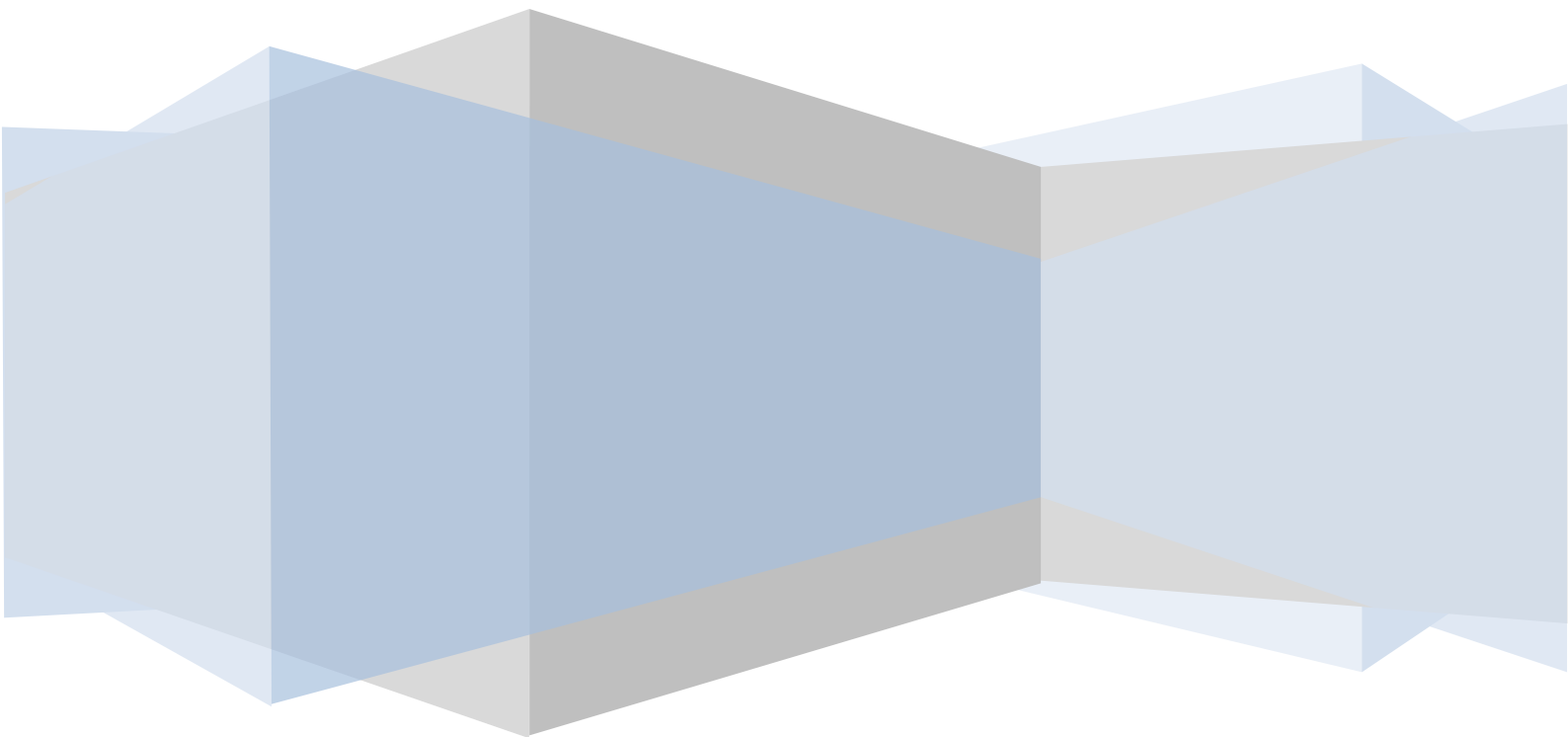


Global Variables Interface

[Type the document subtitle]



About Global Variables Interface

Variables hold information about various facts/values required during execution of intelligent system. It is some sort of global dictionary of key parameters that store information. Global variables interface allows creating new variable, defining variables type, data type, linking menus with the variable, calling UDF (user defined function), setting the formatting options, setting the controls etc.

Note: Further sections explain the different options of Global Variables Interface.

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1. Basic Variable Parameters Option

This option allows adding new variables, defining its type, data type, element type etc.

1.1 Adding New Variable

To add variable:

1. Go to *Main Menu ->Domain Vocabulary ->Global Variables*. By default, *Basic Variable Parameters* option is opened for selected variable.

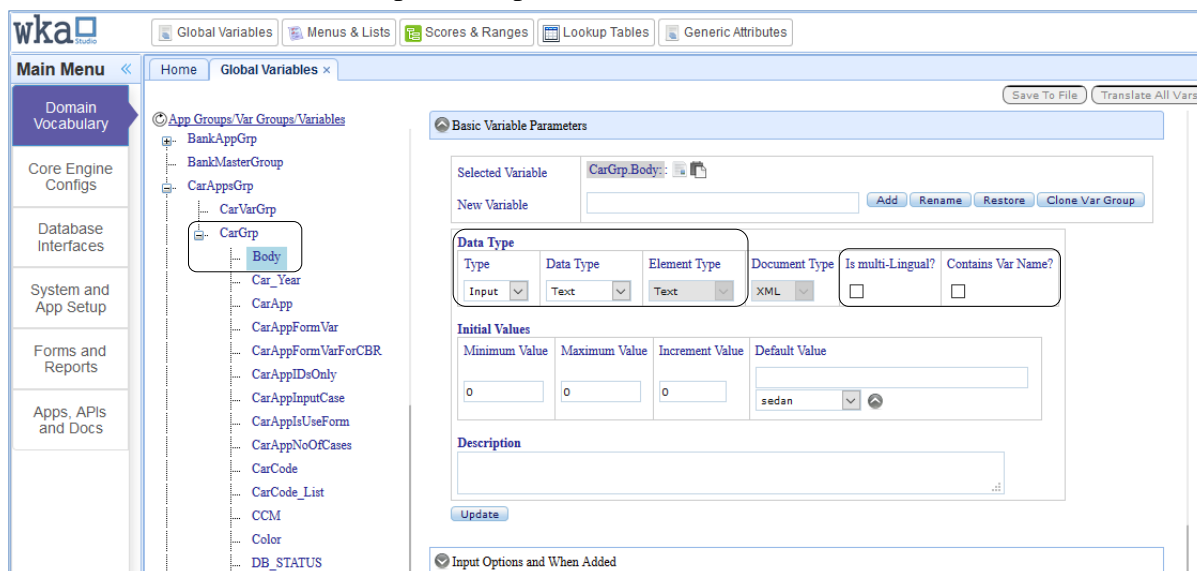


Figure 1: Default Global Variables Interface

The table below explains the various fields of *Basic Variable Parameters*:

Table 1: Fields of Basic Variable Parameters Option

Fields	Description
Selected Variable	Shows the name of the variable selected. The name displayed should be in <i>VarGroups.Variables</i> format. For example: <i>CarGrp.Body</i> .
New Variable	It is name of the variable. Variable names can be of any length. It should contain at least an alphabet. Spaces and hyphens can be included inside variable names.
Type	Defines type of the variable. <ul style="list-style-type: none"> • <i>Input</i>: If variable type is selected as Input then input to the variable is to be entered at run-time through html pages. • <i>Simple</i>: Assigns value to the variable. • <i>Goal</i>: Various access rights are set to goal variable rather than individual variables. Depending upon these access rights users are permitted to execute various intelligent systems.
Data Type	Defines data type of the variable. The data types supported: Integer (32 bit), Real, Text, Boolean, Document, Compound (List), Trend, Date, URL.
Element Type	The compound type represents the data type of contents stored in compound list. It is enabled when variable data type is compound.
Is multi-Lingual?	Supports multiple languages for variable used in application.

Contains Var Name?

This option can be set when a variable itself contains another variable name (make sure it is not the same variable name).

2. Enter variable name in *New Variable* field (*TestVar*) and select *Type* as *Input*.

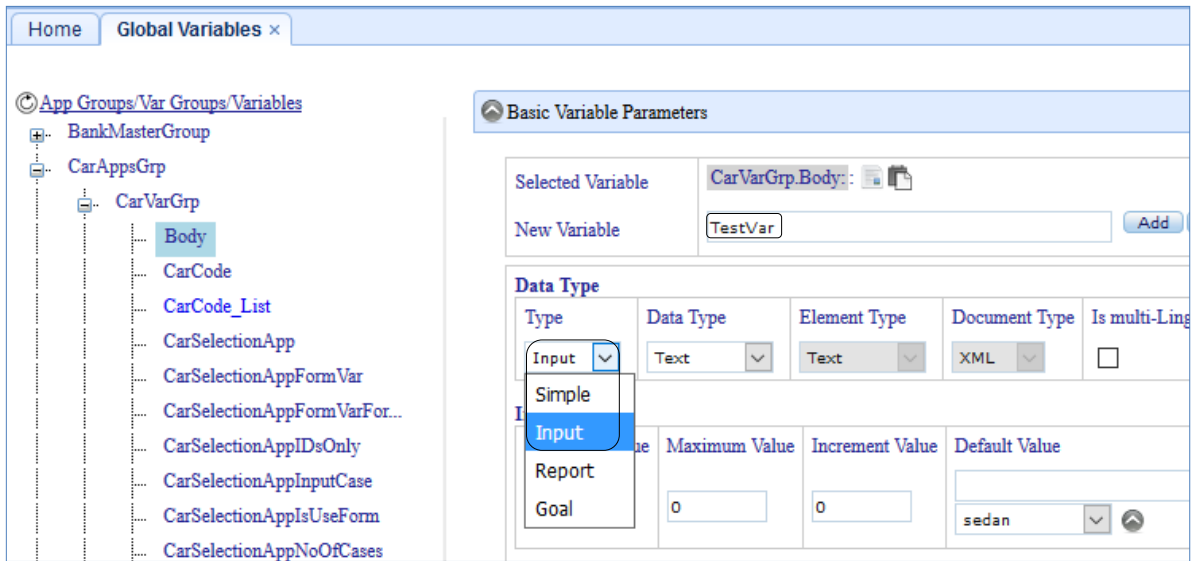


Figure 2: Entering Variable Name and Selecting Type

3. Select *Data Type* for selected variable. Depending upon data type, various options in the interface are enabled or disabled.

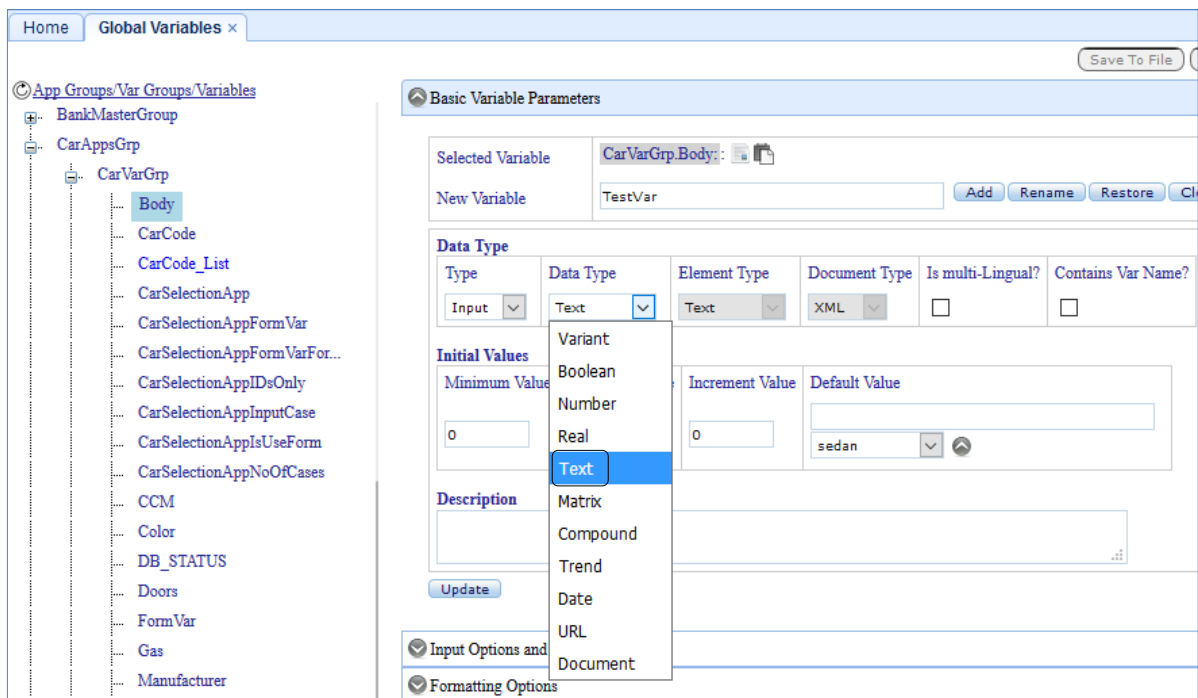


Figure 3: Selecting Data Type

- Click *Add* and a new variable is added into the selected variable group (Example: *CarVarGrp*) with variable type and data type and the variable is displayed in list. Other parameters can be added/updated using *Add/Update*.

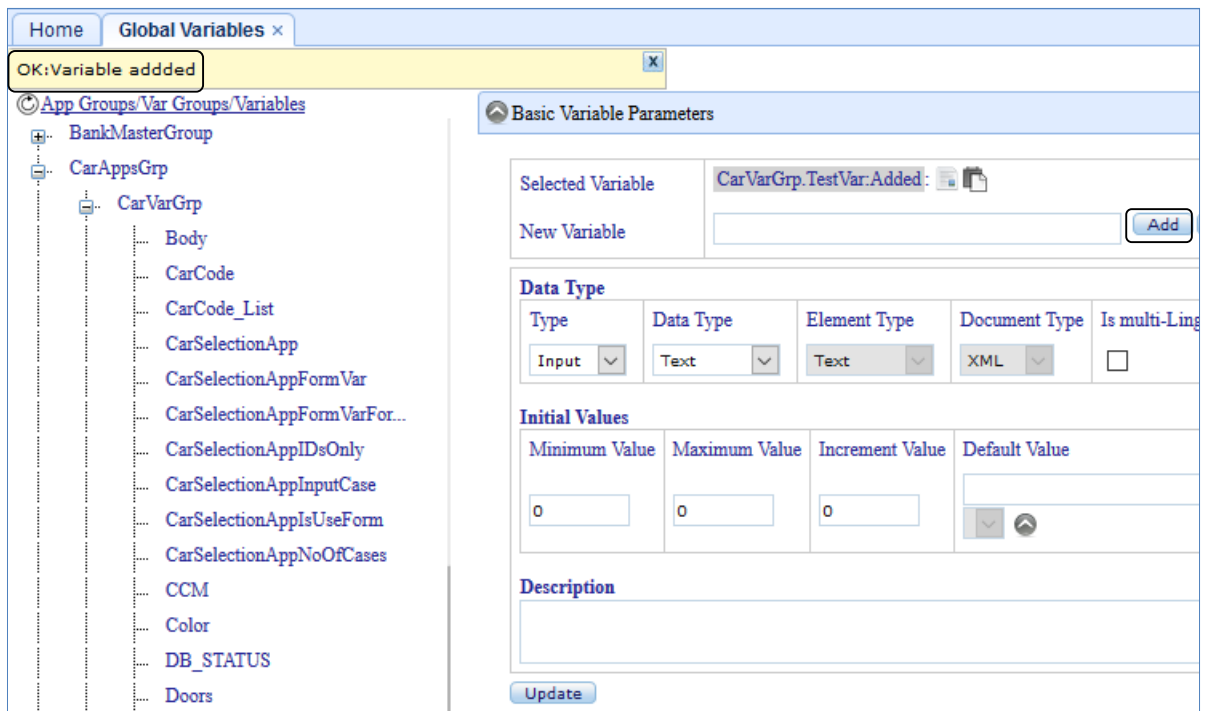


Figure 4: Variable Added

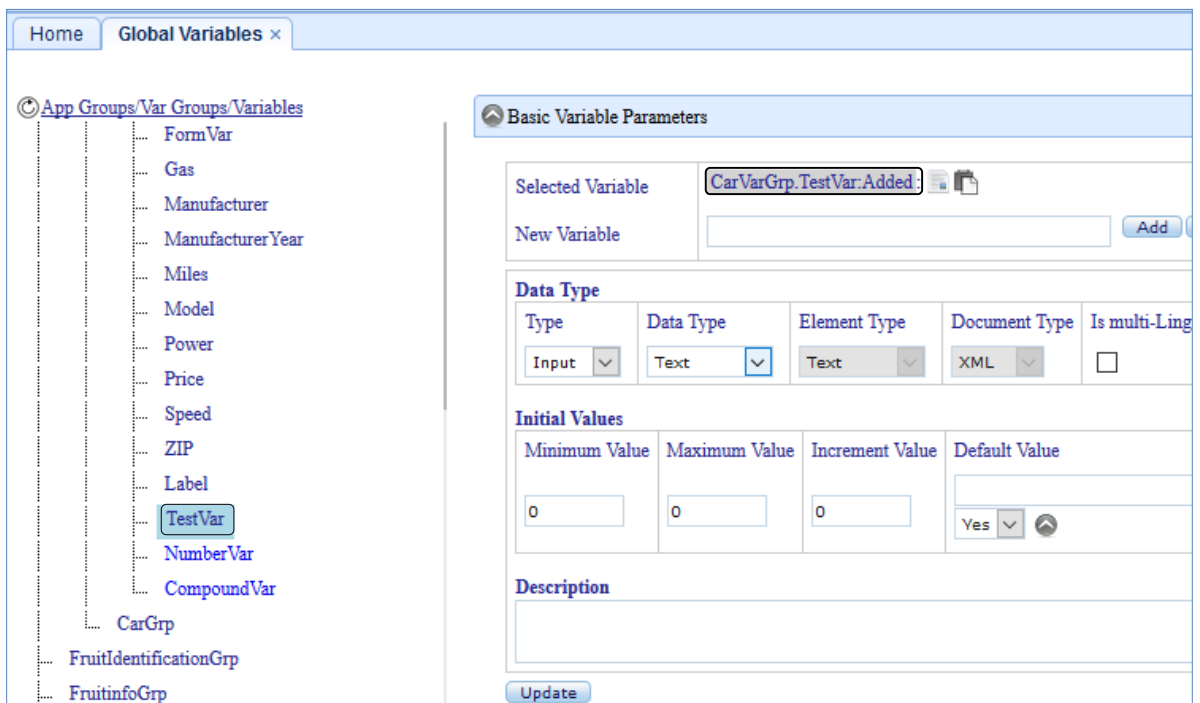


Figure 5: Variable Displayed in List

Note: Similarly, to add other Variables (Example: NumberTest, CompoundVar) for Car App follow the same steps as explained in Section 1.1 Adding Variable and the following screen shots are displayed.

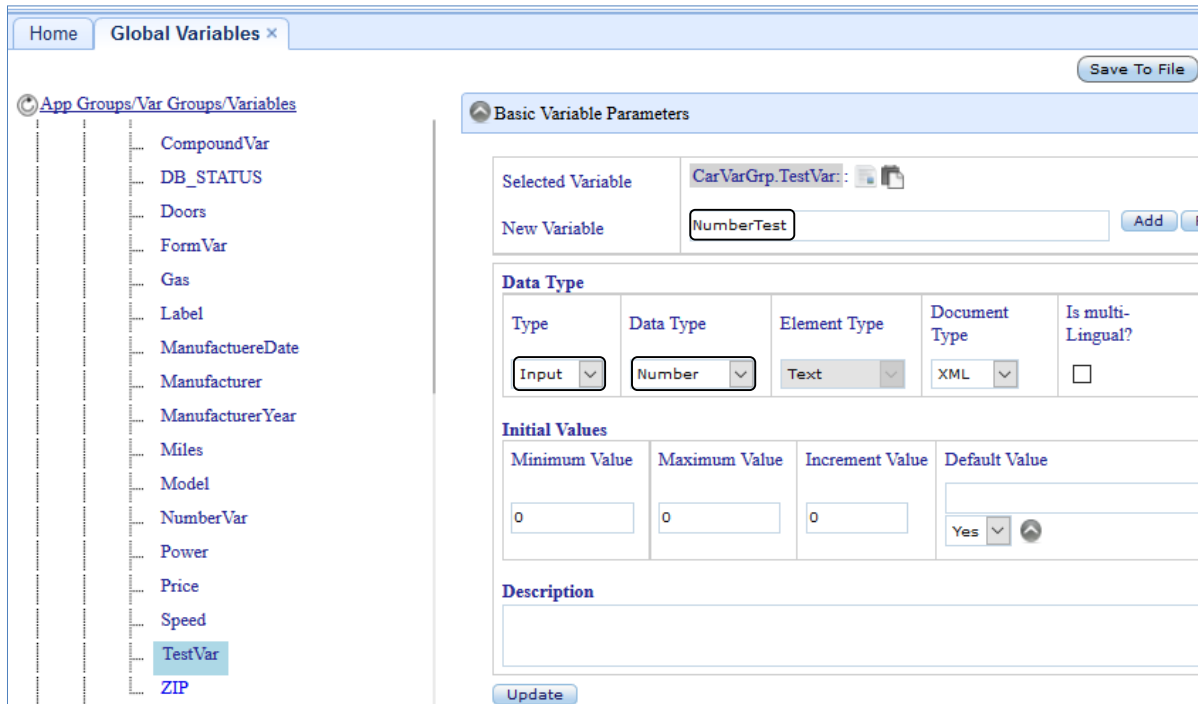


Figure 6: Creating NumberTest Variable

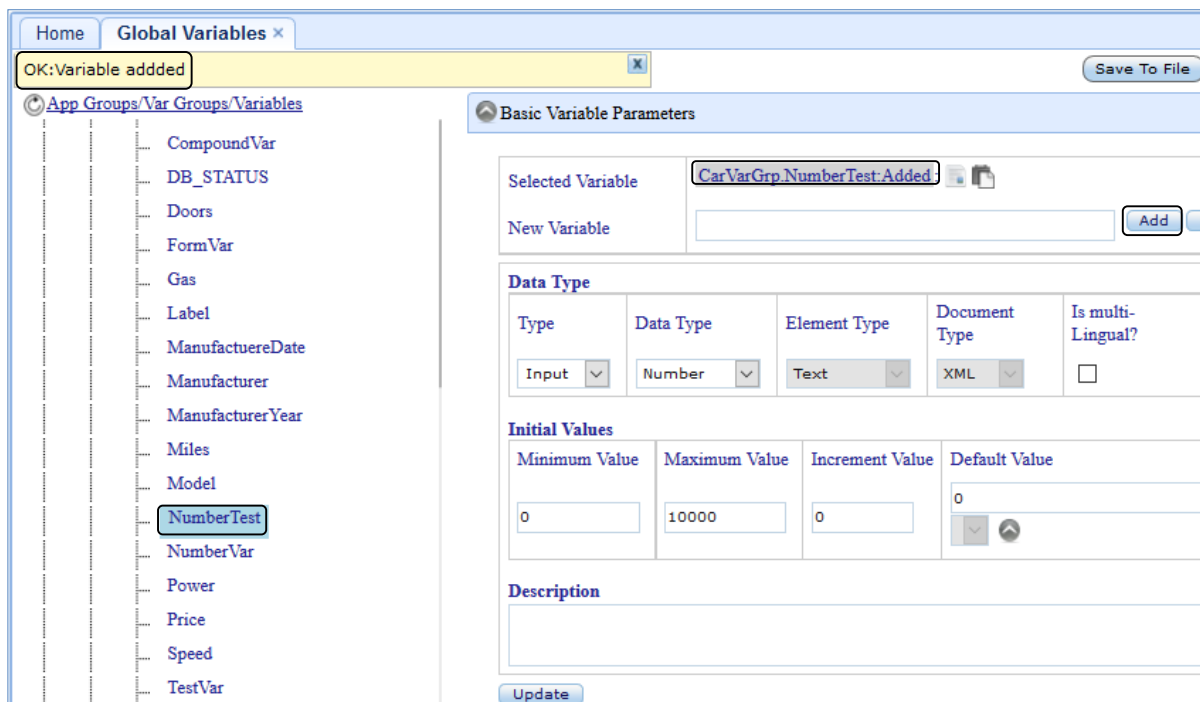


Figure 7: Adding NumberTest Variable

5. Set the variable's *Default Value* and click *Update*.

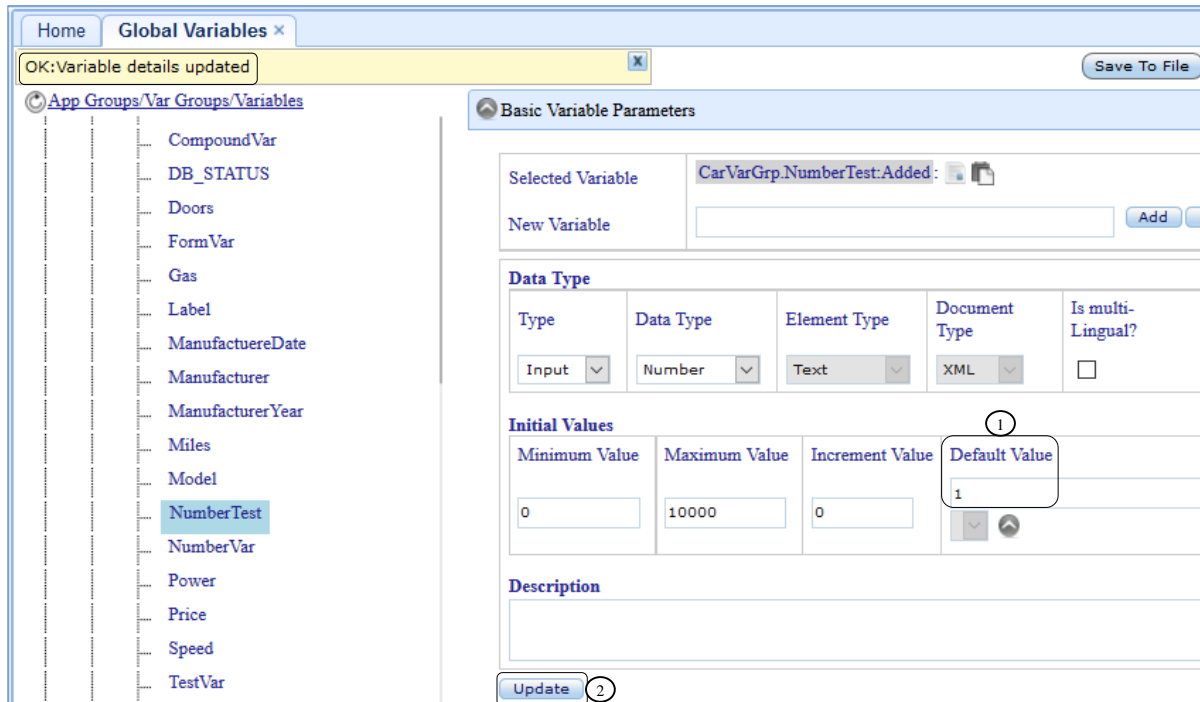


Figure 8: Updating the Variable

6. To create a variable *CompoundVar*, set *Data Type* as *Compound* and *Element Type* as *Text*. After selecting *Data Type*, *Element Type* dropdown menu is enabled else it is disabled (*Further section 1.3 Compound or Trend Variable explains about compound variable*).

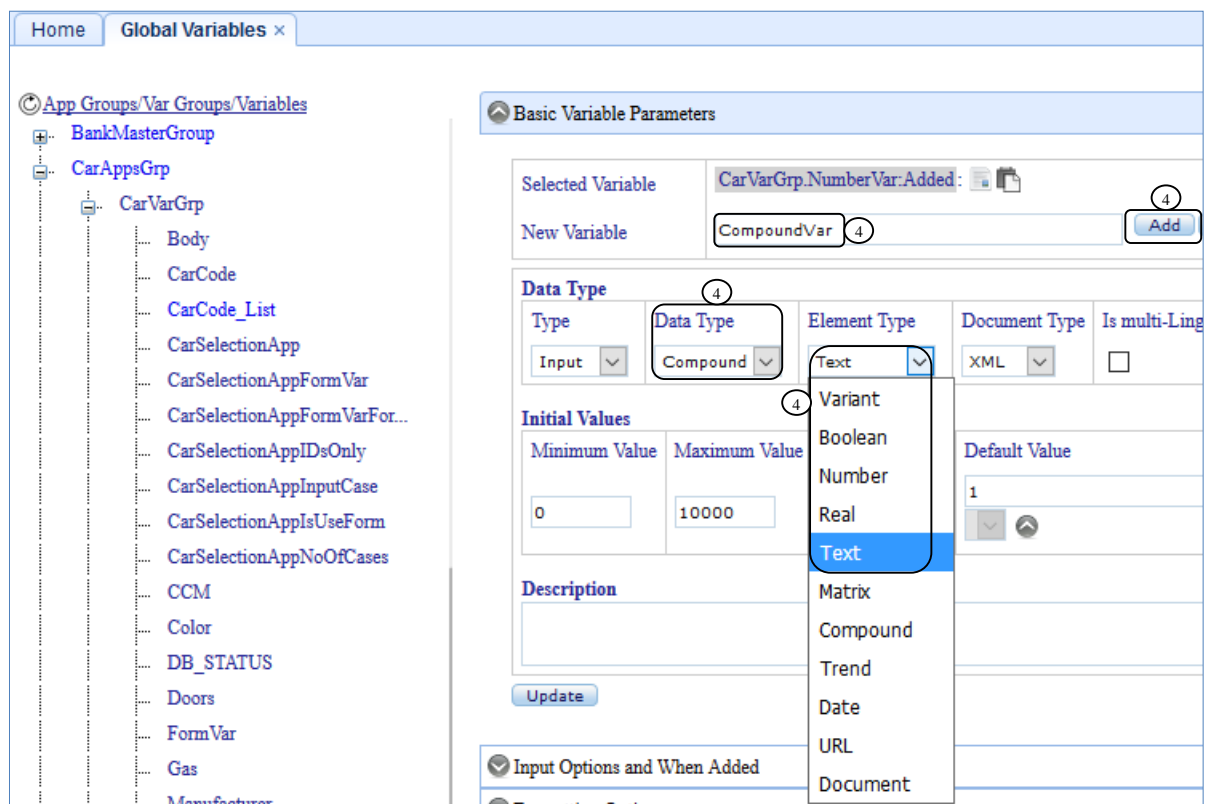


Figure 9: Creating CompoundVar Variable

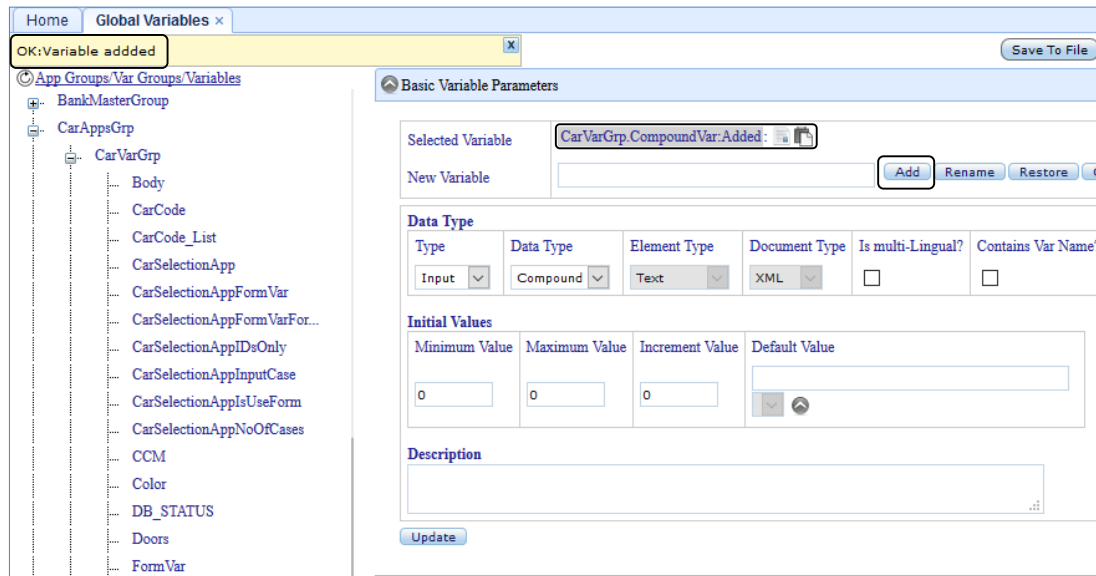


Figure 10: Adding Compound Variable

1.2 Contains var Name Option

This option can be set when a variable itself contains another variable name (make sure it is not the same variable name). *Note the inside variable is only used to ask its value during (QnA sessions), it is not used (substituted) for any calculations etc.* However, the substituted variable value can be retrieved using GET_VAR_VALUE function. This is helpful when different variable inputs are required based on context e.g. asking input for next undefined feature in CBR to complete case.

Enter the variable name (Example: *SubjectInput*) in *New Variable* field and select the *Type* and *Data Type* for that variable.

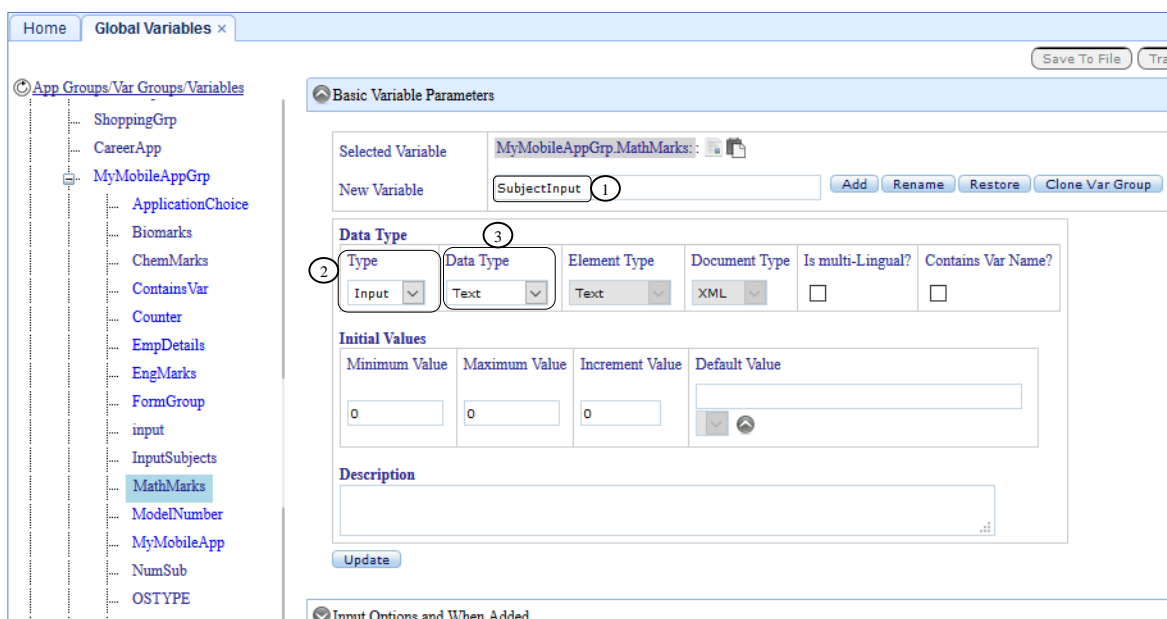


Figure 11: Creating the Variable

1. Click *Add* and the following message is displayed on screen.

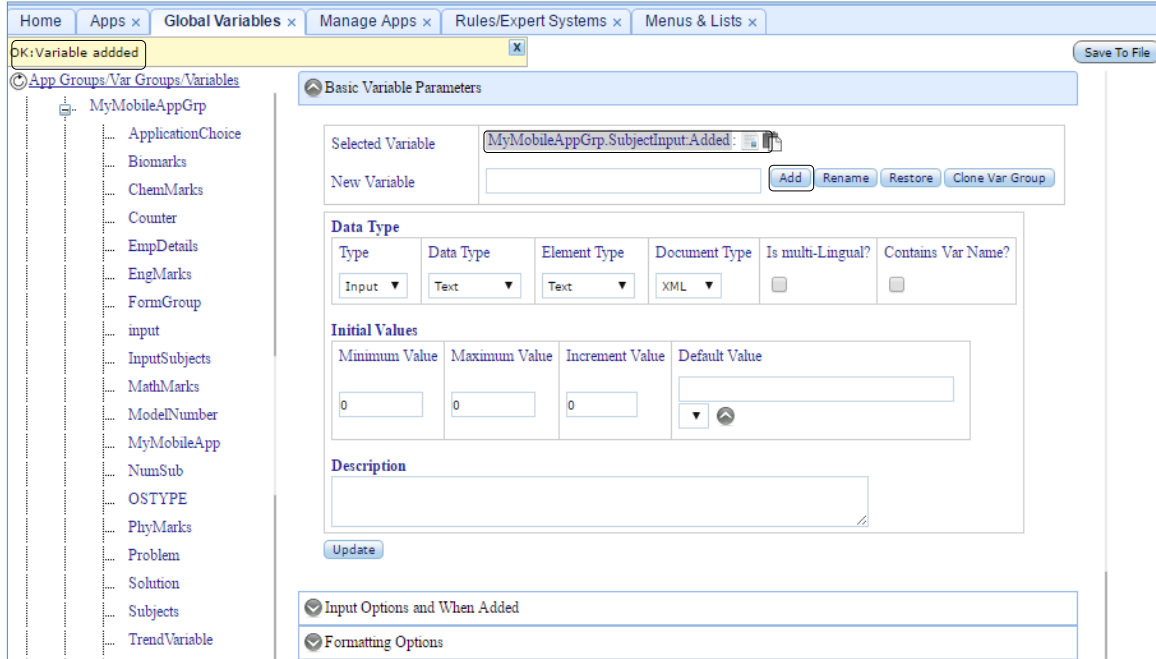


Figure 12: Adding the Variable

2. After adding the variable, the variable gets displayed in the list. For the selected variable *SubjectInput*, check the option *Contains Var Name?* and click *Update* to update the changes.

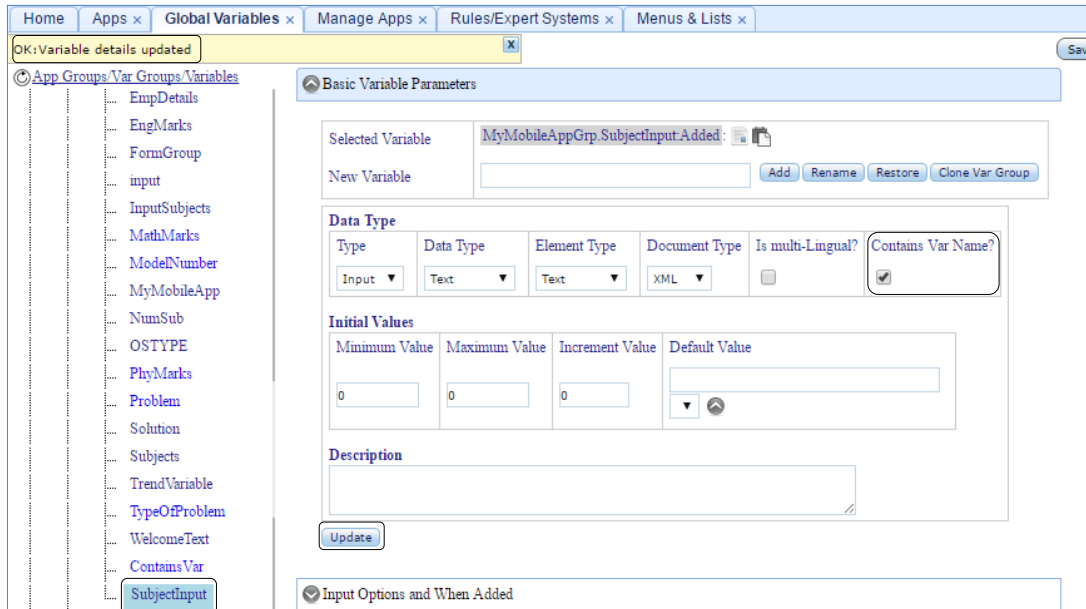


Figure 13: Updating Variable

- To create rule for the variable *SubjectInput* and to show the functionality, go to *Main Menu -> Core Engine Configs -> Rules/Expert Systems* and create the rule as shown below. This rule takes input as number of subjects and then asks those number of variables in loop where variable names are assigned to variable *MyMobileAppGrp.SubjectInput*. This saves lot of explicit code otherwise each variable would be asked separately. See Quiz App tutorials for detailed use. Select the variable group (Example: *MyMobileAppGrp*) and variable (Example: *SubjectInput*) from *Variables and Values* dropdown menu.

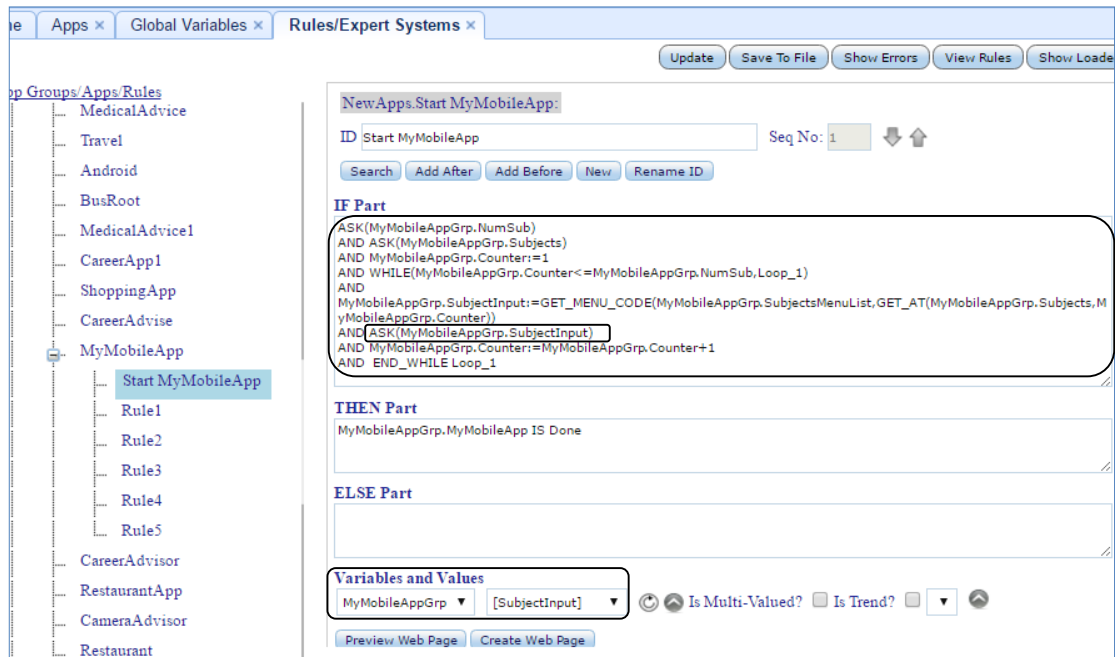


Figure 14: Creating Rule

- To update the rule created, click *Update* and the following message with update screen is displayed.

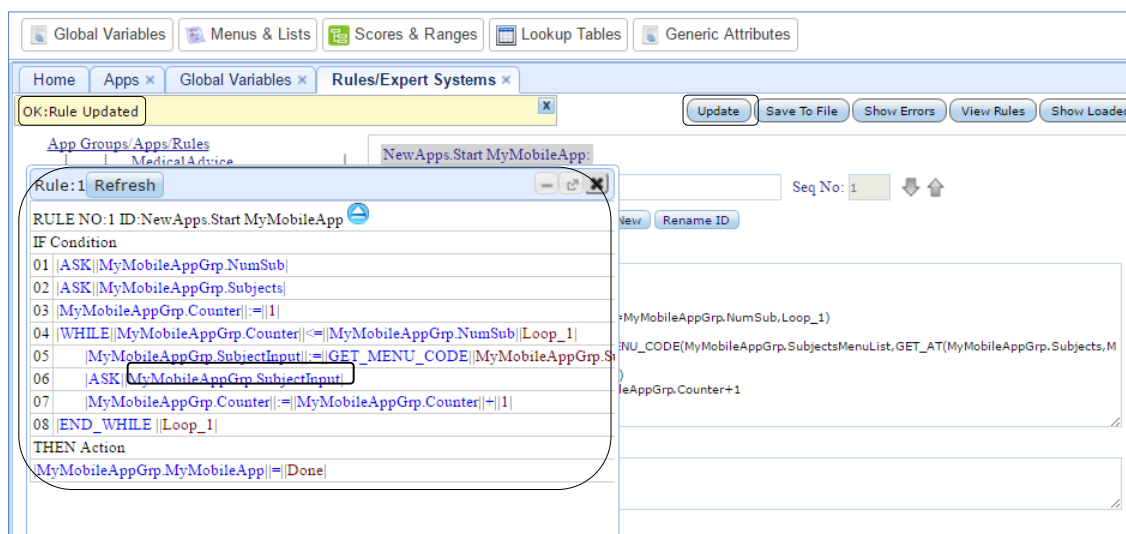


Figure 15: Updating Rules

6. Select the variable for which the changes are required and create a web page. Click Create Web Page before running app.
7. To run the application, go to *Main Menu -> Apps, APIs and Docs -> Apps* and click app name (*Mobile App*). As shown on screen below, enter the number of subjects and click *Next*.

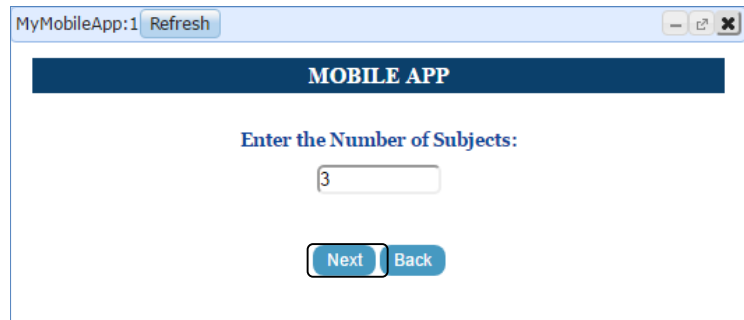


Figure 16: My mobile app

8. As per the number of subjects entered, choose the desired subjects and click *Next*.

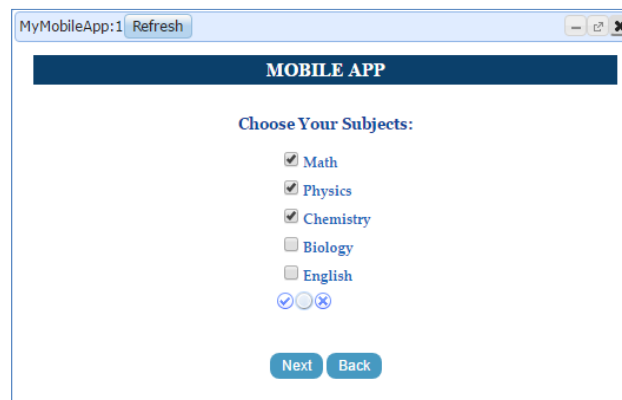


Figure 17: Mobile Application Interface

9. Enter marks for selected subjects (*Maths, Physics and Chemistry*) as shown in screen shots below and click *Next*.

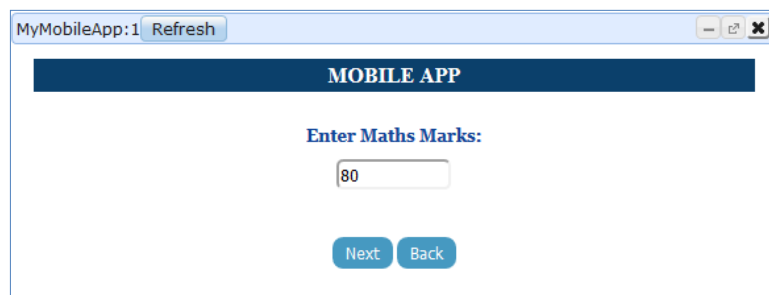


Figure 18: Entering Marks

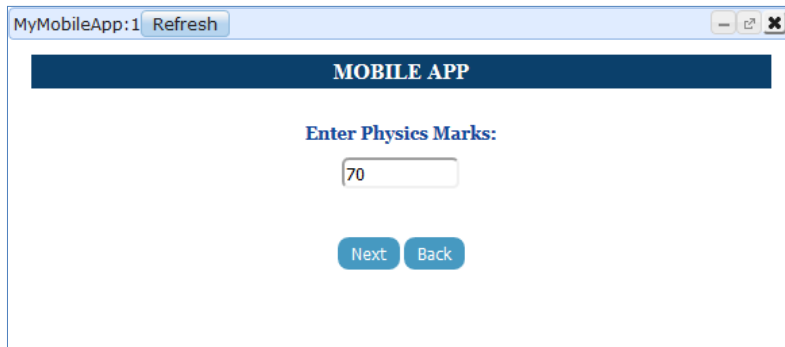


Figure 19: Entering Marks

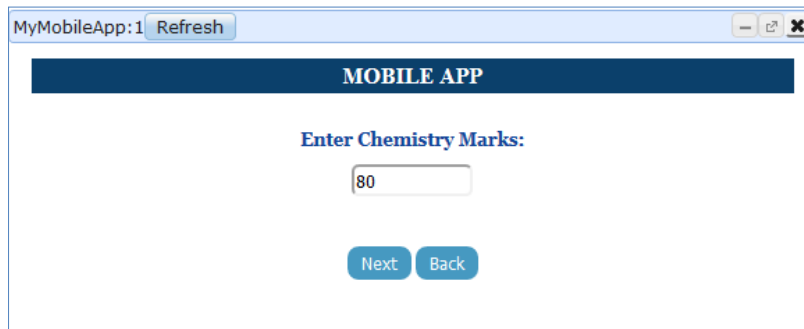


Figure 20: Entering Marks

10. After clicking *Next*, the following session report is shown which shows the marks for each subject entered.

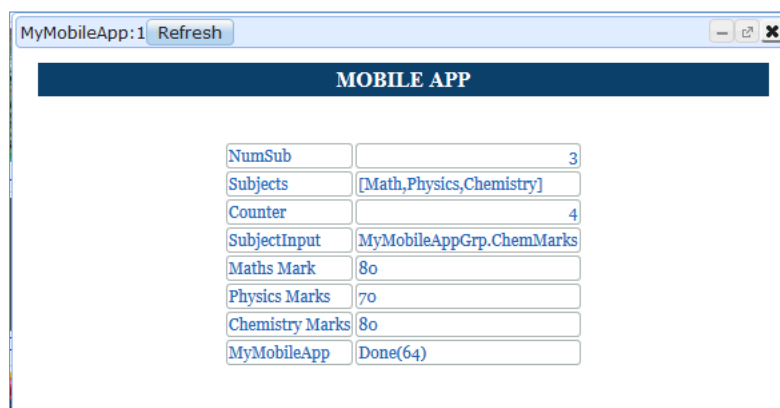


Figure 21: Session Report

1.3 Compound or Trend Variables

Compound or Trend Variables allow storing multiple values. Compound variable holds list (array) of numbers, real, text or even mix of them while Trend variables hold the trend data and array of numeric/real values.

1.3.1 Compound Text

To add a variable of compound type:

1. Go to *Basic Variable Parameters* option in *Global Variables* interface and create a variable as explained above in section 1.1 (Adding New Variable). To add a variable of compound type, enter the variable name (*Example: Languages*) in *New Variable* field and select the *Type* as *Input*, *Data Type* as *Compound*. After selecting data type as

compound, *Element Type* dropdown menu is enabled. Select the type of the variable (Example: *Text*) from *Element Type* dropdown menu.

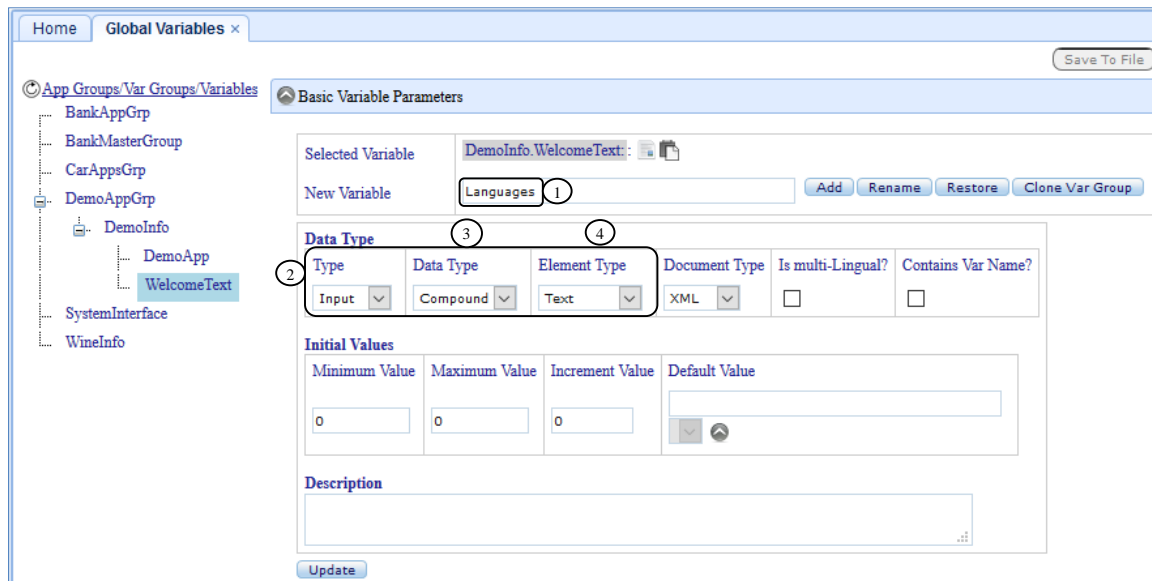



Figure 22: Adding Variable

- To set the menu for variable *Languages*, click *Input Options and When Added* option from the list of options. Select the menu from *Simple Menu* dropdown (Example: *DemoInfo.Language Menu* so only those menus are displayed which is present in that same variable group). To update the menu, click the button . The selected variable (*Languages*) linked with the menu gets added in the variable group.

Note: Further section 2 (Setting the Menu) explains more about setting the menu.

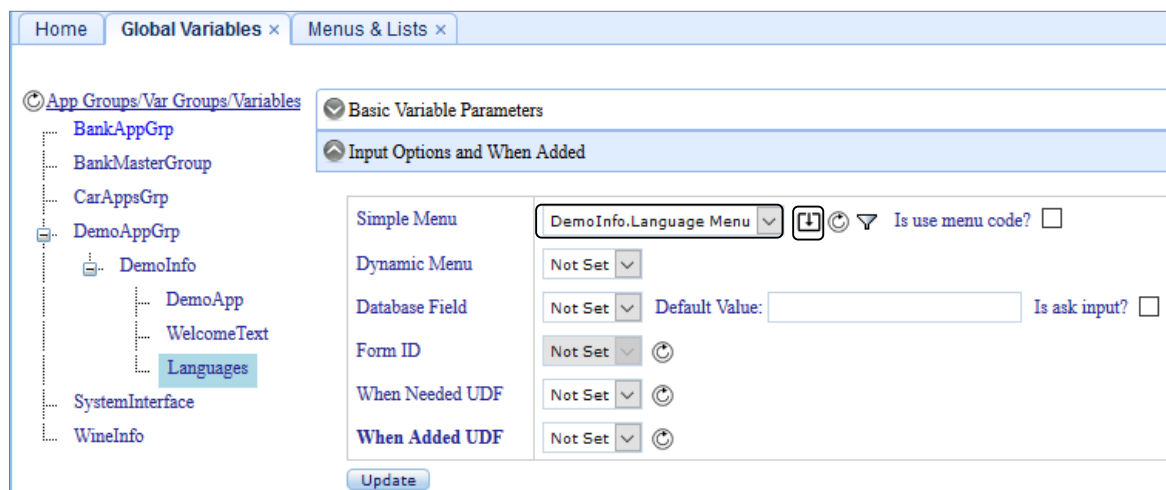


Figure 23: Assigning menu to variable

- For compound variables, default value can be set (e.g. *English, Hindi, Marathi*) for variable *Languages* as shown below. To update the variable details, click *Update*.

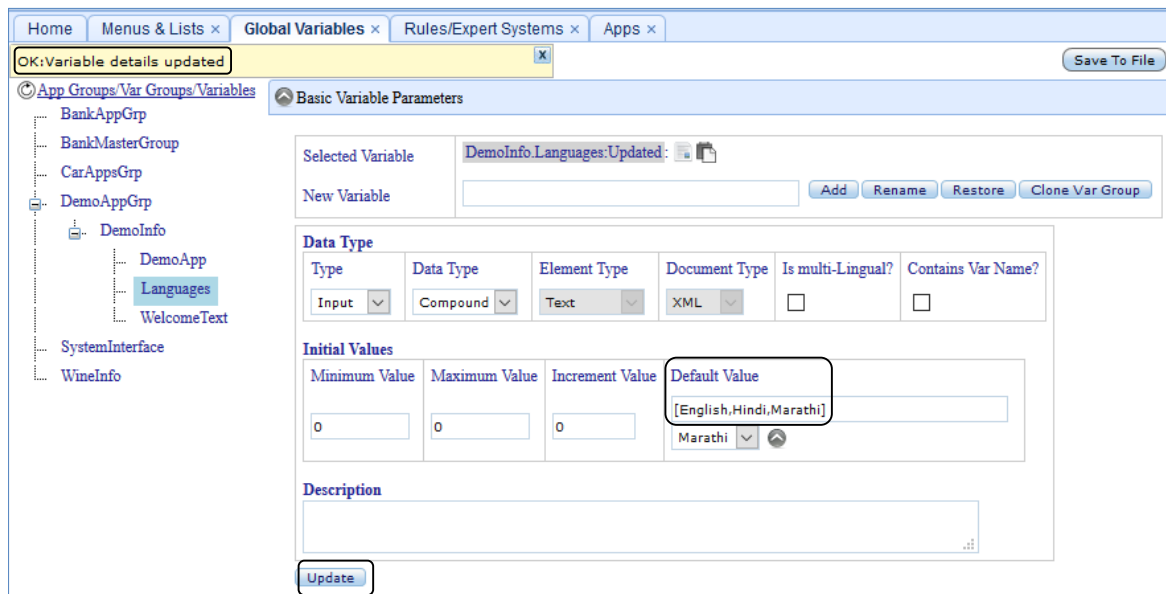


Figure 24: Updating the Variable

- To set the *Control*, click *HTML Web Page Options 1* from the list of options. Set control (*Combo-List*), enter *Number of Options* as 3 (shows 3 combo-list) and click *Update* to update the variable.

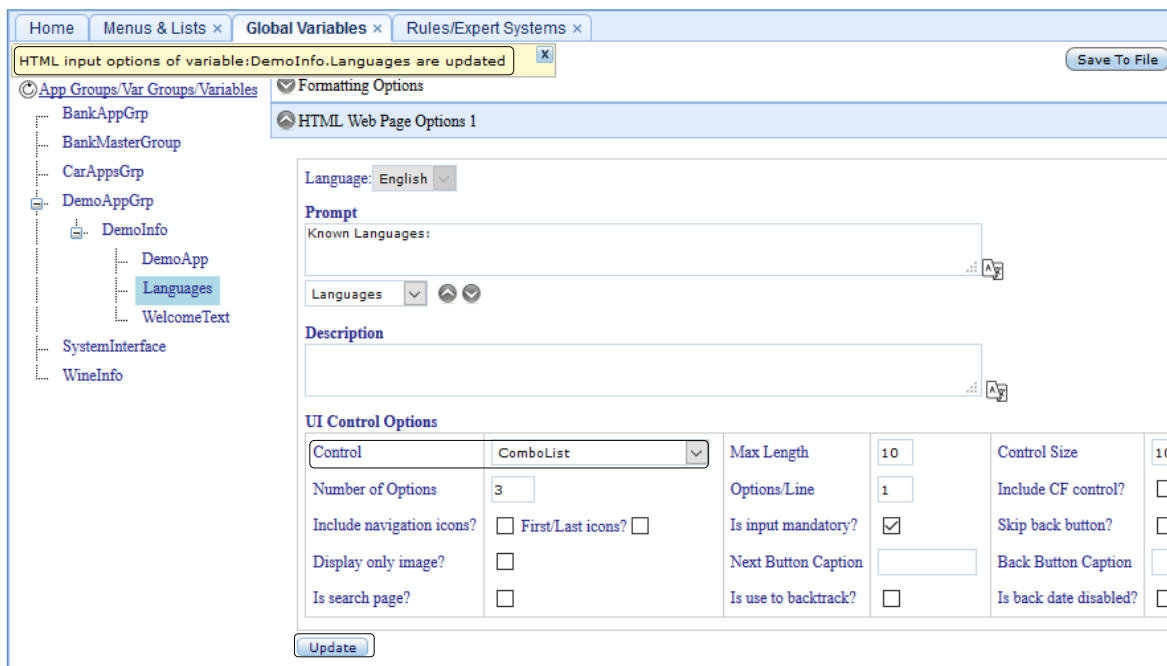


Figure 25: Updating the Input Options of a Variable

Note: In the above screen shot, No of Options can be set more than 1. No of Options set more than 1 is valid for compound/trend data type variable only.

- If the variable (*Languages*) is not asked in rules then that variable first needs to be asked in rules in *Rules/Expert Systems* interface as shown in screen shot below. To update the rule created, click *Update* and the following message with update screen is displayed.

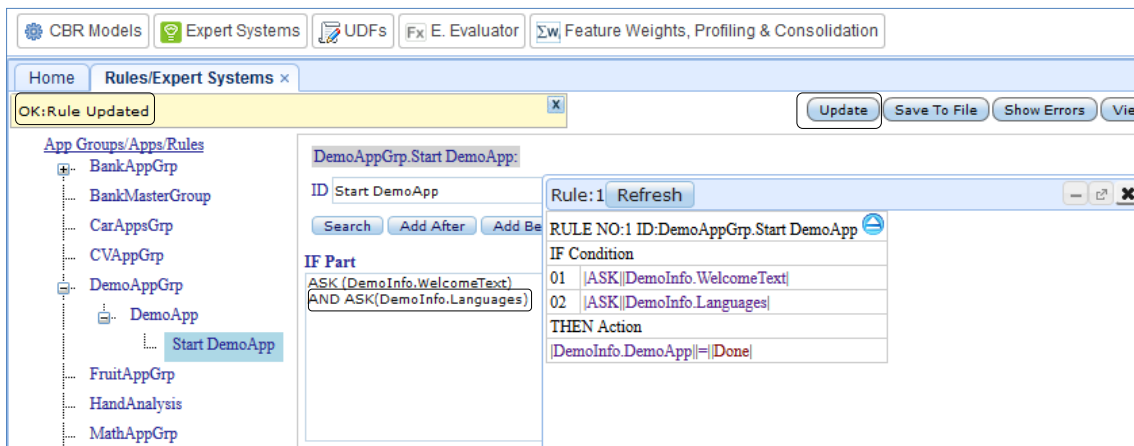


Figure 26: Updating Rules

- To create a web page for variable, click *Create Web Page* and the following message is displayed.

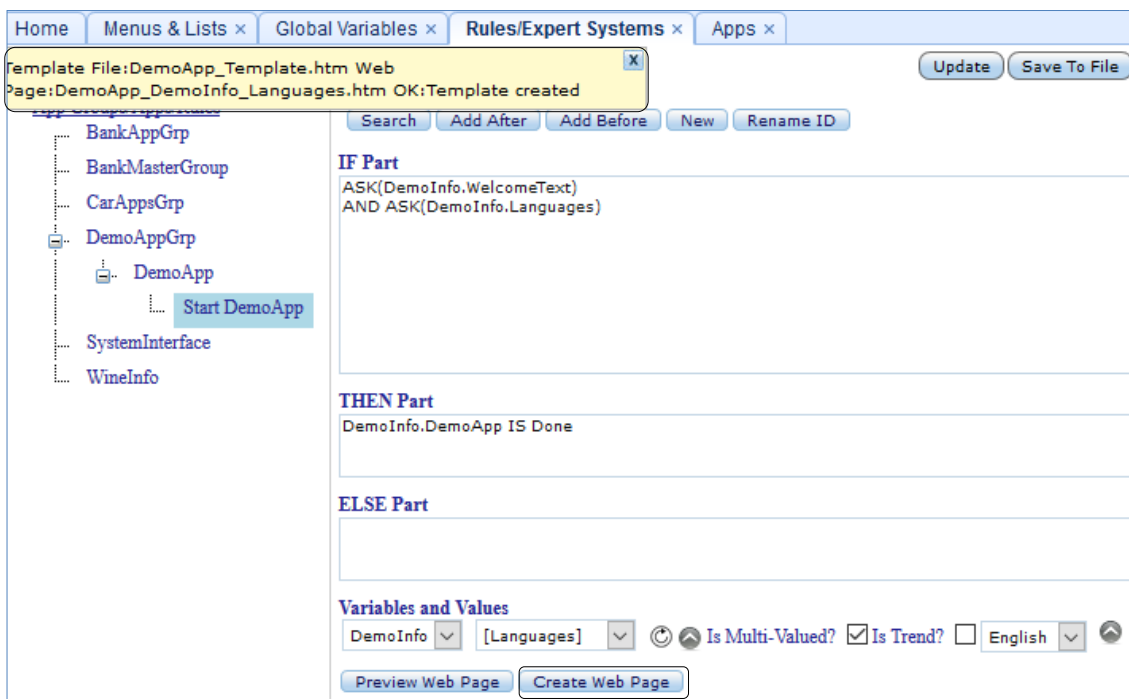


Figure 27: Creating Web Page

- To view the changes, run the application. To run the application, go to Apps interface and click Demo App. The following screen is displayed.

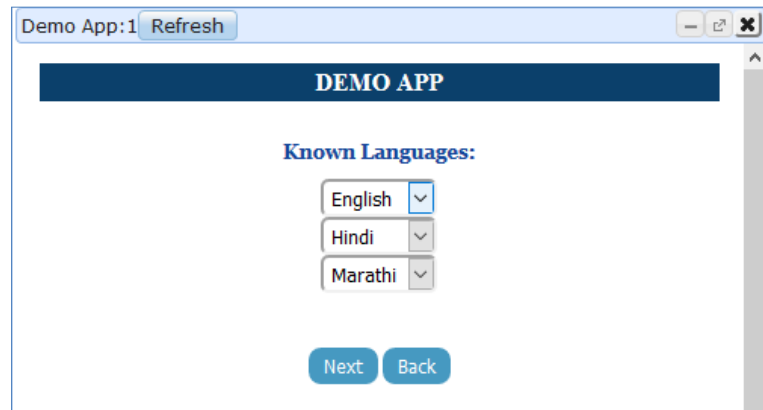


Figure 28: Running the Application

As shown in above screenshot, the default value (English, Hindi and Marathi) set for variable *Languages* is displayed as a Combo-List.

1.3.2 Setting Compound Number

To set the compound number for variable (Example: *Marks*), first the variable needs to be added. To add the variable and set the compound number follow the same steps as explained above in section 1.2 (Adding New Variable) and section 1.3 (Compound or Trend variables) for Compound Text.

- Select the *Type* as *Input*, *Data Type* as *Compound*. After selecting data type as compound, *Element Type* dropdown menu is enabled. Select the type of the variable (Example: *Number*) from *Element Type* dropdown menu. To update the variable (*Marks*), click *Update* and the following message is displayed.

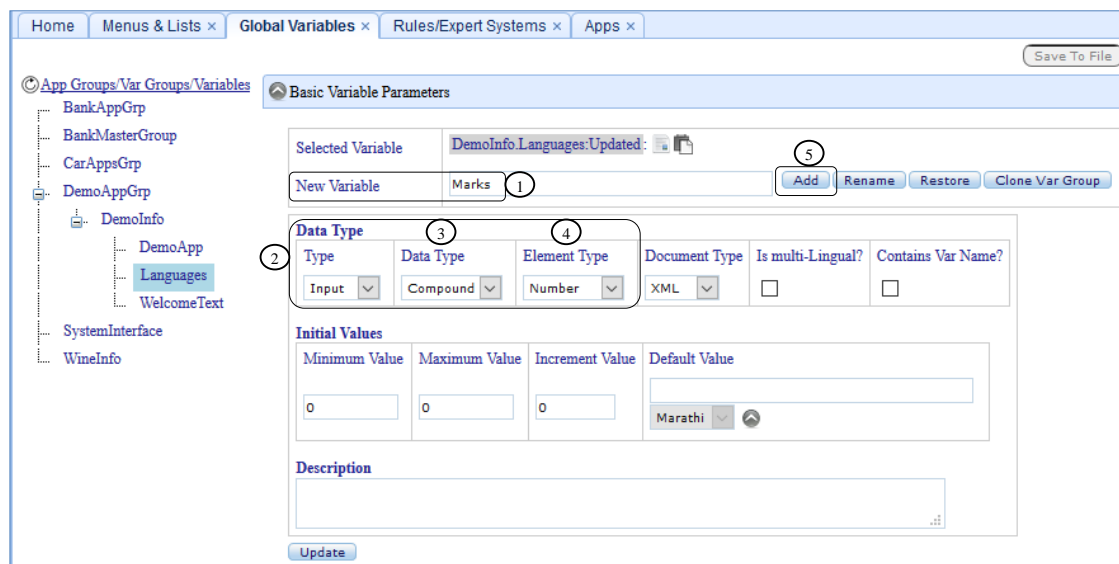


Figure 29: Adding Variable and Setting Compound Number

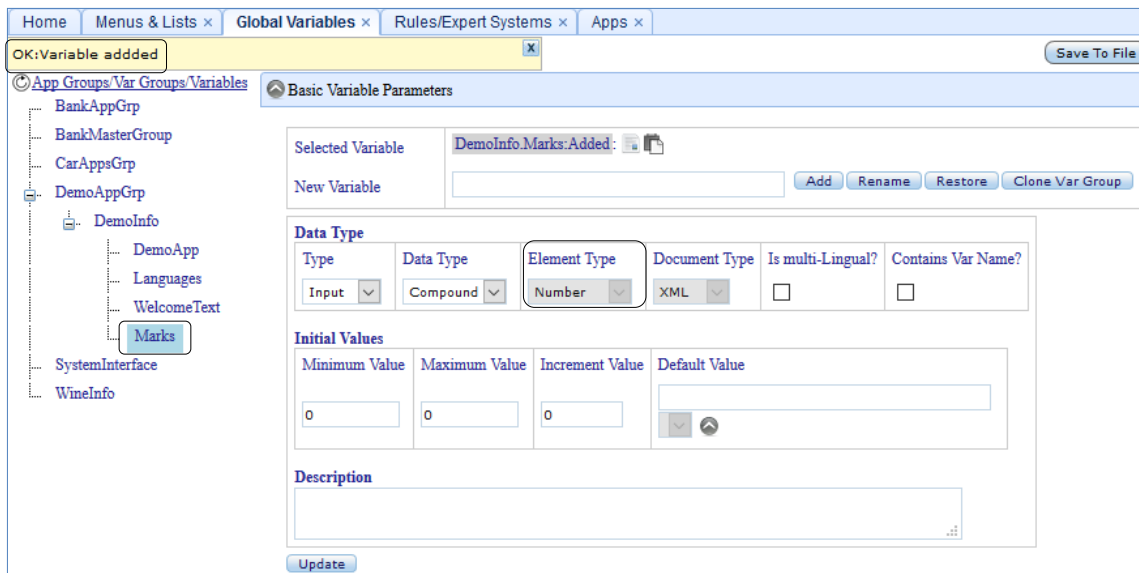


Figure 30: Adding Variable

Note: After adding variable, Element Type dropdown menu gets disabled.

- For compound variables, set the default value (60, 68, 70) for variable *Marks* as shown below. To update the variable details, click *Update*.

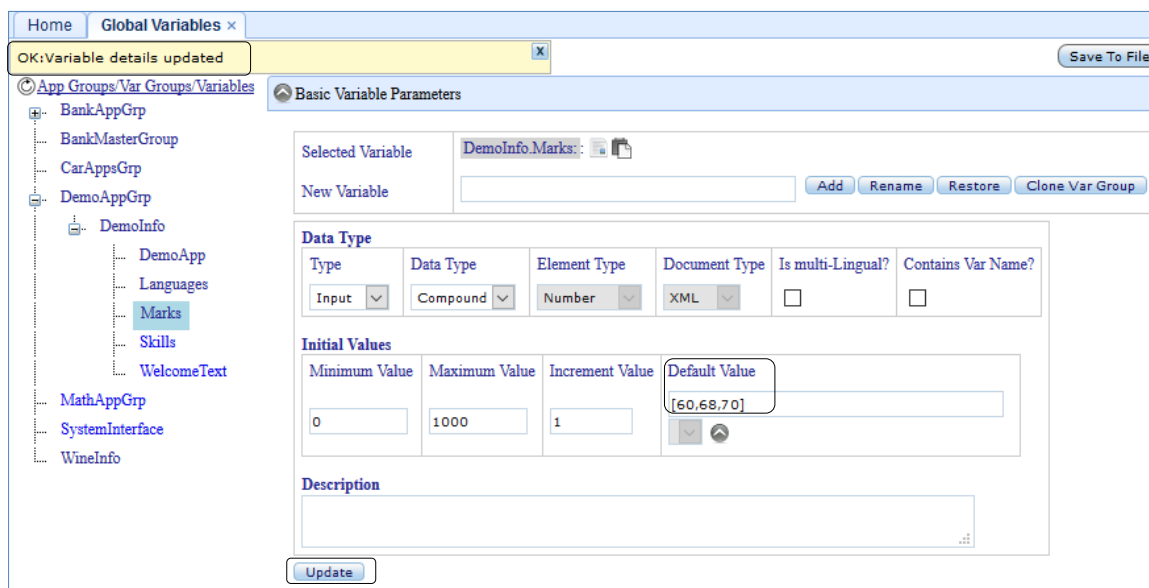


Figure 31: Setting Default Value and Updating Variable

- To set the *Control*, click *HTML Web Page Options 1* from the list of options. Set control (*TextBox*), enter *Number of Options* as 3 and click *Update* to update the variable.

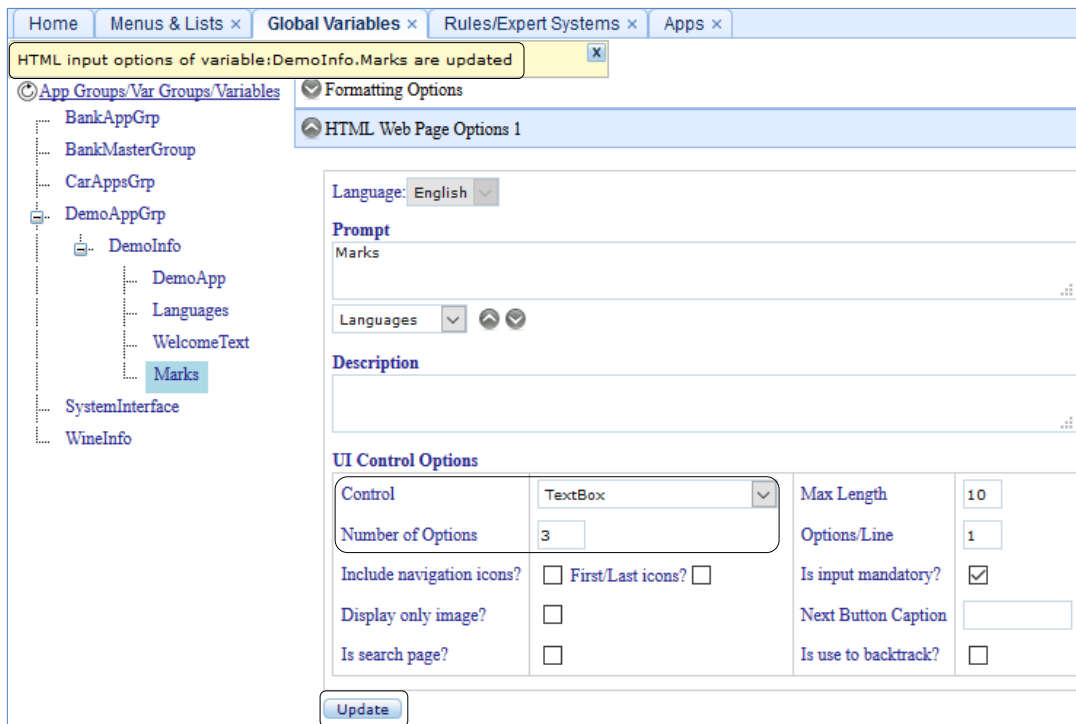


Figure 32: Setting Control and Updating Variable

4. If the variable (*Marks*) is not asked in rules, then that variable first needs to be asked in rules in *Rules/Expert Systems* interface as shown in screen shot below. To update the rule created, click *Update* and the following message with update screen is displayed.

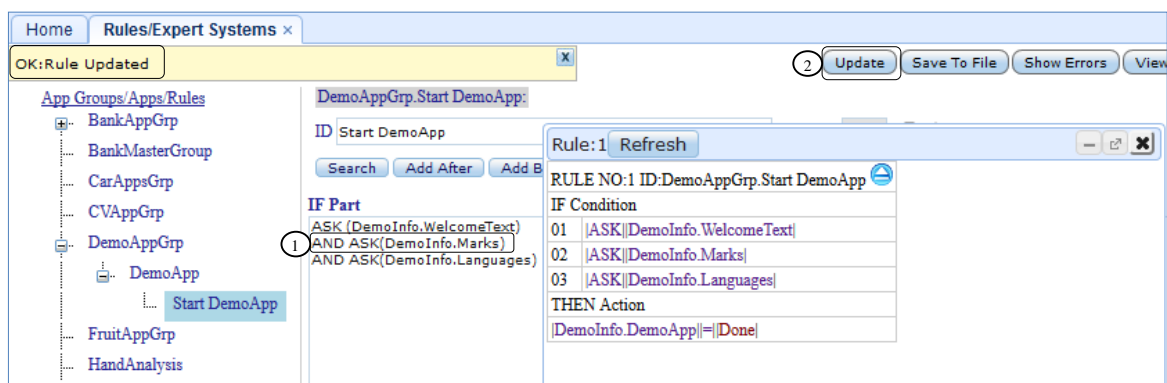


Figure 33: Adding and Updating Rule

5. To create a web page for variable, select variable group (*DemoInfo*) and variable (*Marks*) from *Variables and Values* dropdown menu. Click *Create Web Page* and the following message are displayed.

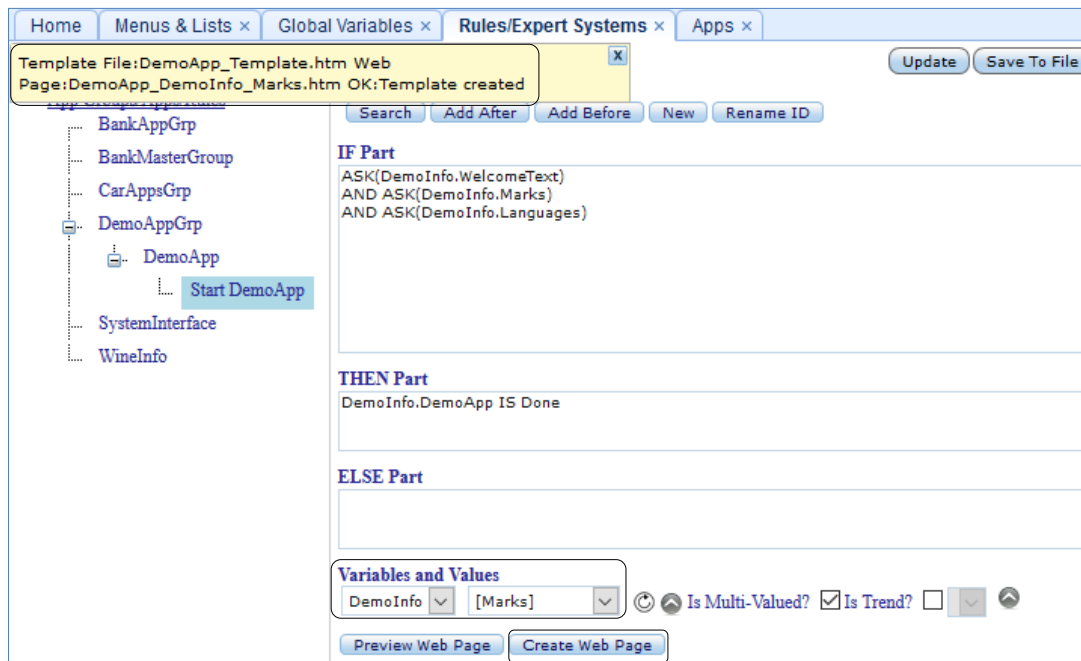


Figure 34: Creating Web Page

- To view the changes, run the application. To run the application, go to *Apps* interface and click *Demo App*. The following screen is displayed.

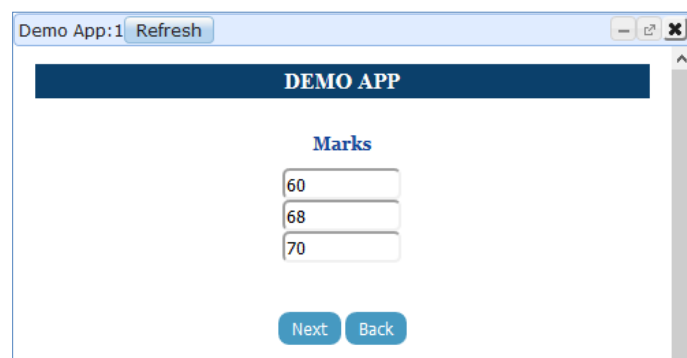


Figure 35: Running Application

As shown in above screenshot, the default value (60, 68, 70) set for variable *DemoInfo.Marks* is displayed as a text box.

1.3.3 Combo MultiSelect Weight Option

This option allows selecting multiple options with weight.

- To set combo multiselect weight option first a new variable (Example: *Skill*) is created in *Basic Variable Parameters* option. To add a variable, follow the same steps as explained above in section 1.2 (Adding New Variable). Select *Type* as *Input*, *Data Type* as *Compound* and *Element Type* as *Text*.

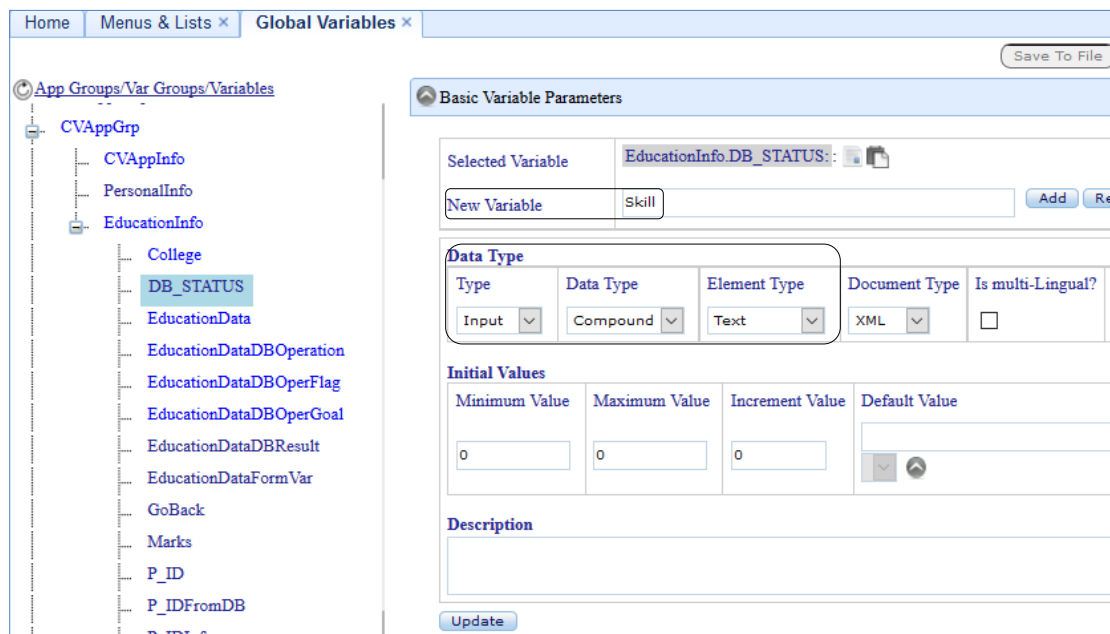


Figure 36: Entering a Variable

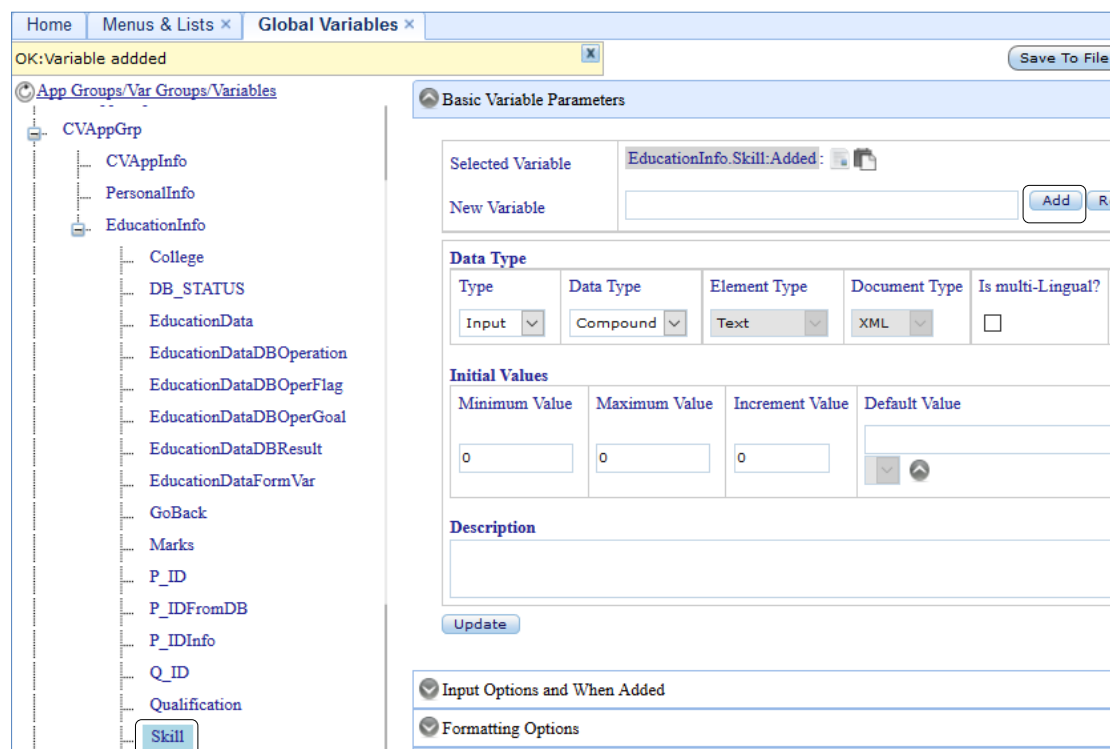



Figure 37: Adding a Variable

- To set simple menu (*EducationInfo.Skill Menu*) for variable *EducationInfo.Skill*, click *Input Options and When Added* option from the list of options. Select the menu from *Simple Menudropdown* (Example: *DemoInfo.Language Menu*). To update the menu, click the button .

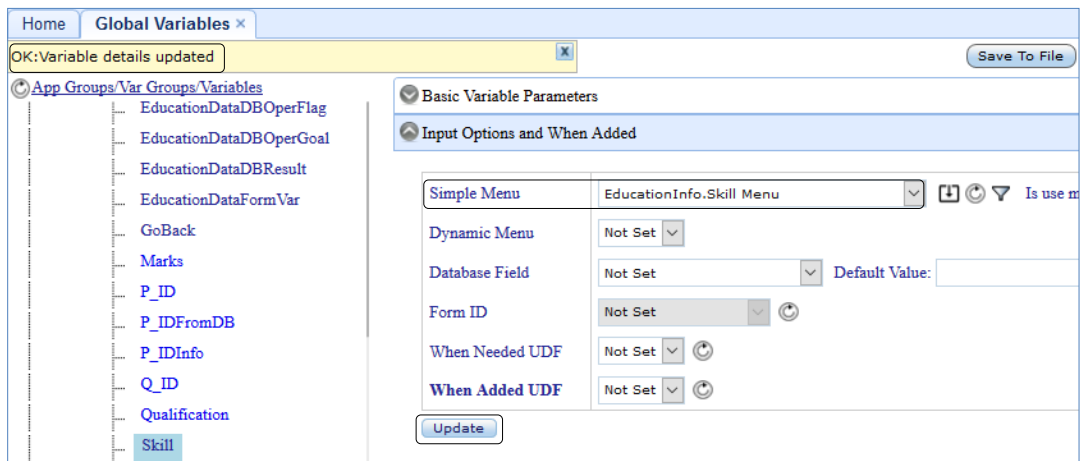


Figure 38: Setting and Updating Menu

- For compound variables, can set the default value (*Core Java*) for variable *Skill* as shown below. To update the variable details, click *Update*. The options set under menu are displayed in *Default Value* dropdown menu.

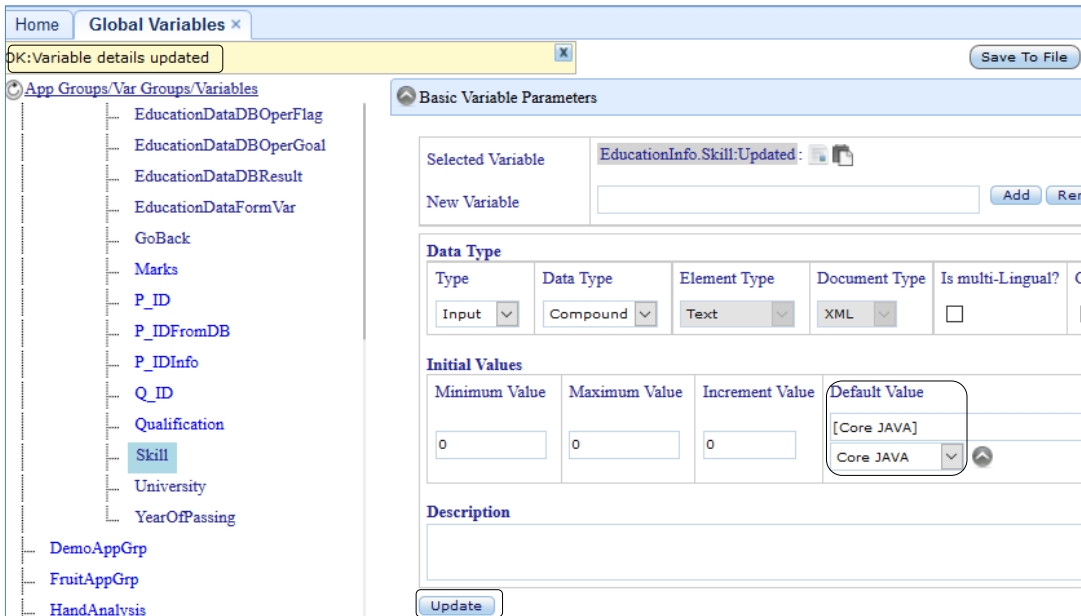


Figure 39: Setting and Updating Menu

- To set the *Control*, click *HTML Web Page Options 1* from the list of options. Set control (*Combo_MultiSelect_Weight*), and to update the variable click *Update*.

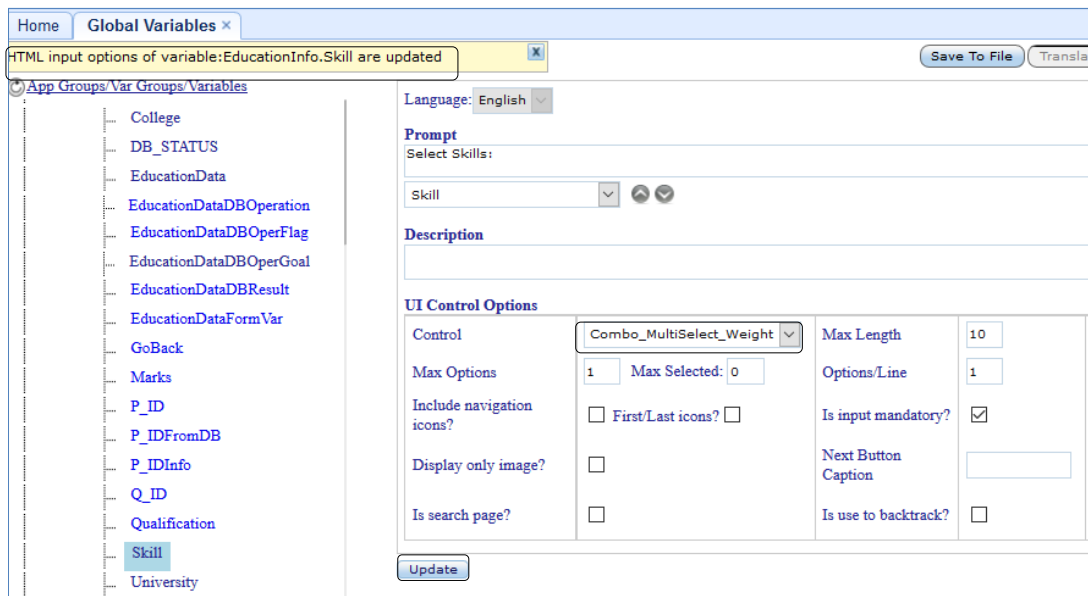


Figure 40: Setting and Updating Control

5. If the variable (*Skill*) is not asked in rules, then that variable can be asked in rules in *Rules/Expert Systems* interface as shown in screen shot below. To update the rule created, click *Update* and the following message with update screen is displayed.

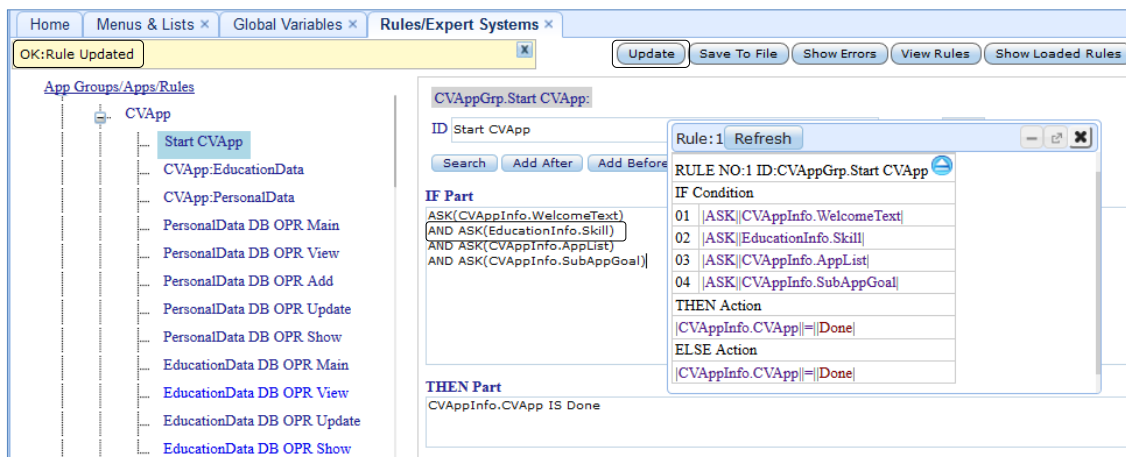


Figure 41: Setting and Updating Rule

6. To create a web page for variable, select the variable group (*EducationInfo*) and variable (*Skill*) from *Variables and Values* dropdown menu. Click *Create Web Page* and the following message is displayed.

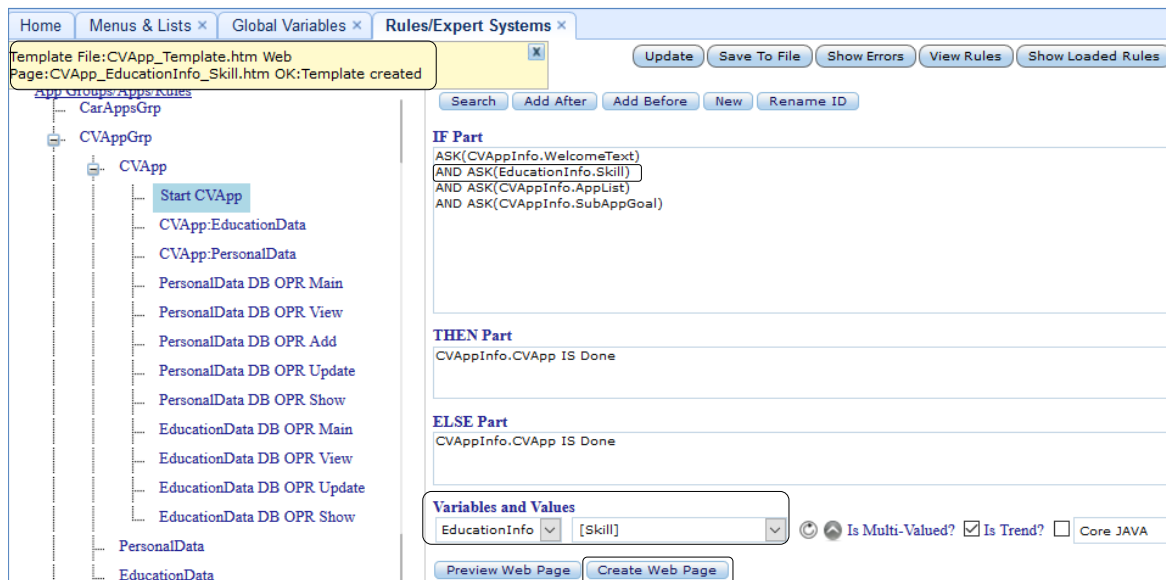



Figure 42: Creating a Web Page

- To view the changes, run the application. To run the application, go to *Apps* interface and click *CV App*. The following screen shows *Combo_MultiSelect_Weight* control in which there are two Combo-Lists and option selected from first Combo-List (Example: Core JAVA) gets populated in the second Combo-List by clicking the button .

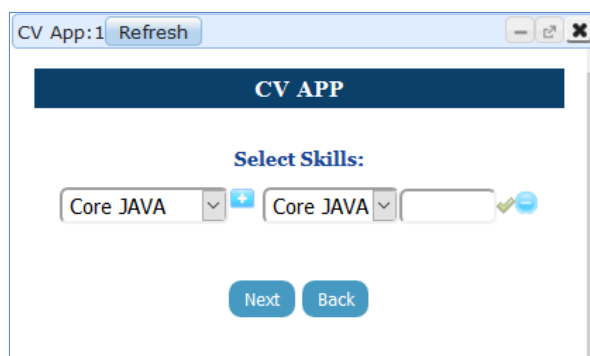


Figure 43: Selecting the Option

- The third option allows setting the weight (example: 80).

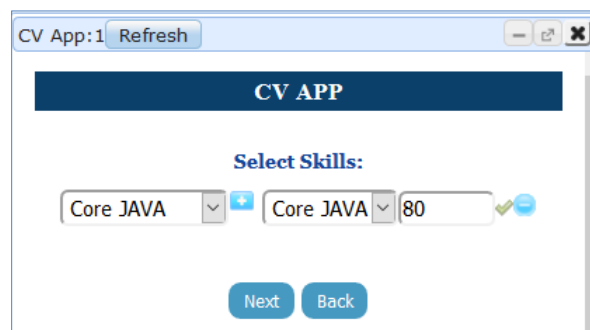




Figure 44: Setting the Weight

- When the button  is clicked, the weight which is set gets added with the option selected in second Combo-List (Example: Core JAVA=80). Also, the third option in

which weight is set can be removed by clicking the button  and the weight set for the selected option in second Combo-List is removed.

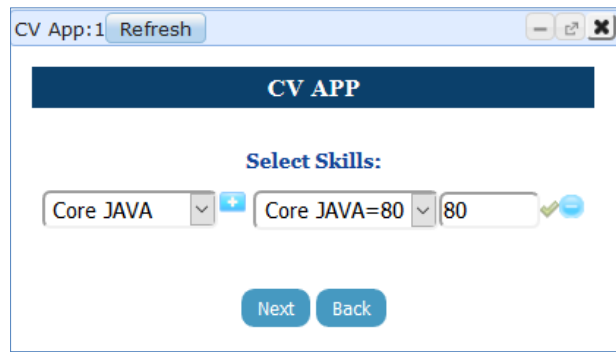


Figure 45: Setting the Weight

10. In screen shot below if any other option (*Advanced JAVA*) is selected; follow the same steps as explained above for *Core JAVA*.

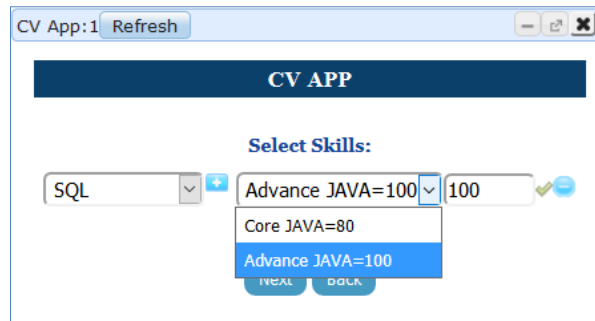


Figure 46: Selecting the Option

2. Input Options and When Added

This option allows setting menu, field, UDF, form etc.

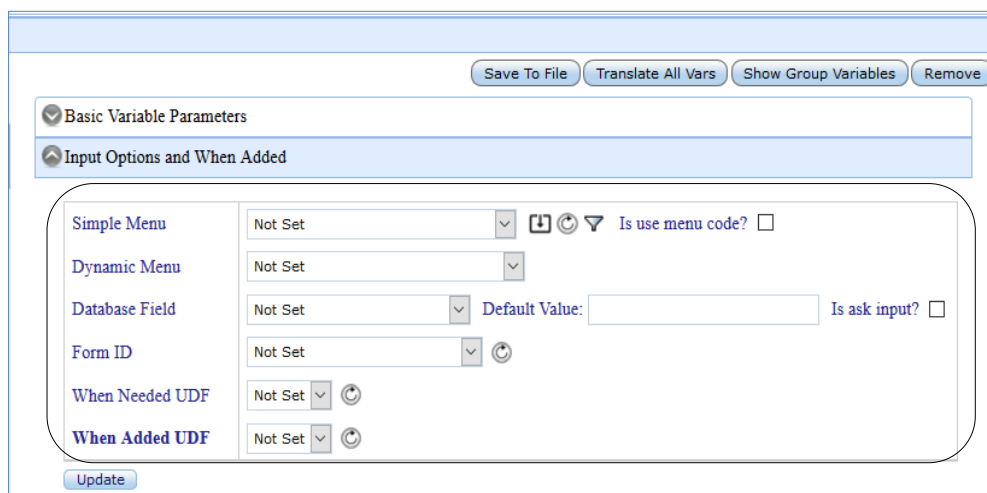


Figure 47: Selecting the Option

The following table explains the fields of *Input Options and When Added*:


Table 2: Fields of Input Options and When Added

Fields	Description
Simple Menu	The variable takes input from predefined values from this menu. The menu selected from this dropdown is linked with the variable selected from the list. Simple Menu dropdown holds the static and database menu of the particular variable group.
Dynamic Menu	Input to variable is assigned from dynamic menu.
Database Field	This option takes the value of the variable from database query and assigns it to the variable.
Form ID	The variable may take group inputs instead of one input. In such case, form is assigned to the variable.
When Needed UDF	When the variable needs value as part of rule execution, it is computed by executing this UDF.
When Added UDF	When variable value is asked (through UI or from DB) and assigned, this UDF is executed. This is helpful in completing tasks after variable value is taken from the end-user.

2.1 Setting Simple Menu

Setting simple menu allows linking the variable with the menu and when variable is called the corresponding values of menu are displayed. The variable takes input from predefined values from the menu.

To set simple menu:

1. Click *Input Options and When Added* option from the list of options. Select the menu from *Simple Menu* dropdown (Example: *CarGrp.MenuYesNo* so only those menus are displayed which is present in that same variable group). To update the menu, click the button  and the following message is displayed on screen. The selected variable (*TestVar*) linked with the menu gets added in the variable group.

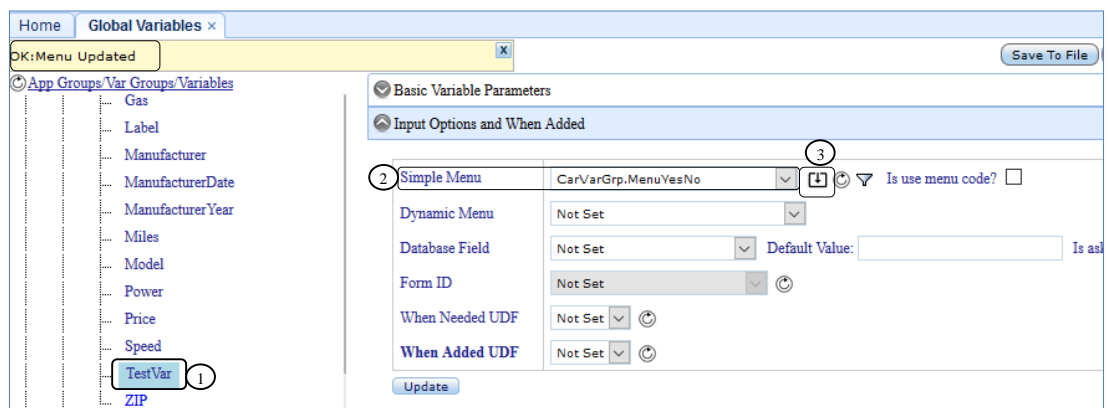


Figure 48: Selecting and Updating Menu

- To view the changes, first create a web page. To create a web page, go to *Main Menu* -> *Core Engine Configs* -> *Rules/Expert Systems* and select the variable group (*CarVarGrp*) and variable (*TestVar*) for which changes needs to be done.

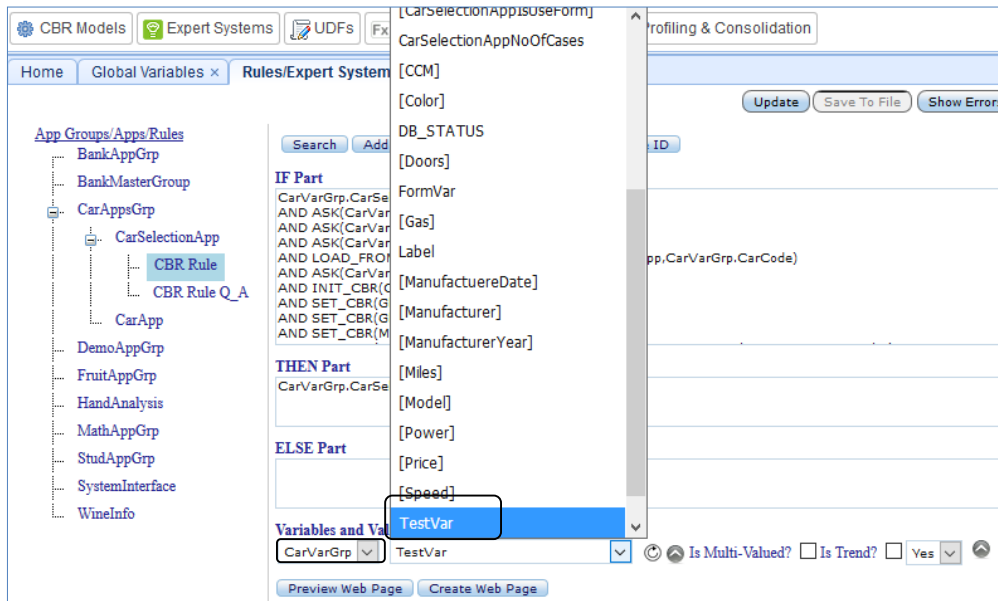


Figure 49: Rules/Expert Systems Interface

- To preview web page, click *Preview Web Page* and the following preview screen is displayed.

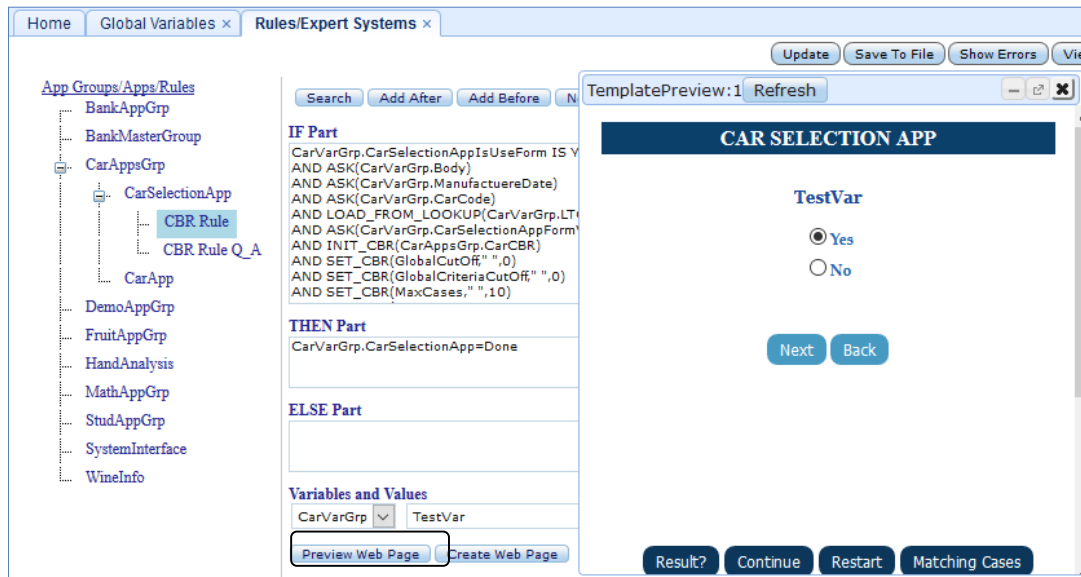


Figure 50: Preview Screen

- To display the changes on web page at runtime, click *Create Web Page* and the following message is displayed.

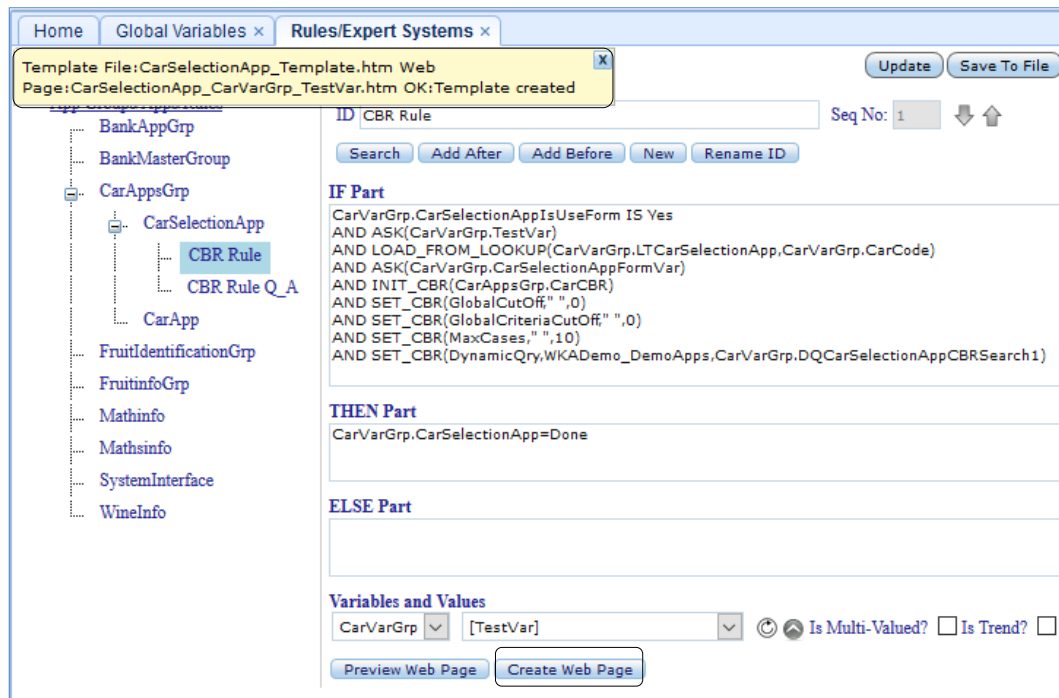


Figure 51: Web Page Created

- To view the changes, run the application. To run the application, go to *Main Menu -> Apps, APIs and Docs ->App* and select *Car Selection App*.



Figure 52: Car Application Interface

As shown in above screen shot, the value of the variable (*CarVarGrp.TestVar*) linked with the menu is shown.

2.2 Setting Dynamic Menu

Like menu option which holds list of possible values for a variable. The dynamic menu holds the value at *run-time*. Values are retrieved from database or from static menu based on filter.

When the limited values of the variable are to be retrieved and populated from database or from existing simple menu itself at run-time (based on certain criteria), dynamic menu is linked to the variable.

To set the dynamic menu:

1. Go to *Main Menu -> Database Interfaces->Dynamic Query*. Enter the desired ID in *New ID* field.

Figure 53: Adding Dynamic Query

2. Select the purpose *DynamicMenu* from *Purpose* dropdown menu. Select the Database (Example: *WKADemo_DemoApps*) where data is defined from *Selected Database* dropdown menu and click *Add New*.
3. After clicking *Add New*, dynamic query name is displayed in *Dyn Query ID* field (*CarGrp.DQMenuModelManufacturer*) and also in the list.

Figure 54: Adding Dynamic Query

4. Query can be created by entering Field Names, View Name etc. otherwise it can be built using Query Building interface by clicking *Build Query* and the page is redirected to *Query Builder* interface as shown in screen shot below. The fields of database (*WKADemo_DemoApps*) are displayed in the list and the following message is displayed.

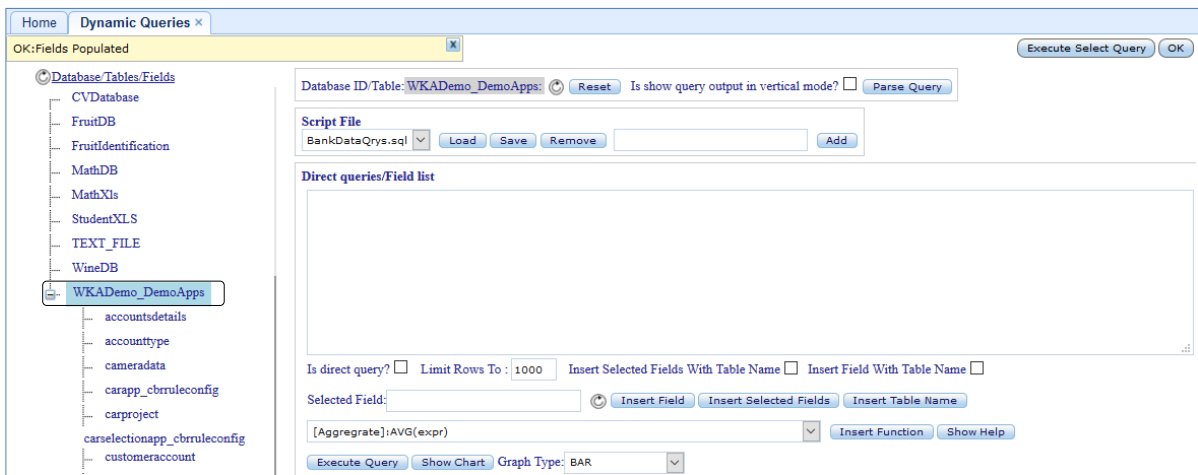


Figure 55: Build Query Interface

5. Select the table (*usedcar*) created from the list of tables and select the required fields (*Model, Manufacturer*) from the list of fields. Click *Insert Selected Fields* and the selected fields get populated in *Direct queries/Field list* text box.

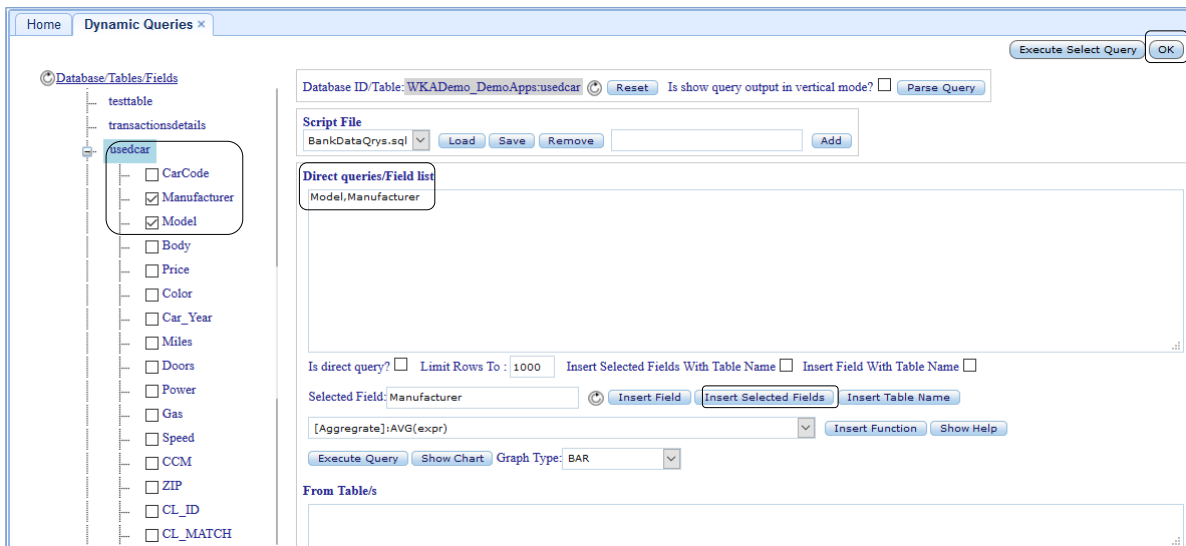


Figure 56: Inserting the Fields


6. Click Ok and the fields (*Model, Manufacturer*) get populated in *Field Name/s* text box and table name (*usedcar*) gets populated in *View Name* field. Select the variable group *CarGrp* and variable *Manufacturer* from *Variable* dropdown menu and click the button  to insert the variable in *Filter* parameter. Variable value in the filter will be populated at run-time.

Figure 57: Inserting the Variable

- To update the dynamic query, click *Update/Refresh* and the following message is displayed on screen.

Figure 58: Updating Dynamic Query

- To set the *Dynamic Menu*, go to *Main Menu ->Domain Vocabulary ->Global Variable*. Click *Input Options* and *When Added* from the list of options, select the variable (*Model*) from the list and select the *Dynamic Menu* name created (*DQMenuModelManufacturer*) from *Dynamic Menu* dropdown. Use refresh button if dynamic menu is not shown.

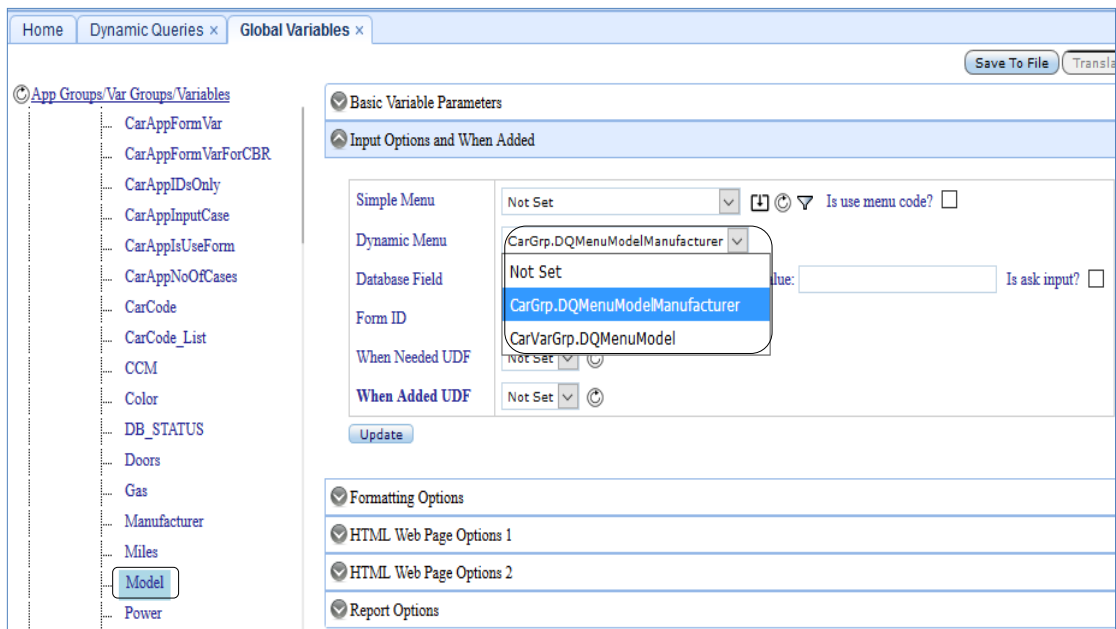


Figure 59: Setting Dynamic Menu to Variable

- To update the variable details, click *Update* and the following message is displayed on screen.

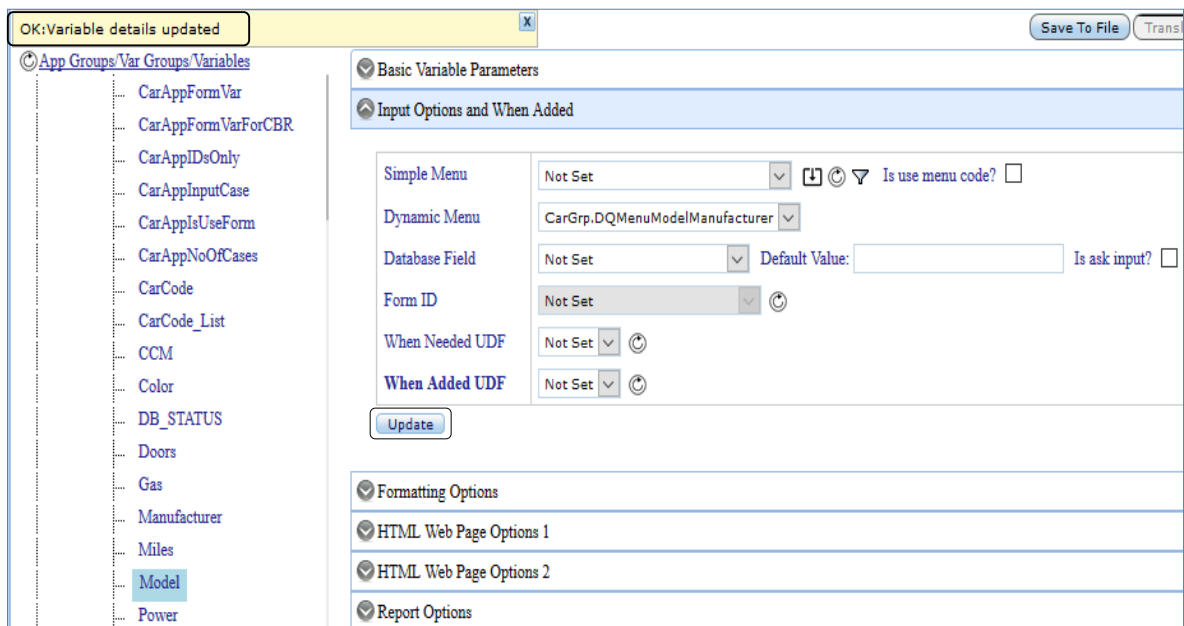


Figure 60: Updating dynamic menu for variable

- To create a web page of the variable for which the changes are required, go to *Main Menu -> Core Engine Configs -> Rules/Expert Systems*. Select the variable

group(*CarGrp*) and variable (*Model*) from *Variables and Values* dropdown menu. Click *Create Web Page*.

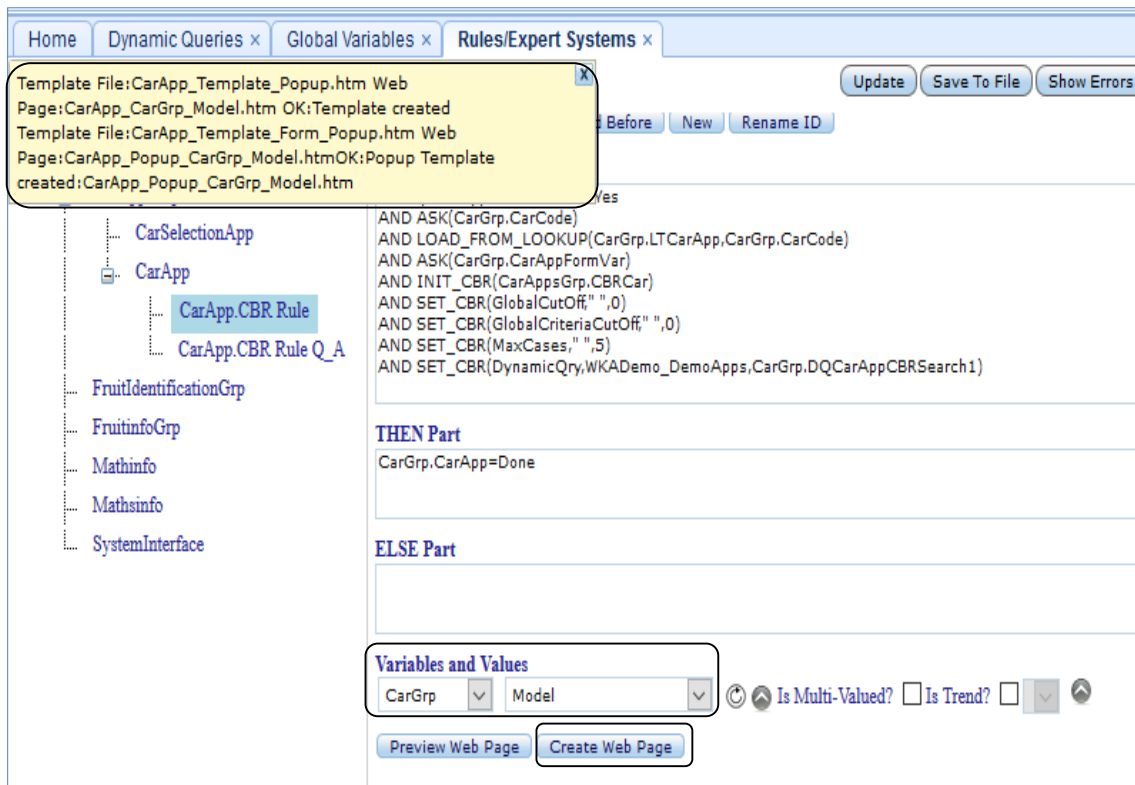


Figure 61: Creating a Web Page

Note: If variable is asked in the Form, the form is recreated to display the changes in the form for the required variable.

- To recreate the form, go to *Main Menu -> Forms and Reports -> Form Designer* and select the form *FormCarApp*. The details (Dynamic Query, App Name etc.) corresponding to *FormCarApp* is shown.

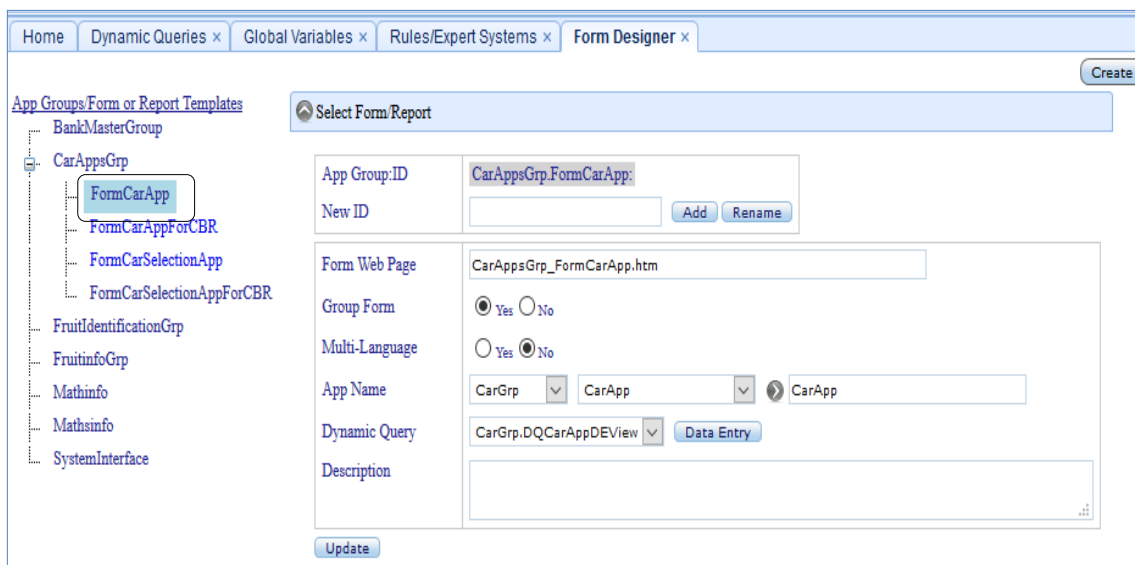


Figure 62: Form Design Interface

- Click *Create* and the following message is displayed on screen.

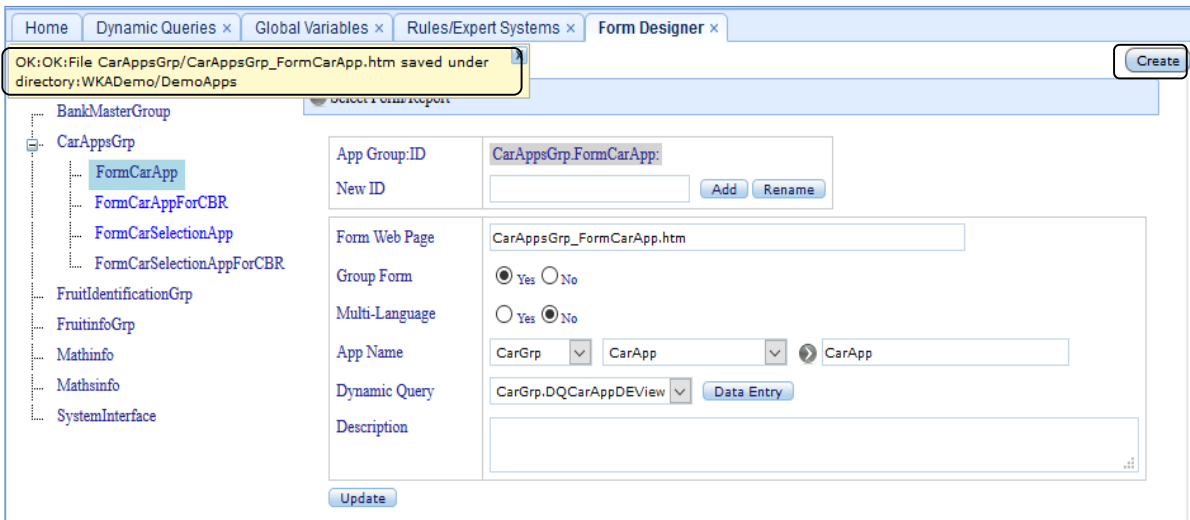


Figure 63: Creating Form

13. To view the changes, run the application. To run the application, go to *Main Menu* -> *Apps, API's and Docs* -> *Apps* and click *CarApp*. The following screen shot is displayed, click *Yes* to view the form based input and click *Next*.

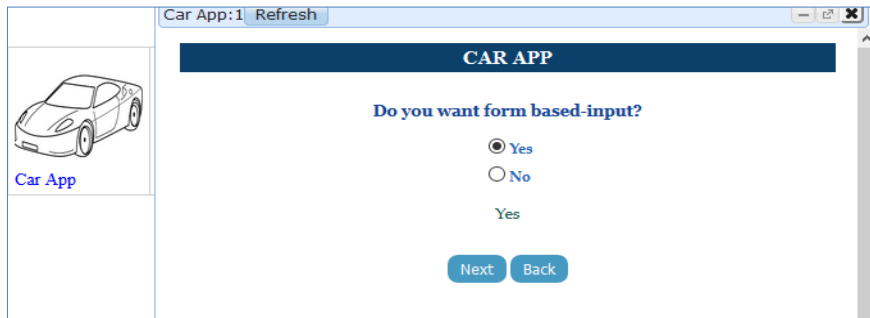


Figure 64: Running the Application

14. Enter the required code and click *Next*.

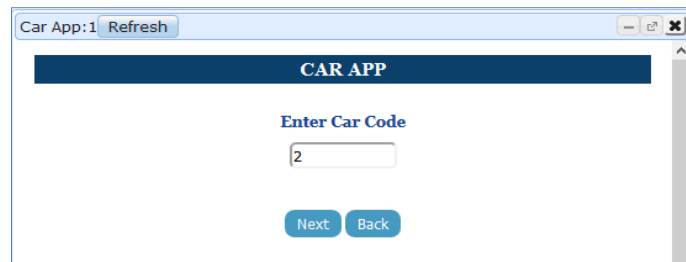


Figure 65: Entering Car Code

15. The record whose car code is 2 is displayed.

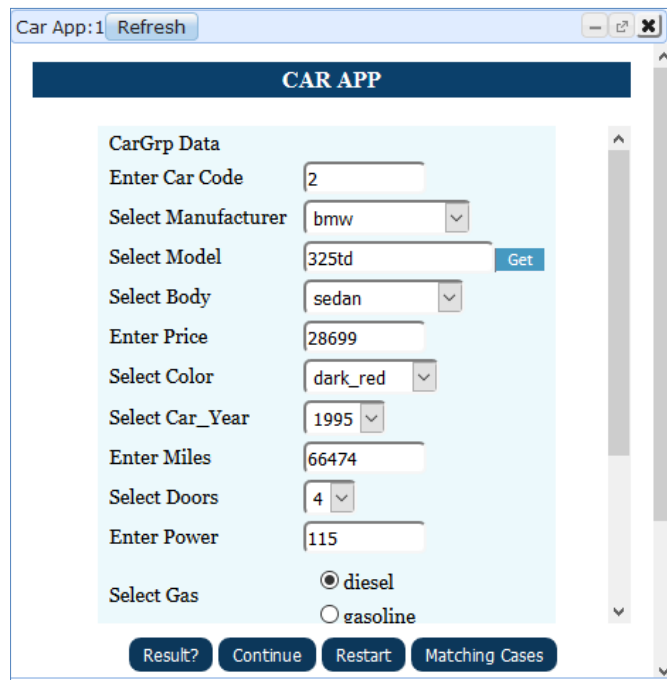


Figure 66: Showing Records

16. Select the manufacturer from *Select Manufacturer* dropdown menu.

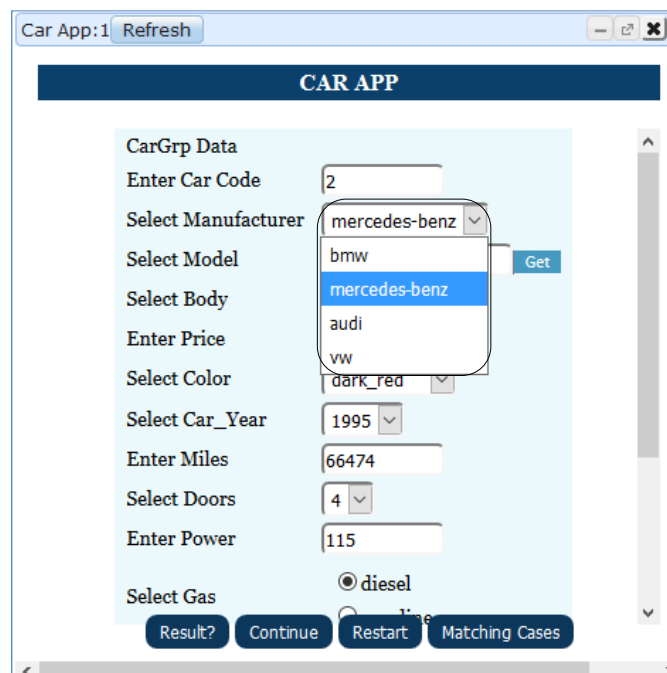


Figure 67: Selecting Manufacturer Type

17. Click *Get* and depending on the manufacturer selected, the lists of car models available are displayed in *Model* dropdown menu using filter of manufacturer.

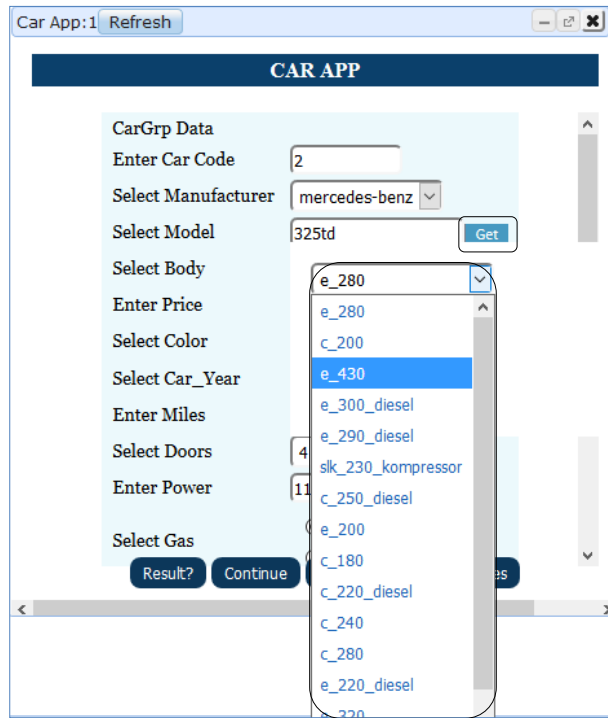


Figure 68: Selecting Model

18. Select the required model and the following screen is shown.

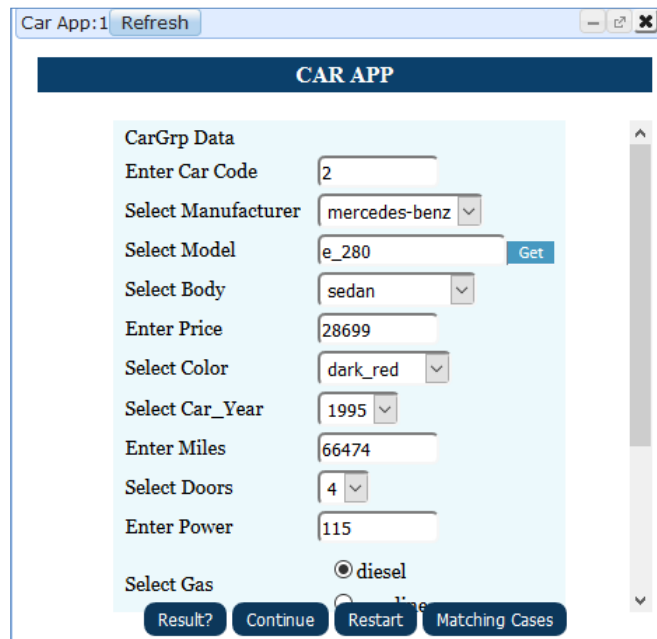


Figure 69: Car App Form

19. Click *Next* and the following session report is displayed.

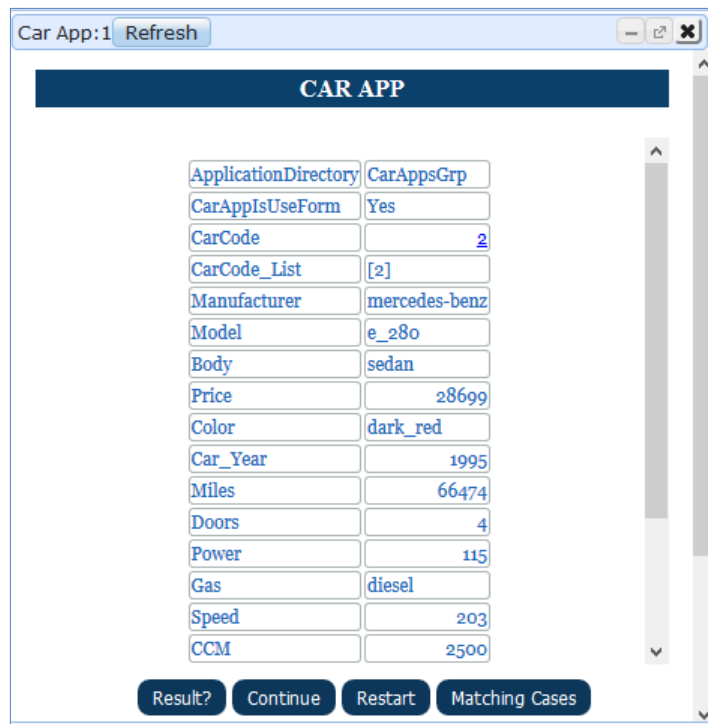


Figure 70: Session Result

As shown in above session report, the records with car code 2 are shown including Manufacturer, Model, Price etc.

3. Formatting Options

This option allows setting all formatting related options such as title, tool tip, mask, display format etc.



Figure 71: Formatting Options

The following table explains the fields of *Formatting Options*:

Table 3: Fields of Formatting Options

Fields	Description
Title	The title of the variable that would appear on reports as heading. By default it takes the variable name.
Tool Tip	This text will be used as tool-tip text for variable title.
Mask	Value of the variable can be formatted using mask characters. Applicable to only numeric and date variables. Mask can be used to enter dates in specific format.
Display Format	When variable value is displayed on report. This HTML formatting would be used. The format text should contain [Variable_Name] where value would be populated. e.g. <label style='color:Green;font-weight:bold'>[Variable_Name]</label> value of variable would be shown as green and bold.
View URL/ Expression	Used for putting URL link or expression when variable value is displayed on report. This can include variables inside []. The language placeholder can be included [LANG] which will be replaced by langcode (e.g. hi for hindi) at run time. This can be useful when images are prefixed with language. Values would be replaced at run time for each row in case it is SQL report.
Other Options	<ul style="list-style-type: none"> • <i>Is show lang output?</i> When value of variable is displayed, is displayed in selected language based on session, if multi-lang menu is connected to variable no need to set this. If input variable and text box is used for getting input and if this option is checked, language text will be converted into English text and variable will hold English value. • <i>Is capitalize each word?:</i> Converts first alphabet of each word to capital. This is required when multi-lingual values are converted back to English. • <i>Is show image?:</i> If this option is checked, it displays image corresponding to value of variable (based on menu linked) in session report. • <i>Is show value? :</i> If this option is checked, it displays value of variable in session report.

3.1 Show Image Option

This option allows adding image with the variable.

1. To show an image with the variable, first the menu (*CarVarGrp.MenuBody*) is set for the variable (Example: *Body*) as shown in screen shot below in *Input Options and When Added* option and under menu options image is already set.

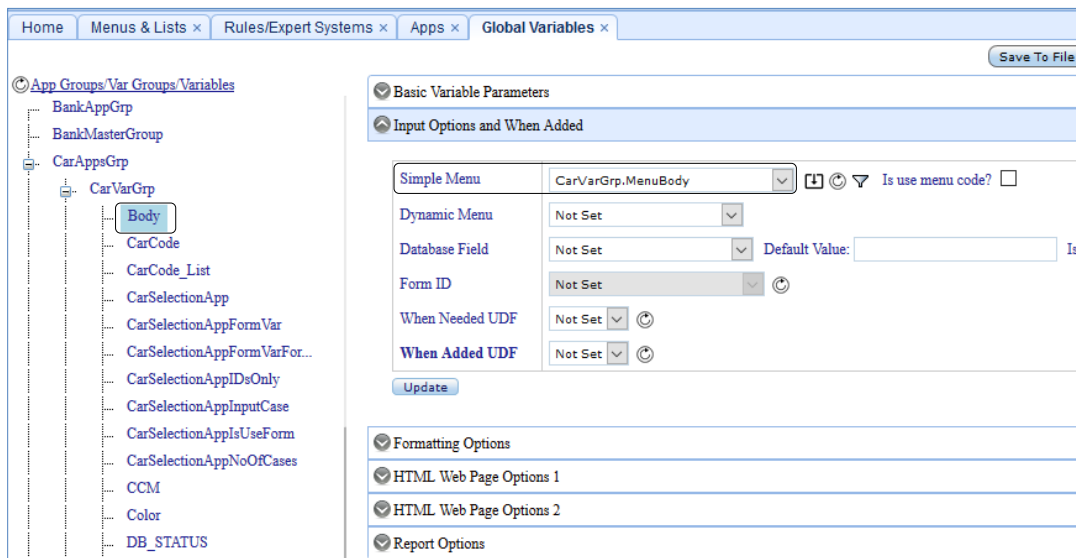


Figure 72: Setting Menu

2. Click *Formatting Options* from the list of options. Enter title (Example: *Body*) of the variable in *Title* field that would appear on report and to display the variable value on report, select the value (Example: *Body*) from *Display Format* dropdown menu. To show the image with the variable, check the option *Is show image?* To update the variable details, click *Update* and the following message is displayed.

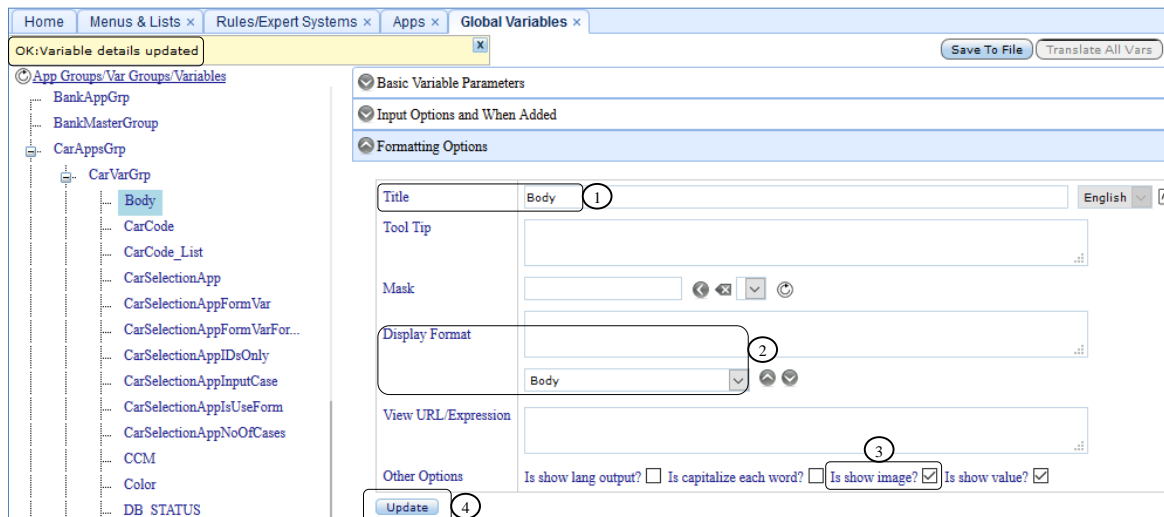


Figure 73: Updating Variable

3. If the variable (*CarVarGrp.Body*) is not asked in rules, then that variable first needs to be asked in rules in *Rules/Expert Systems* interface as shown in screen shot below. To update the rule, click *Update* and the following message with update screen is displayed.

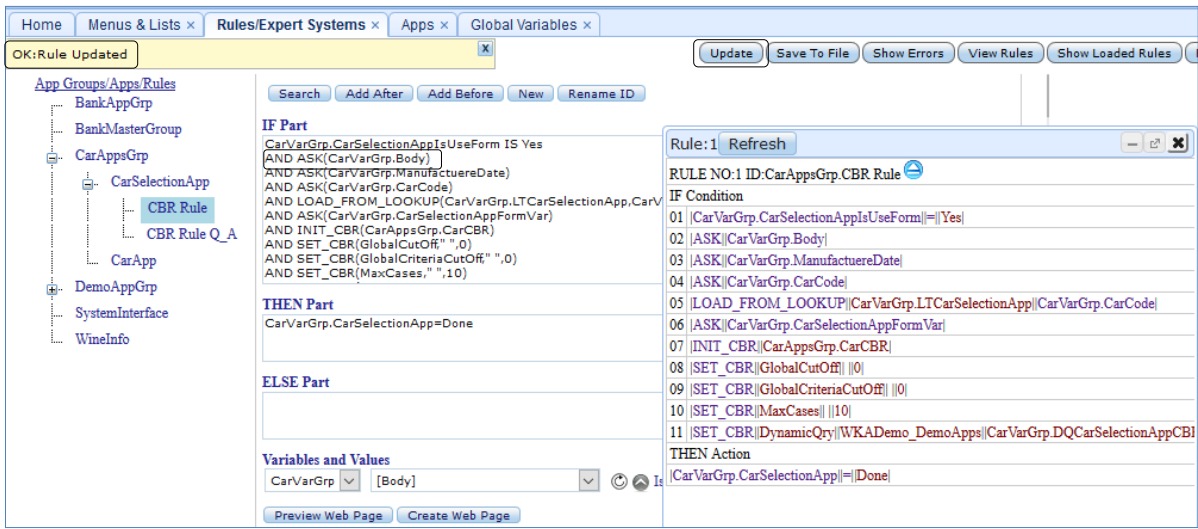


Figure 74: Updating Rules

- To create a web page for variable created, click *Create Web page*.

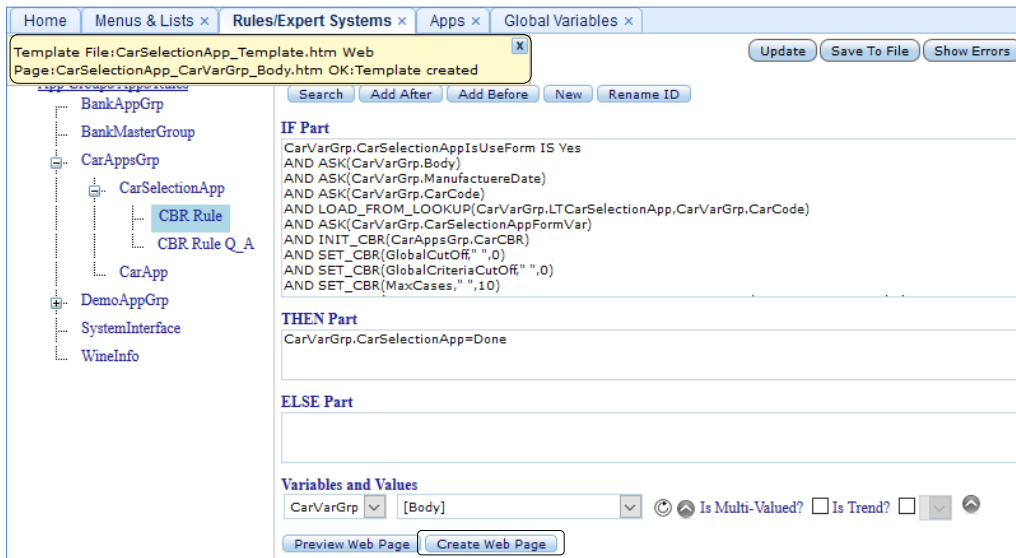


Figure 75: Creating Web Page

- To view the changes, run the application. To run the application, go to Apps interface and click *Car Selection App*.



Figure 76: Session Report

As shown in above screen shot, since the option *Is show image?* is checked so the image is displayed with the value of variable.

3.1.1 Display Format Option

This HTML formatting would be used when variable value is displayed on report. The format text should contain [Variable_Name] where value would be populated. Example:

```
<h1><b>[FruitVarGrp.Fruit]</b></h1></b>.
```

Enter title (Example:*Fruit*) of the variable in *Title* field that would appear on report and to display the variable value on report, select the value (Example: *Fruit*) from dropdown menu.

Click the button  to insert the value in *Display Format*. To update the variable, click *Update* and run the application.

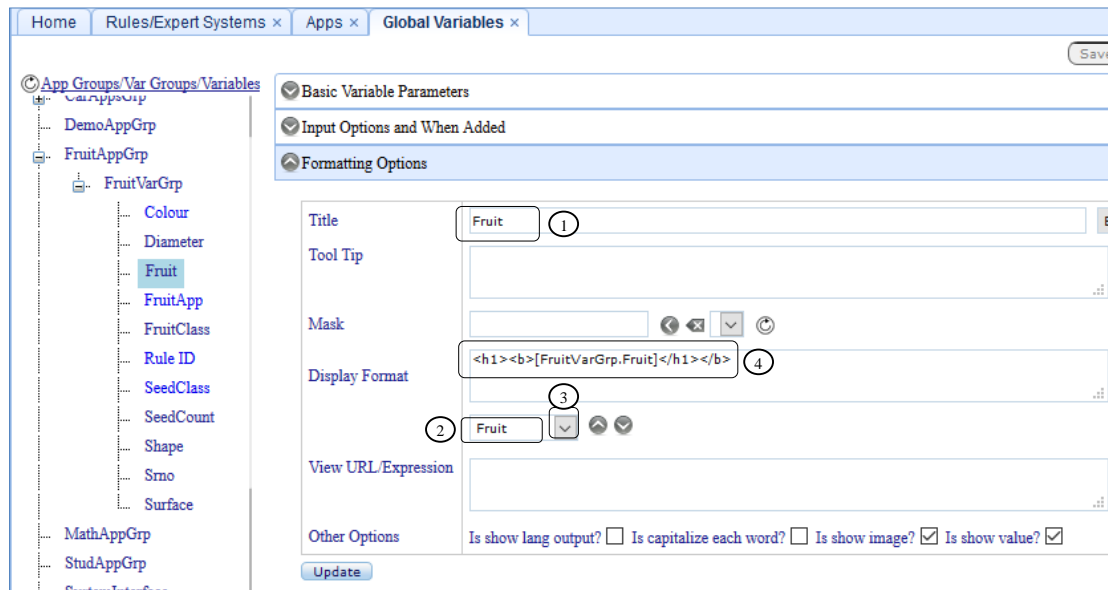


Figure 77: Display Format Options

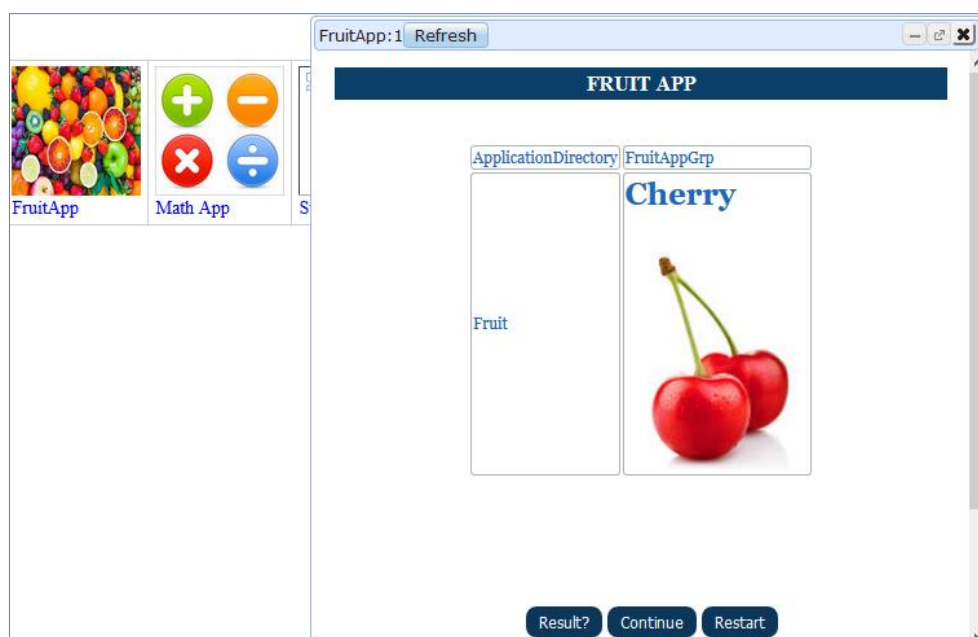


Figure 78: Session Report

As shown in above screen shot, the value (*Cherry*) of the variable *Fruit* is displayed as bold since in *Display Format* field the value of the variable is set as bold.

3.2 Title and Tool Tip Option

1. To create a variable, refer the above section 1.1 and to set the title and tool tip go to Formatting Options.

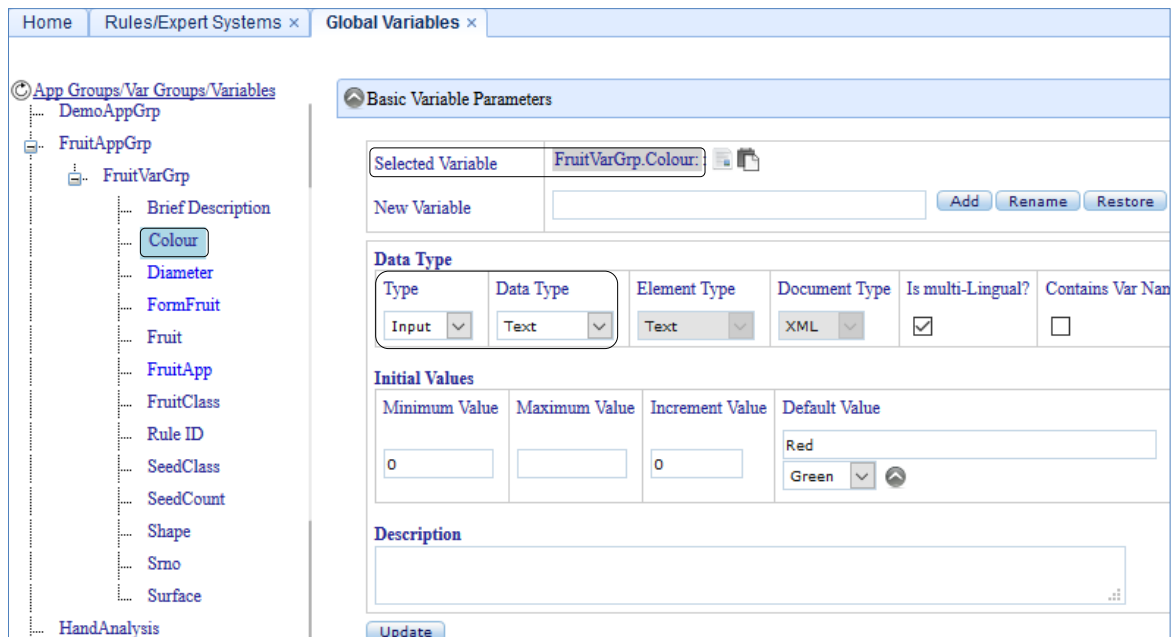


Figure 79: Creating the Variable

2. Enter the title in Title field and tool tip for that variable in Tooltip field. Entered title and tooltip is to be displayed in the end session report.

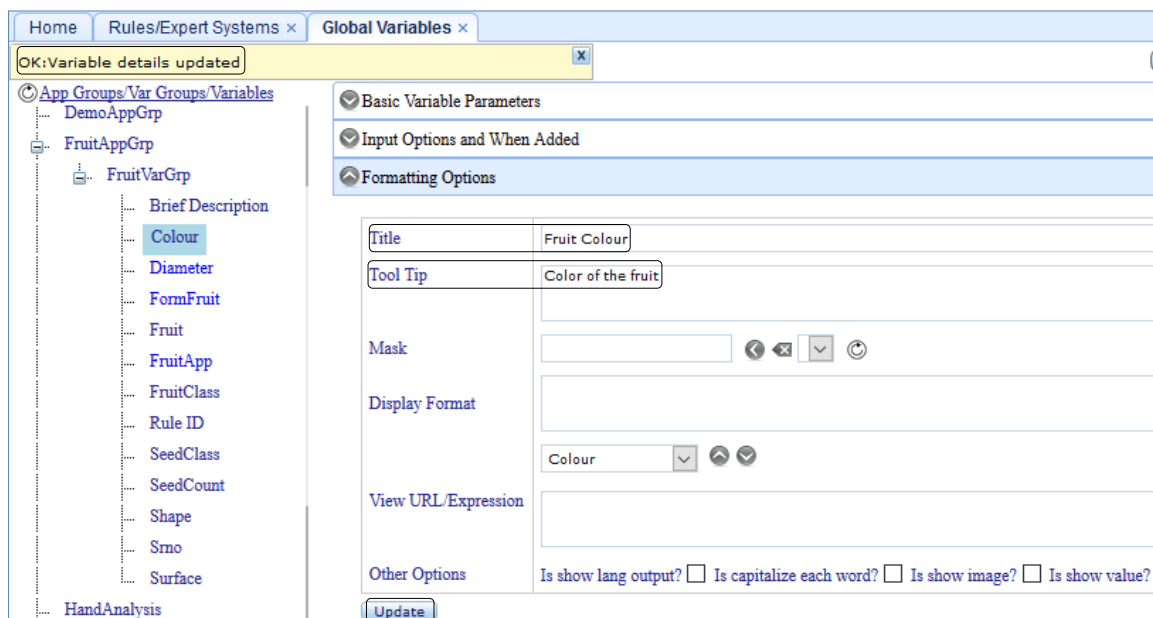


Figure 80: Entering the options



Figure 81: Session Report

3.2Is show Lang output &Capitalize Each Word Options

This option converts first alphabet of each English word to capital before converting into language. This is required when values are converted back to English (this is required because mapped English values are stored in lower-case). To perform this:

1. First click *Basic Variable Parameters* option from the list of options. Select the variable (*FruitIdentificationVar.Color*) already created and the details (*Data Type, Type, Default Value* etc.) corresponding to variable is displayed.
2. Click *Formatting Options* from the list of options. Select the variable (*Color*) created from the list of variables and the details (*Title, Display Format* etc.) corresponding to the variable is displayed. To convert first alphabet of each word to capital, check the option *Is capitalize each word?* and to update the variable details click *Update*.

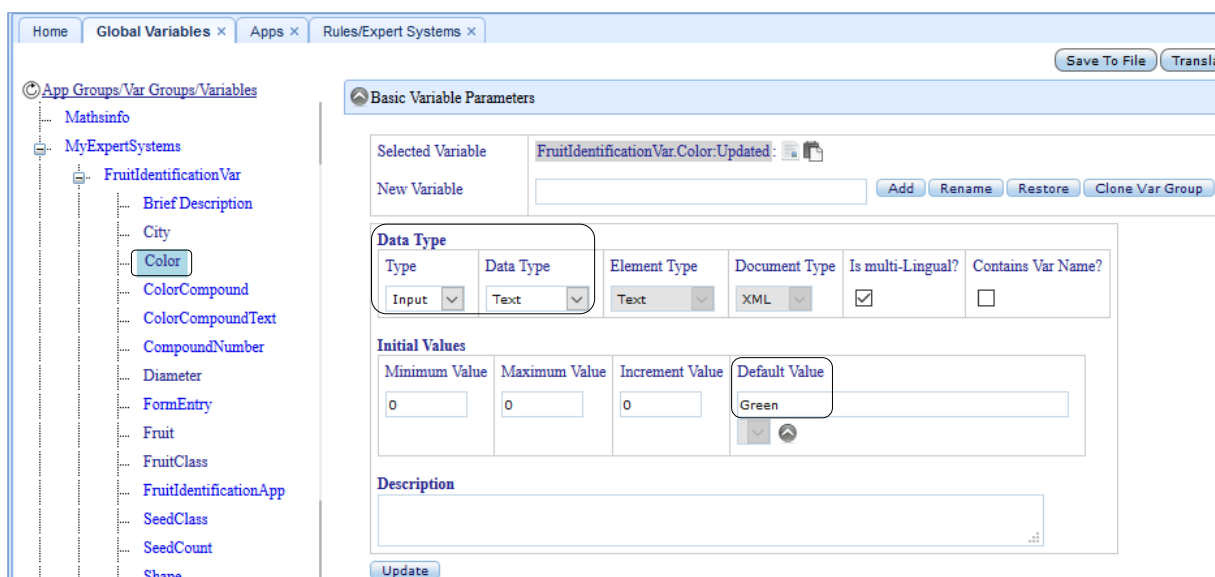


Figure 82: Basic Variable Parameters Option

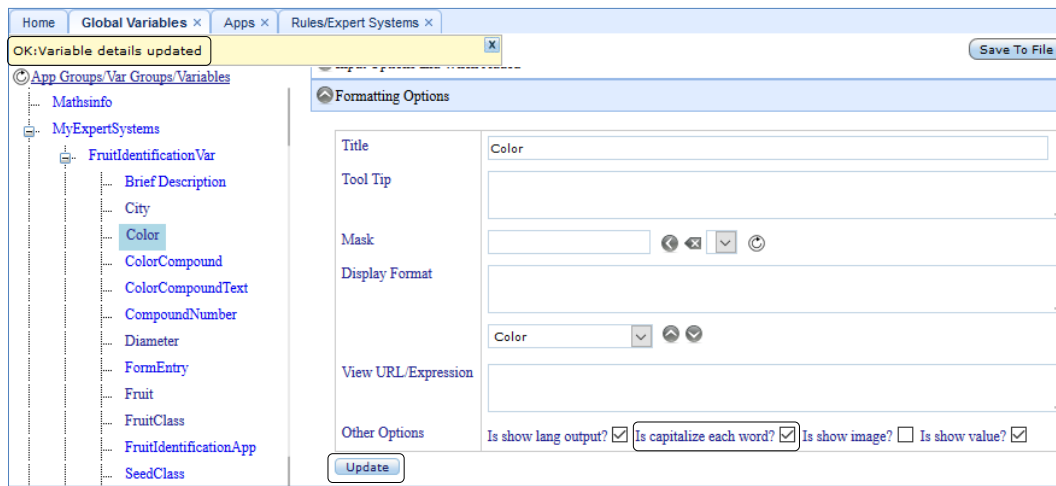



Figure 83: Formatting Options

3. Click *HTML Web Page Options 1* from the list of options and the details (*Prompt, Description, Control, Number of Options* etc.) corresponding to the variable is displayed.
4. Click *HTML Web Page Options 2* from the list of options. To validate the data entered for this variable at run-time, first select the variable (*Color*) from dropdown menu and click the button  to move the variable in *Validation Condition (JavaScript Expression)* field.

Enter the JavaScript expression in *Validation Condition (JavaScript Expression)* field. In case of multilingual for variables using Text controls values can be included in \wedge s e.g. `[VarGroup.Color]=='\wedgeRed\wedge'`, based on language, Red will be translated into selected language when script is created.

Enter message (using JavaScript expression) in *Validation Message (JavaScript Expression)* field to be displayed when validation condition is not satisfied. Include text in \wedge s when text is to be translated into selected language. Example: “ \wedge Selection should be Red \wedge ” (Refer section 5.1 to know more about JavaScript Validation).

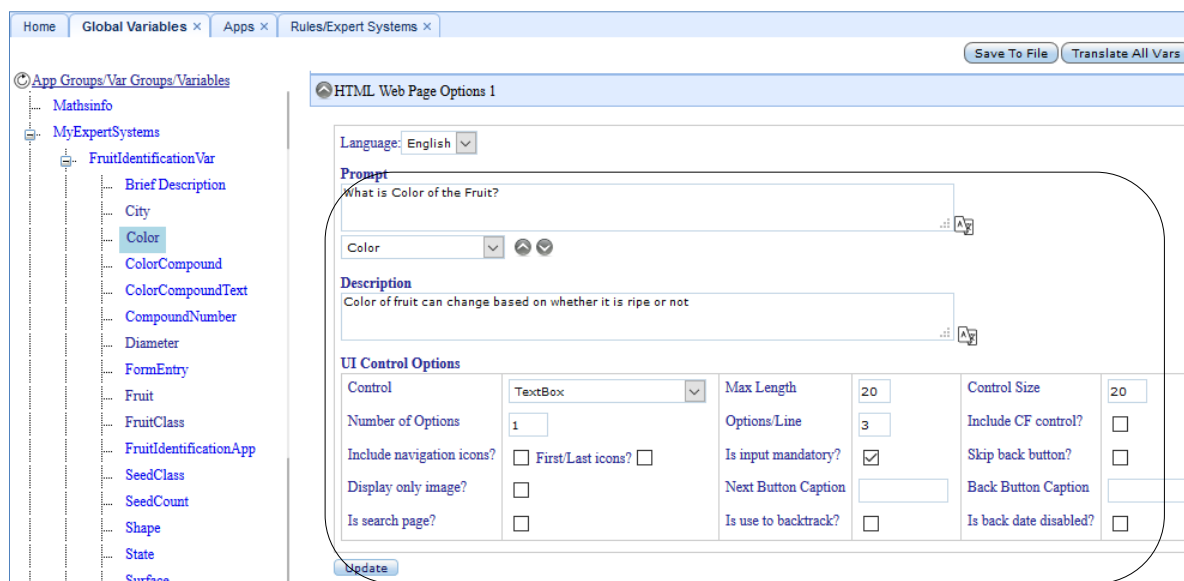


Figure 84: HTML Web Page Options 1

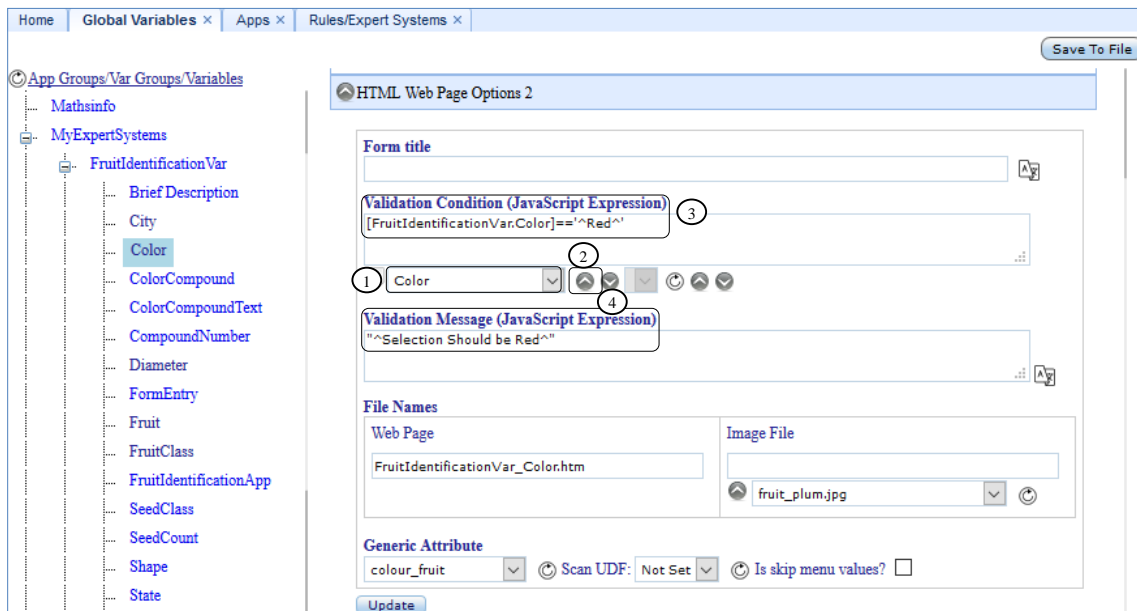


Figure 85: HTML Web Page Options 2

5. If the variable (*FruitIdentificationVar.Color*) is not asked in rules, then that variable first needs to be asked in rules in *Rules/Expert Systems* interface as shown in screen shot below. To update the rule, click *Update* and the following message with update screen is displayed.

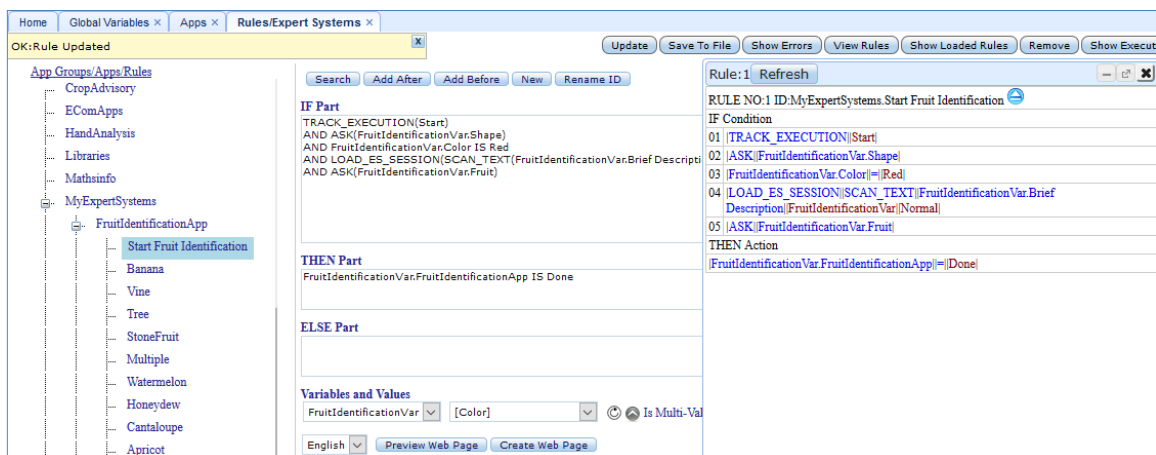


Figure 86: Creating and Updating Rule

6. To create a web page for variable created, click *Create Web page*.

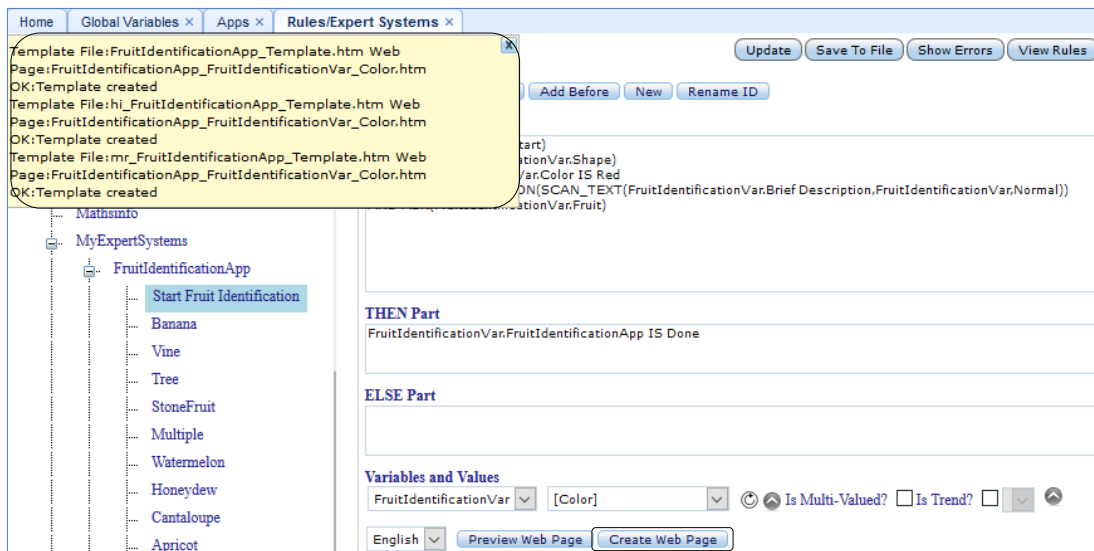


Figure 87: Creating Web Page

- To view the changes, run the application. To run the application, go to *Apps* interface and click *Fruit Identification*. The following screen shots are displayed.



Figure 88: Selecting Shape

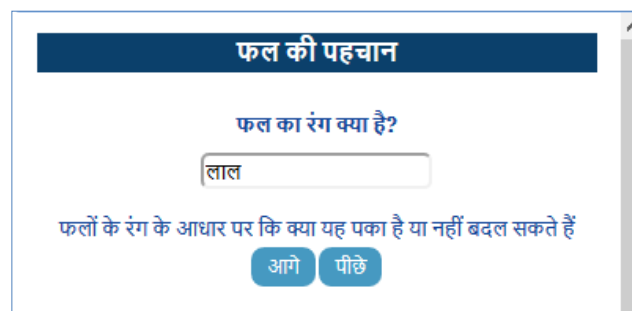


Figure 89: Selecting Colour

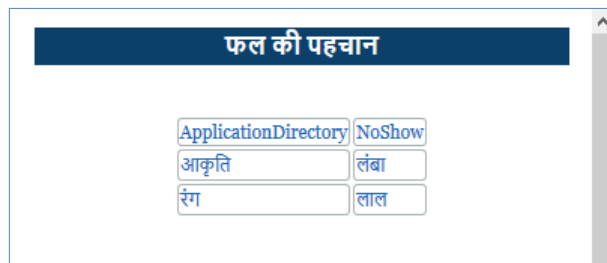


Figure 90: Session Report

As shown in above screen shot, the variables and its values are displayed in selected language (Hindi).

To view the changes, restart the application by clicking *Restart* and by default it takes the value of the session and converts first alphabet of that value to capital as shown in screen shots below.

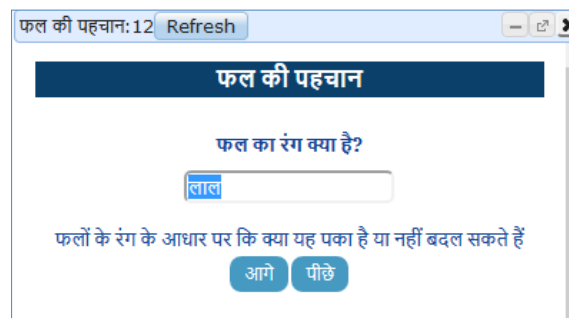


Figure 91: Selecting Colour

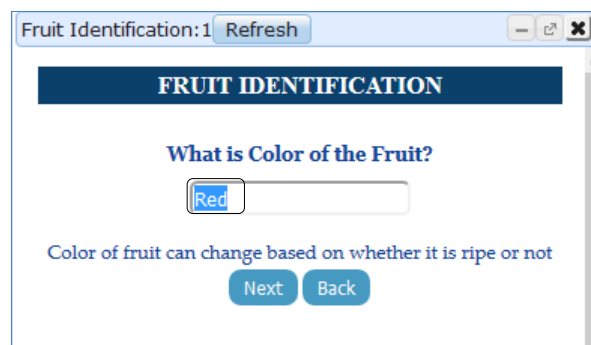


Figure 92: First Letter Converted to Capital

If the option *Is capitalize each word?* is unchecked then first alphabet of each word is not converted to capital.

1. Click *Formatting Options* and uncheck the option *Is capitalize each word?* To update the variable details, click *Update*.

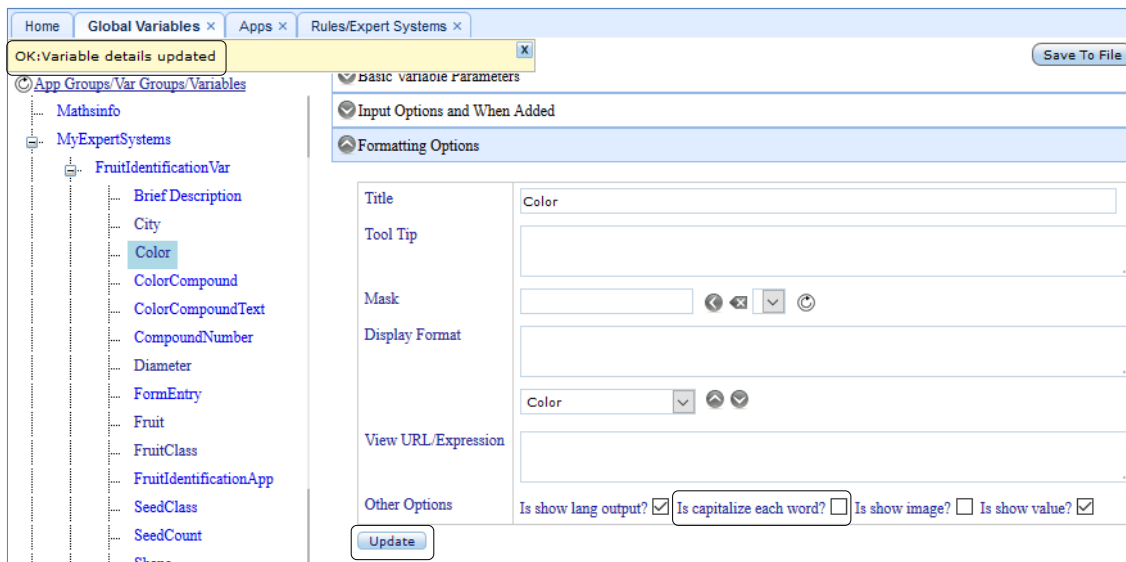


Figure 93: Unchecking the Option and Updating the Variable

2. To create a web page, click *Create Web page*.

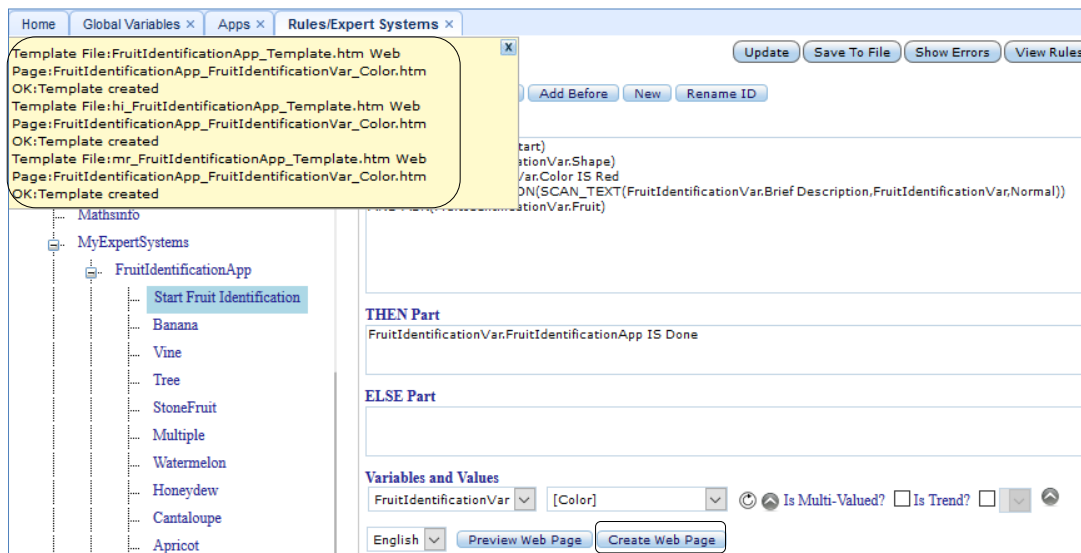


Figure 94: Creating Web page

3. To view the changes, run the application.

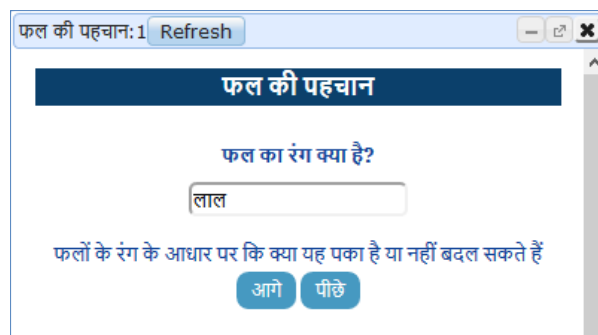


Figure 95: Selecting Colour

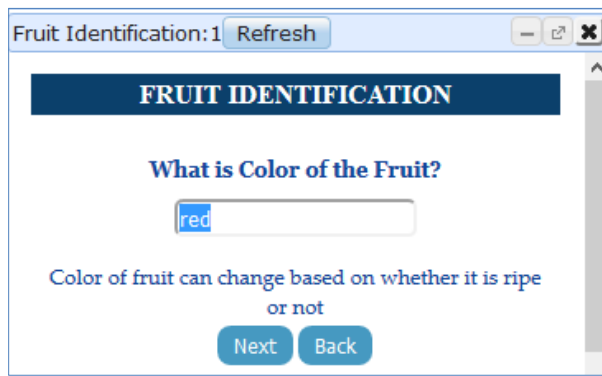
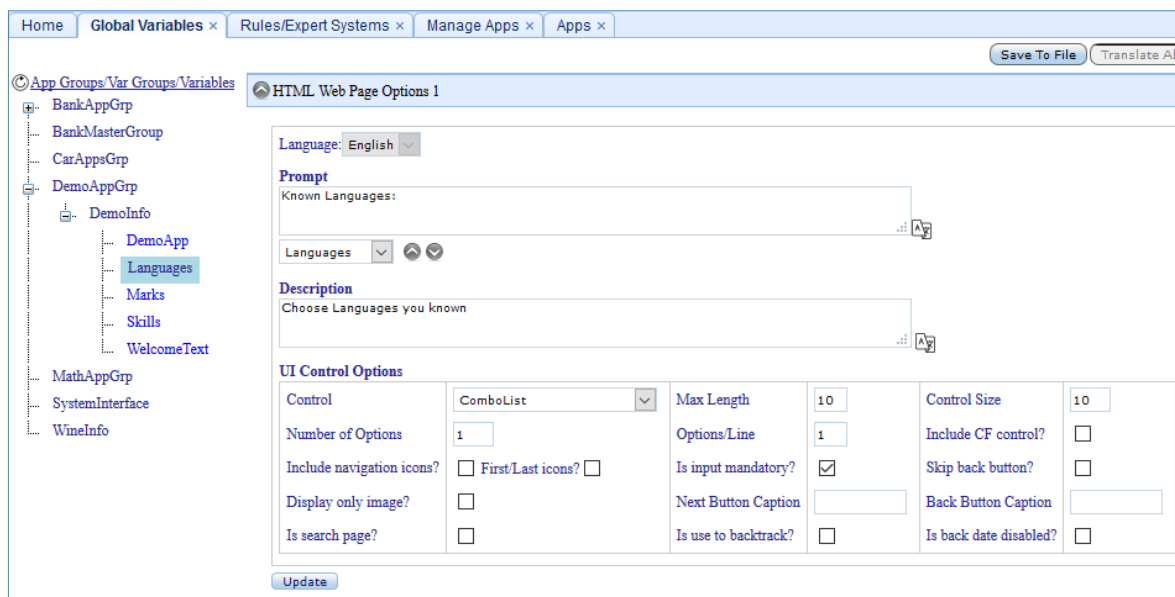


Figure 96: No Changes in First Letter

4. HTML Web Page Options 1

This option allows adding Prompt, Description, UI Control Options etc.



The following table explains the fields of *HTML Web Options 1*:

Table 4: Fields of HTML Web Page Options 1

Fields	Description
Prompt	Prompt which appears in question and answer mode.
Description	Adds description of the variable when template to enter the data is created. It appears at run-time.
UI Control Options	<ul style="list-style-type: none"> <i>Control</i>: Type of control used for selected input type variable. <i>Max Options</i>: Applicable in compound variables. This value shows how many values need to be entered for compound variable. May be useful when number of values to be restricted and order of values in compound variable is important. If number of options is more than 1 the Control type cannot be <i>CheckBox</i> or <i>Multi-select</i>. <i>Options/Line</i>: Number of options to be displayed per line (applicable in radio/check box).

- *Is input mandatory?:* When input asked for this variable, whether user must give input and cannot leave blank etc.
- *Skip back button?:* By default when expert system asks variable value, it has two default buttons NEXT and BACK. If variable is the first variable whose value is asked first, BACK button can be skipped.
- *Display only image?:*displays only images while displaying images for CheckBoxList_1 and RadioBoxList_1 option.
- *Is search page?:*Set this if variable is used to hold search text, the control must be textarea or textbox.
- *Is use to backtrack?:*Set this option if the current variable is used to go back to any point of session. It must have menu connected with variable names as codes. Session will jump to variable corresponding to code of selected option.
- *Is back date disabled?:* When this option is checked, then date control disables all the dates which are less than current date.

4.1 Changing Prompt and Description

Global Variables interface allows changing prompt and description of a variable.

1. To change prompt or description of a variable, go to *Main Menu -> Domain Vocabulary ->Global Variables ->HTML Web Page Options 1* and edit the *Prompt* and *Description* textbox for variable *Languages*.

The screenshot shows the 'Global Variables' interface. On the left, a tree view shows the hierarchy: App Groups/Var Groups/Variables > DemoAppGrp > DemoApp > Languages (highlighted). The main area is titled 'HTML Web Page Options 1'. It contains a 'Language' dropdown set to 'English'. Below that is the 'Prompt' section with a text area containing 'Known Languages:'. The 'Description' section has a text area containing 'Choose Languages you know'. The 'UI Control Options' section includes: Control (ComboList), Max Length (10), Number of Options (1), Options/Line (1), Include navigation icons? (checkboxes for First/Last icons), Is input mandatory? (checked), Display only image? (checkbox), Next Button Caption (empty), Is search page? (checkbox), and Is use to backtrack? (checkbox). An 'Update' button is at the bottom.

Figure 97: Inserting Prompt and Description

2. To update the input options of variable *Languages*, click *Update*.

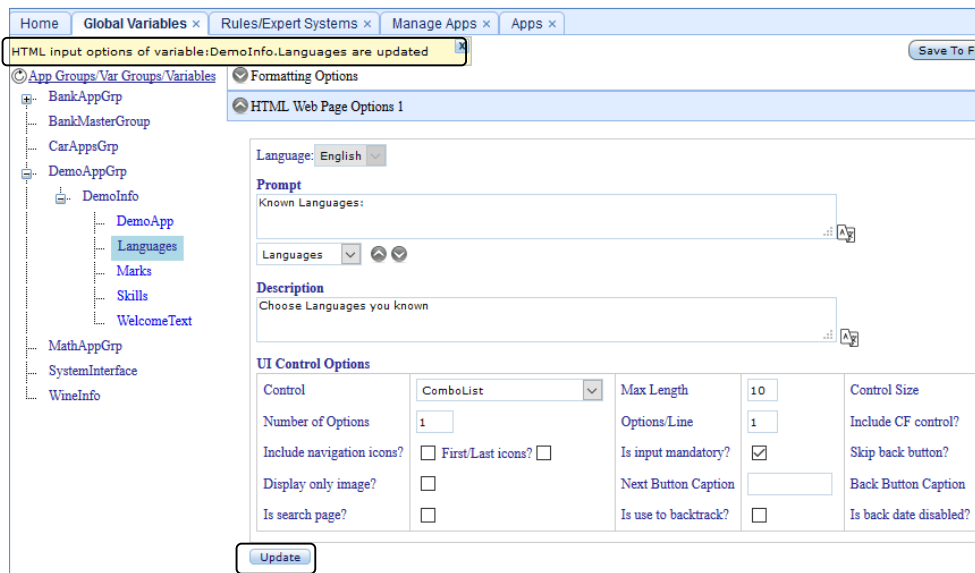


Figure 98: Updating the Changes

3. To create web page of a variable for which the changes are required, go to *Main Menu* -> *Core Engine Configs* -> *Rules/Expert Systems*. Select the required variable group (*DemoInfo*) and corresponding variable (*Language*) from *Variables and Values* dropdown menu. To create the template, click *Create Web page* and the following message is displayed.

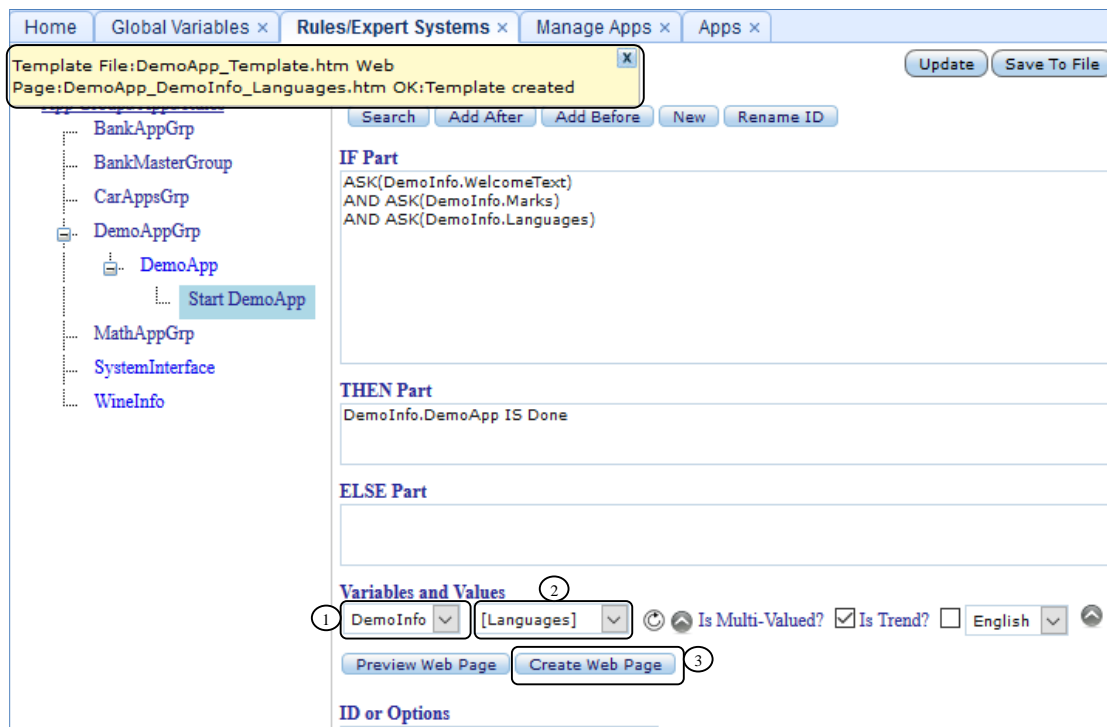


Figure 99: Creating Web Page

4. To view the changes on web page, run the application. To run the application, go to *Apps Interface* and click *DemoApp*.



Figure 100: Running the Application

As shown in above screen shot, the prompt for *DemoApp* has been changed.

4.2 Setting Control options

Global variables interface allows setting textbox, text area and hidden controls of a variable.

1. To set the control options of a variable, go to *Main Menu -> Domain Vocabulary -> Global Variables*. By default, *Basic Variable Parameters* option is shown. Select the variable *Body* and the selected variable gets displayed in *Selected Variable* field (*CarVarGrp.Body*).

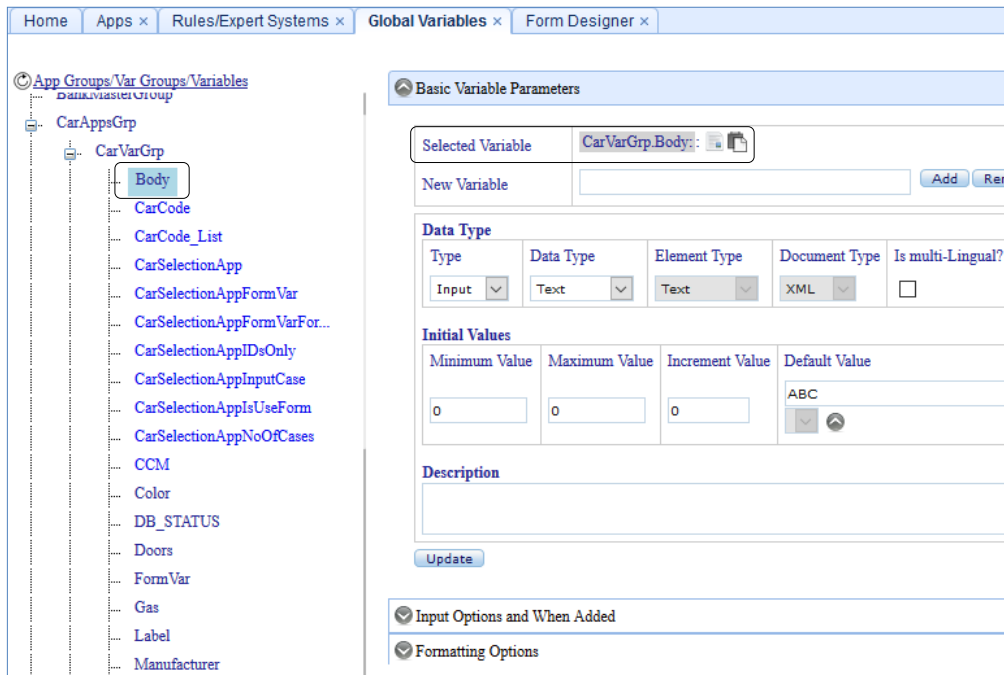


Figure 101: Selecting Variable

2. Click *HTML Web Page Options* from the list of options. Select the *Control* (Example: *TextBox*) for the required variable from *UI Control Options -> Control* dropdown menu.

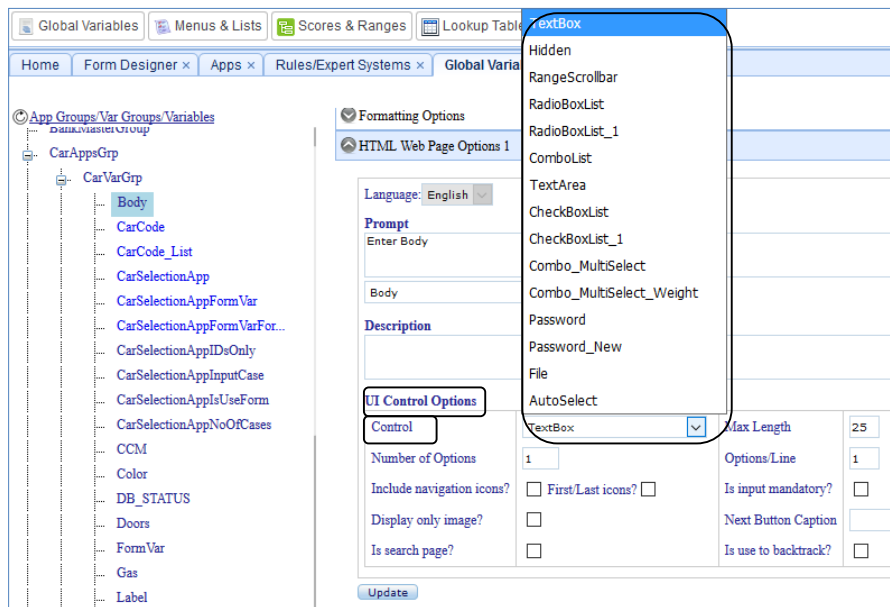


Figure 102: Selecting the Control

- To update the input options of a variable, click *Update* and following the message is displayed on screen. To save the changes, click *Save to File*.

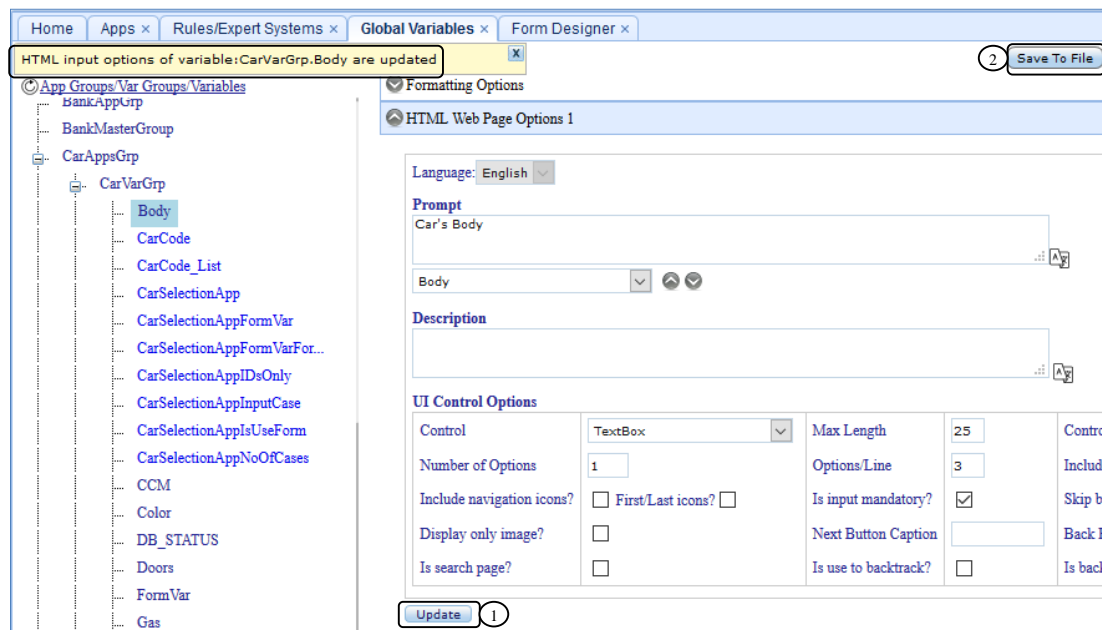


Figure 103: Updating and Saving the Variable

- To create a web page of the variable for which the changes are required, go to *Main Menu -> Core Engine Configs -> Rules/Expert Systems* and follow the same steps as explained above in section 4 (Refer Figure 99).
- To view the changes on web page, run the application. To run the application, go to *Apps Interface* and click *Car Selection App*.

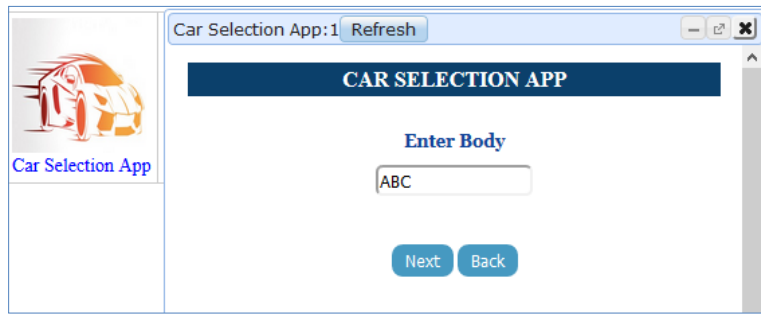


Figure 104: Setting Textbox Control

As shown in above screen shot, the control has been changed to text box.

6. Similarly, to hide the control for a variable select the option *Hidden* from the list of options (Refer Figure 102) and control is hidden as shown in screen shot below.

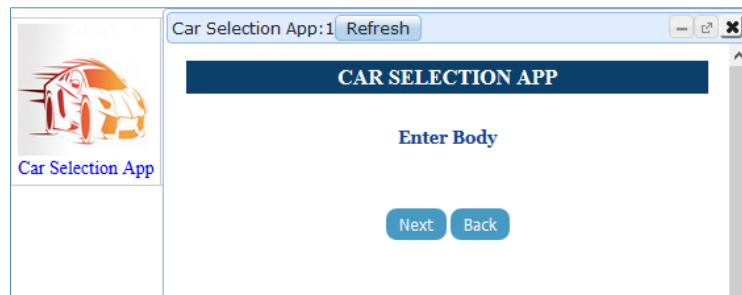


Figure 105: Hidden Control Interface

4.2.1 RadioBoxList

To set *RadioBoxList* control for a variable:

1. Click *Input Options and When Added* from the list of options. Select the variable (*Body*) from the list of variables. Select the required menu (*CarVarGrp.MenuBody*) from *Simple Menu* dropdown according to the selected variable.

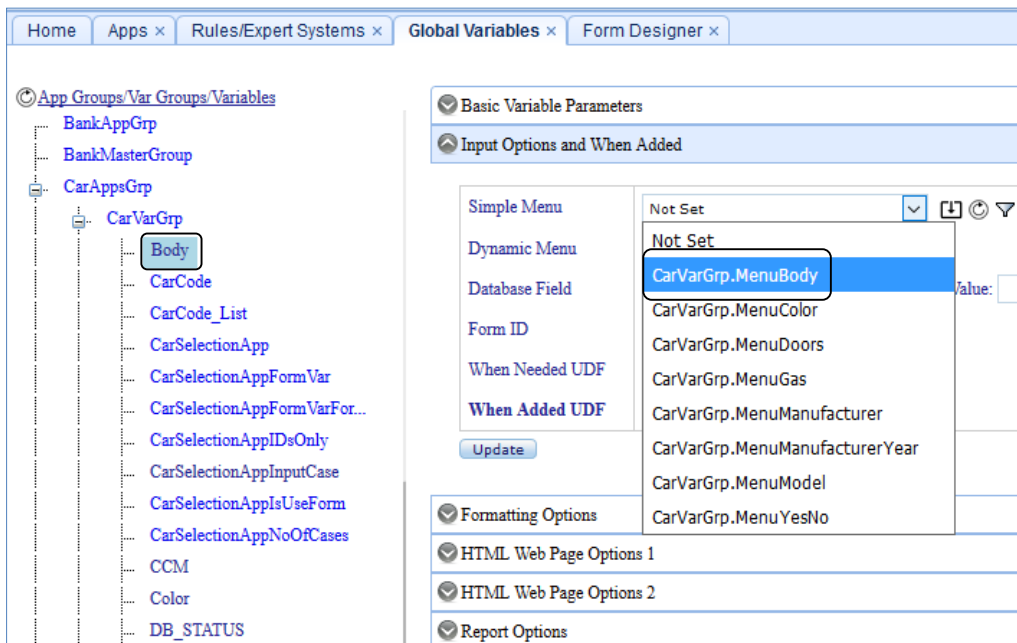


Figure 106: Setting Menu

- To update the menu options of variable, click *Update* and the following message is displayed on screen.

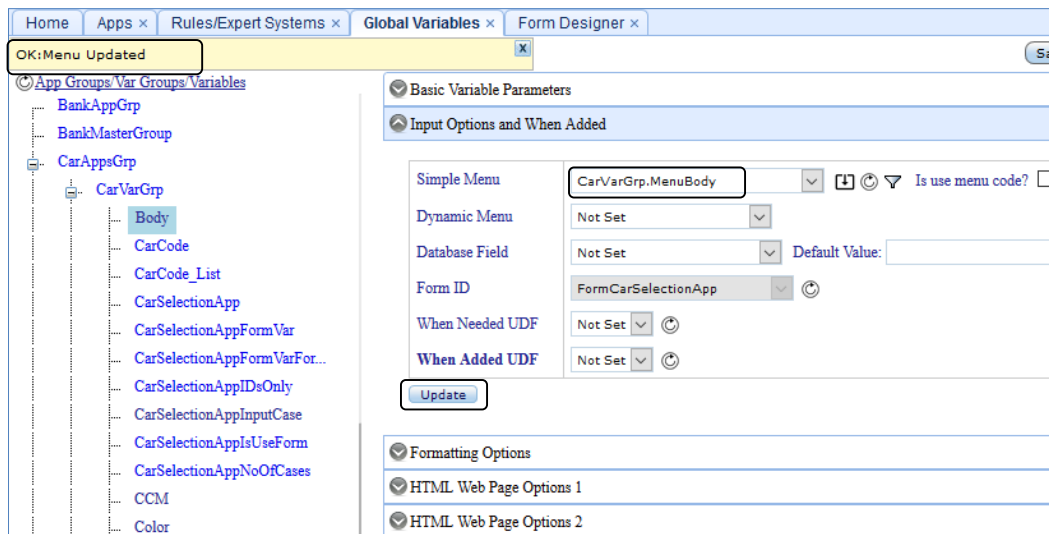


Figure 107: Updating Menu

- To change the control, click *HTML Web page Options 1* from the list of options. Select the control *RadioBoxList* from *Control* dropdown menu and to display the number of options per line, enter the desired number in *Options/Line* field. To set the control, click *Update* and the following message is displayed.

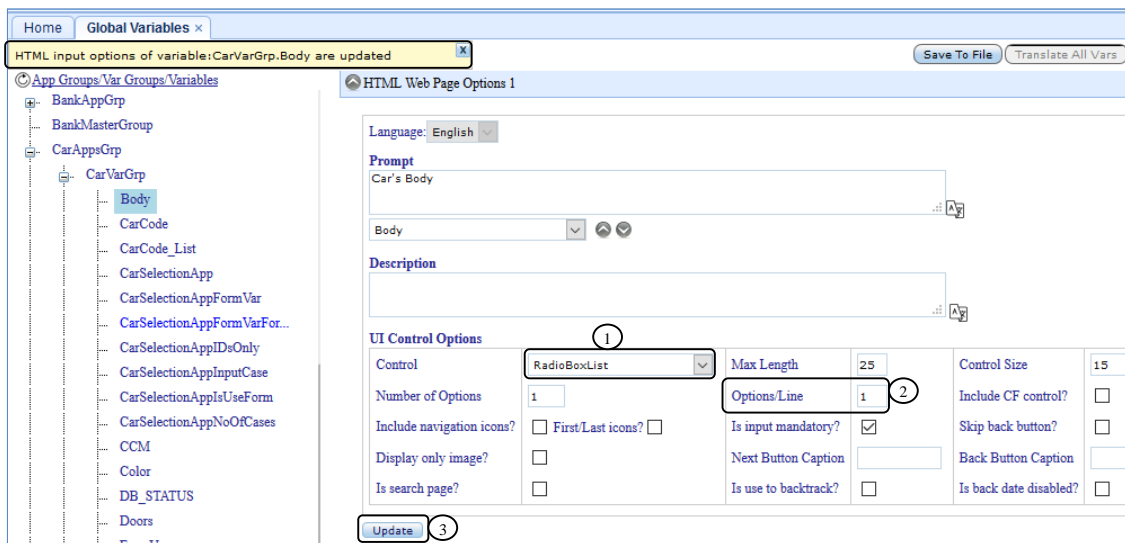


Figure 108: Selecting and Updating the Control

- To create web page of a variable for which the changes are required, go to *Main Menu* -> *Core Engine Configs* -> *Rules/Expert System* and follows the same steps as explained in section 4 (Refer Figure 99).
- To view the changes on web page, run the application. To run the application, go to *Apps Interface* and click *Car Selection App*.

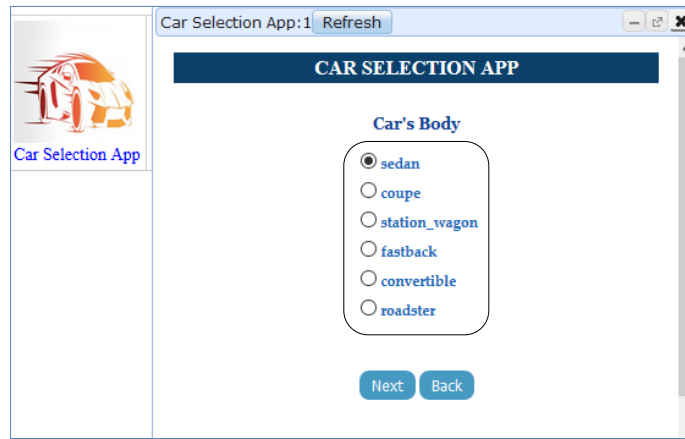


Figure 109: RadioBoxLayout Control Interface

As shown in above screen shot, the radio box control is set and since the option per line is set as 1 so it will show only one option per line.

Note: If Option/Line is set as 3 in UI Control Options of Global Variable Interface (Refer Figure 108) then output is shown as below.

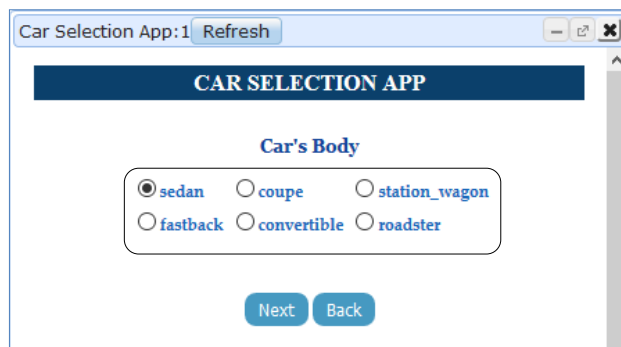


Figure 110: RadioBoxLayout Control Interface

4.2.2 Combo-List Control

Note: To set Combo-List Control, follow the same steps as explained above for RadioBoxLayout Control (Refer Figure 108) and following screen is displayed with Combo-List Control.

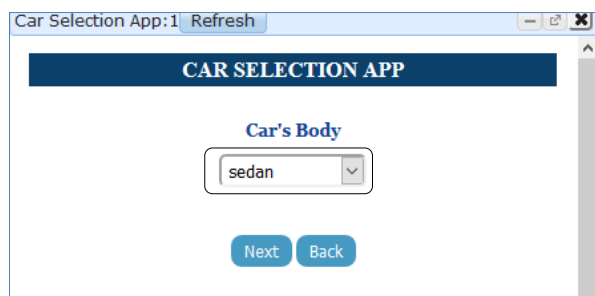


Figure 111: Combo-List Control Interface

4.2.3 RadioBoxLayout_1 and CheckBoxList_1 control

To set *RadioBoxLayout_1* and *CheckBoxList_1* control follow the same steps as explained above for *RadioBoxLayout* Control. The only difference between *RadioBoxLayout* and *RadioBoxLayout_1* control is *RadioBoxLayout* control displays the one option image at a time *RadioBoxLayout_1* control displays all images at a time on the page.

1. Select the control *RadioBoxList_1* from *Control* dropdown menu and to display only image on the web page, check the option *Display only image?* To update the settings, click *Update* and the following message is displayed.

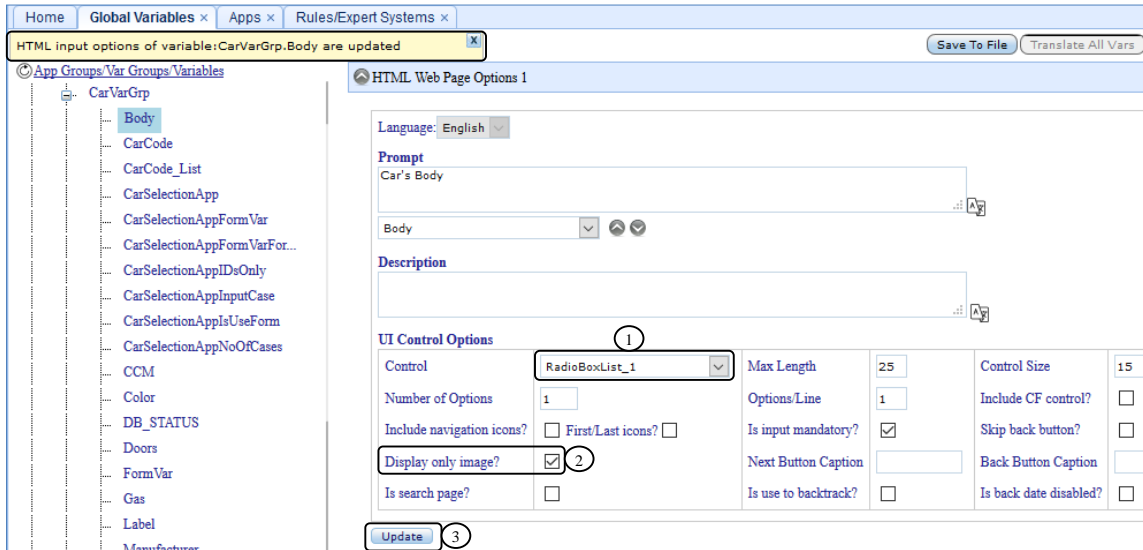


Figure 112: Setting RadioBoxList_1 Option and Updating the Settings

2. To create web page of a variable for which the changes are required, go to *Main Menu* -> *Core Engine Configs* -> *Rules/Expert System* and follow the same steps as explained in section 4 (Refer Figure 99).
3. To view the changes on web page, run the application. To run the application, go to *Apps Interface* and click *Car Selection App*. The following screen shot displays only image since the option *Display only image?* is checked.

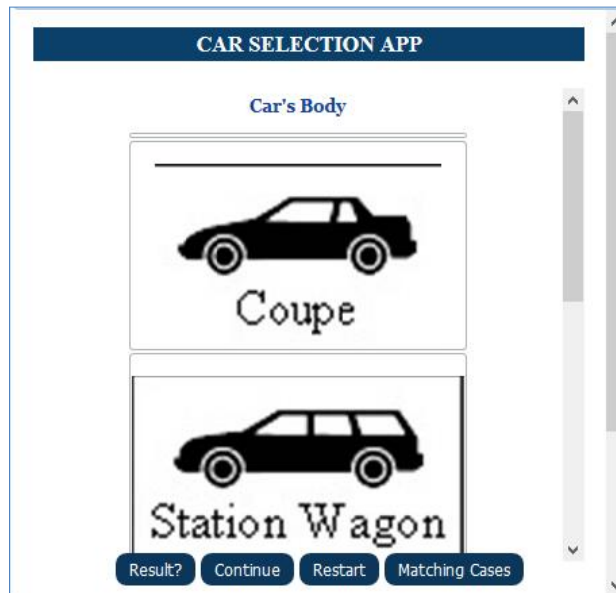


Figure 113: RadioBoxList_1 Control

4. To add the *RadioBoxList_1* control with image, uncheck the option *Display only image?* (Refer Figure 112) and the following screen shot is displayed.

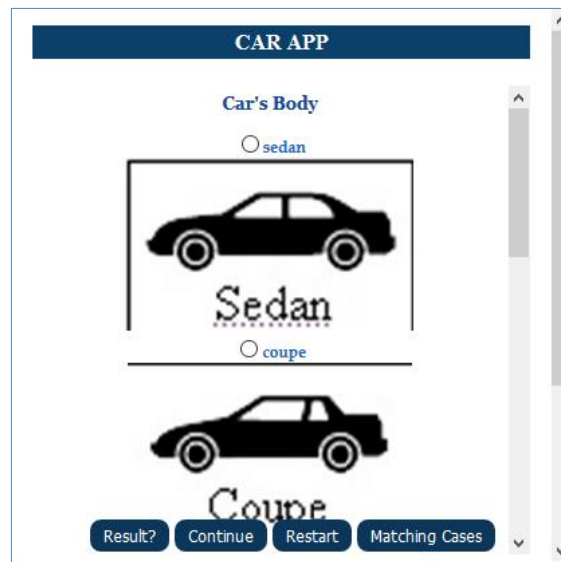


Figure 114: RadioBoxList_1 Control

5. Similarly, to add the checkbox control with image, uncheck the option *Display only image?* (Refer Figure 112) and the following screen shot is displayed.

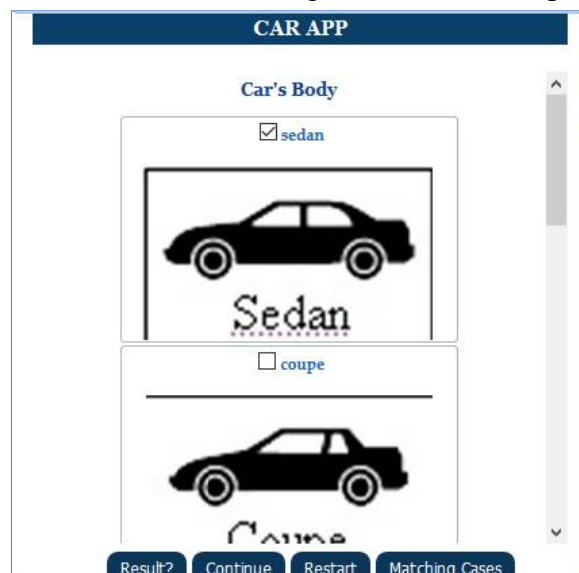


Figure 115: CheckBoxList_1 Control

Note: In *RadioBoxList_1* and *Checkboxlist_1* control, options and their corresponding images are shown.

4.2.4 Combo-List Control

To set *Combo-List* navigation icon:

1. Select the control(*Combo-List*) from *Control* dropdown menu and check *Include navigation icons?* from *UI Control Options* in *HTML Web Options 1* interface to show the icons on web page. To update the input options of variable, click *Update* and the following message is displayed.

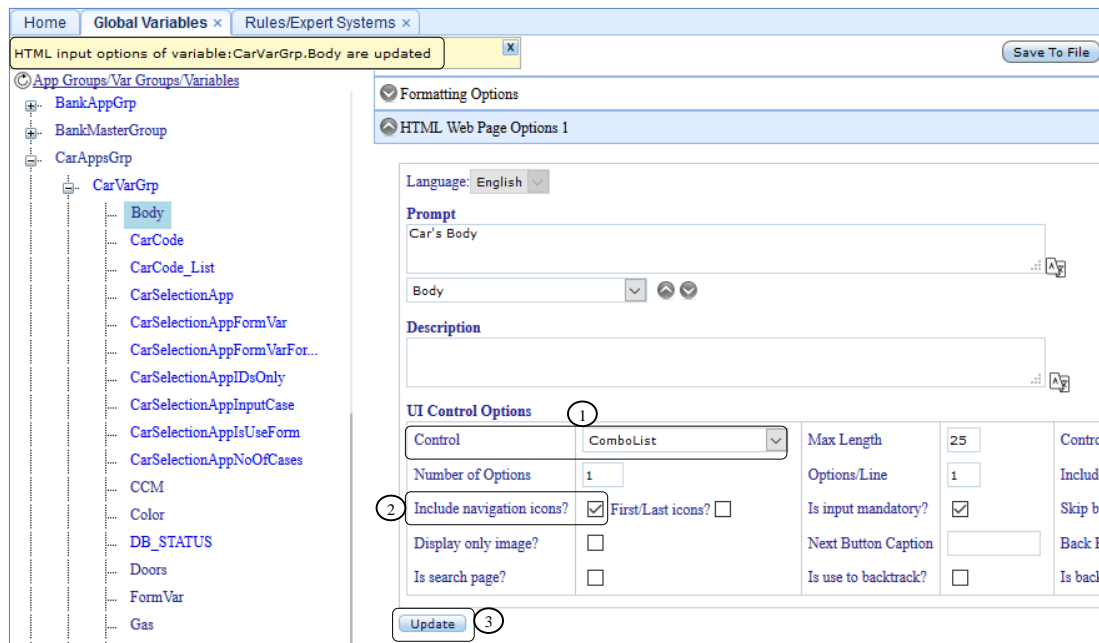


Figure 116: Updating Combo-List with Navigation Icons

2. To view the changes, run the application. To run the application, go to *Apps* interface and the following screen is displayed with navigation icon.

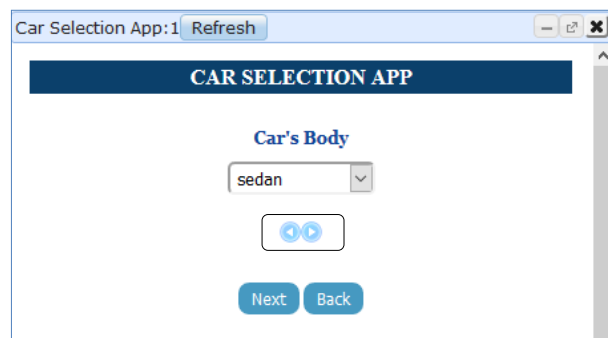


Figure 117: Combo-List with Navigation icon

Note: For CheckBoxList, CheckBoxList_1, Combo_MultiSelect and Combo_MultiSelect_Weight controls, datatype must be Compound because at a time multiple options can be selected.

4.2.5 CheckBoxList control

To set *CheckBoxList* control:

1. Click *Basic variable Parameters* option from the list of options. Select the variable (*Body*) from the list of variables and set the data type as *Compound* from *Data Type* dropdown menu. To update the variable details, click *Update*.

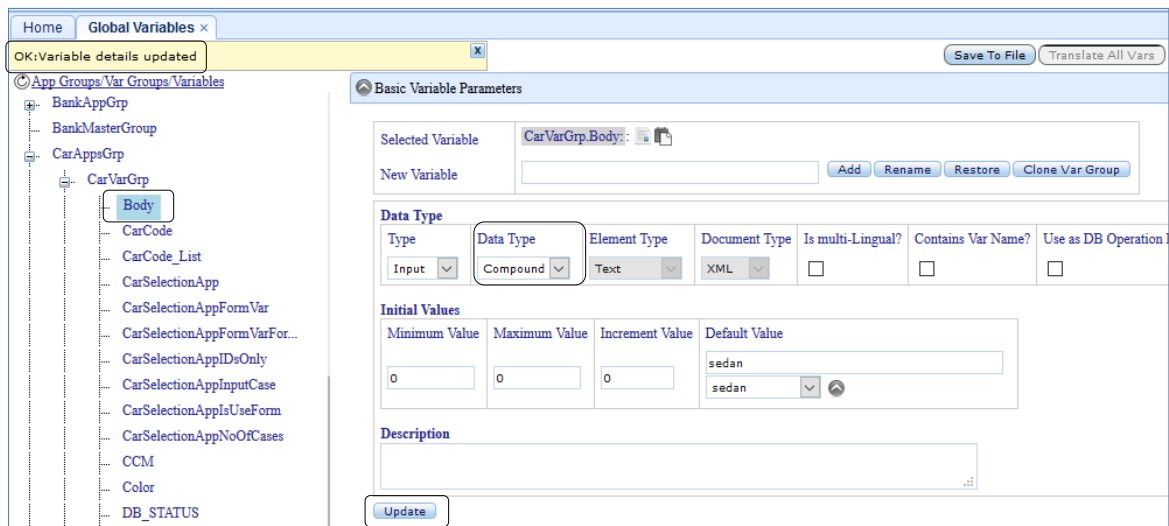


Figure 118: Setting Datatype for CheckBoxList Control

- To set *CheckBoxList* control, click *HTML Web Page Options 1* from the list of options. Select the control *CheckBoxList* from *Control* dropdown menu. To update the variable, click *Update*.

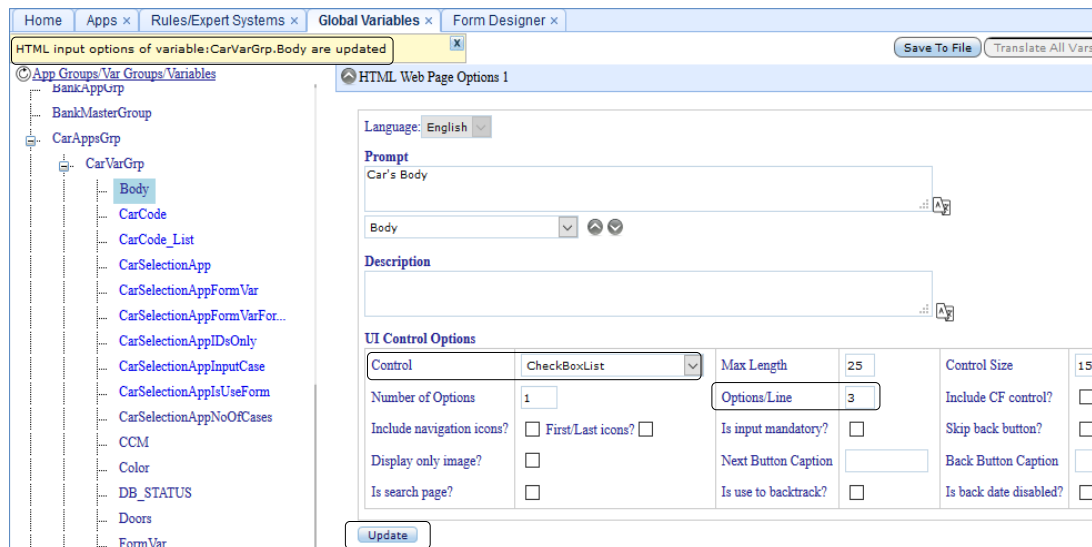


Figure 119: Updating Control Option

- To create web page of a variable for which the changes are required, go to *Main Menu* -> *Core Engine Configs* -> *Rules/Expert System* and follow the same steps as explained in section 4 (Refer Figure 99).

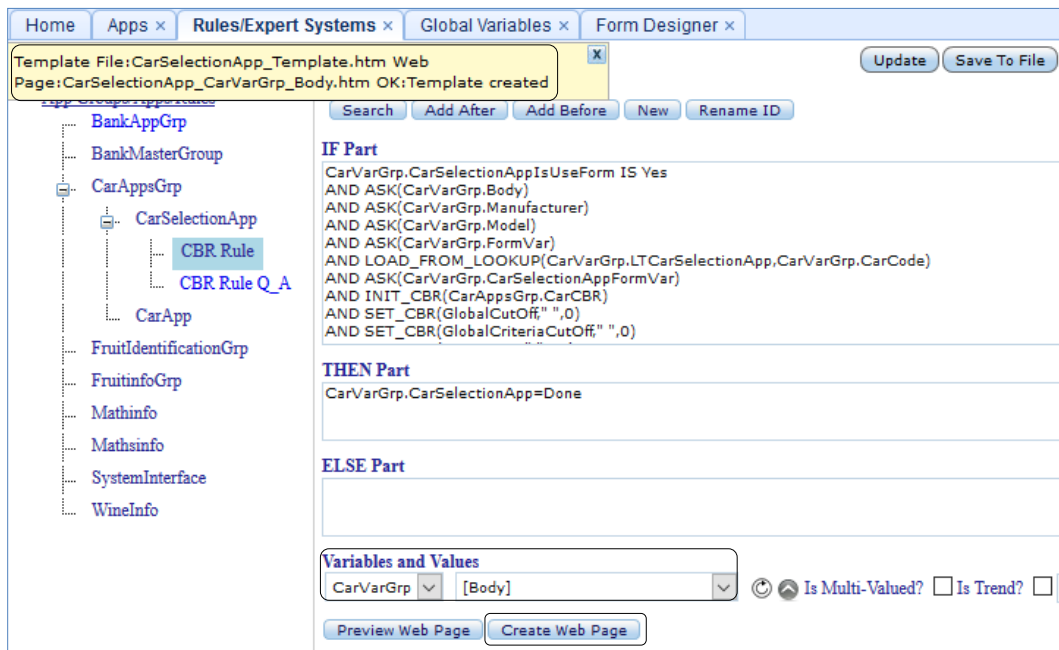


Figure 120: Creating Web Page

- To view the changes on web page, run the application. To run the application, go to *Apps* interface and click *Car Selection App*. The following screen shot displays the *CheckBoxList* control and since in above screen shot (Refer Figure 119) the *Options/Line* is set as 3 so the number of options displayed per line is 3.

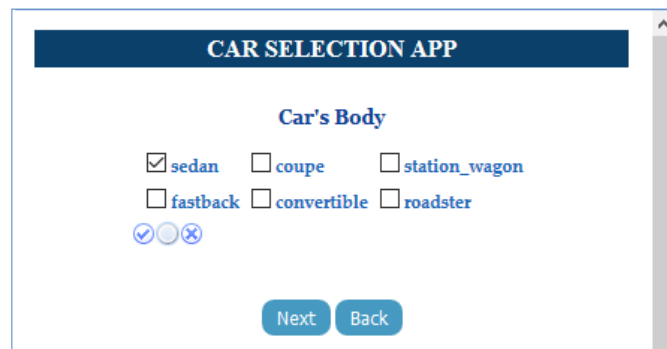




Figure 121: CheckBoxList Control

4.2.7 Combo_MultiSelect

To set *Combo_MultiSelect* and *Combo_MultiSelect_Weight* controls, follow the same steps as explained above for *CheckBoxList* control.

The following screen shows *Combo_MultiSelect* control in which there are multiple Combo-Lists and option selected from first Combo-List (Example: sedan) gets populated in the second Combo-List by clicking the button . Also, the option in second Combo-List can be removed by clicking the button .

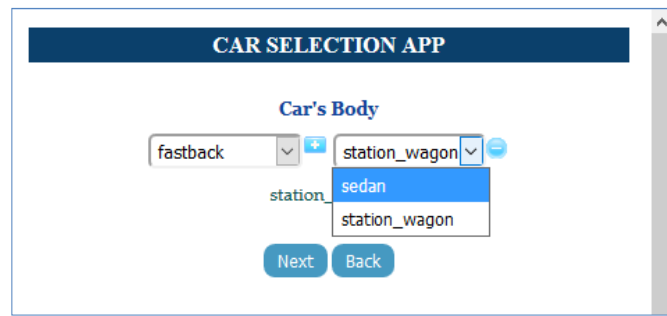


Figure 122: Combo_MultiSelect Control

4.2.8 Combo_MultiSelect_Weight control

The following screen shows *Combo_MultiSelect_Weight* control in which there are two Combo-Lists and option selected from first Combo-List(Example: JQuery) gets populated in the second Combo-List by clicking the button . The third option allows setting the weight (example: 70). When the button is clicked, the weight which is set gets added with the option selected in second Combo-List (Example: JQuery=70). Also, the third option in which weight is set can be removed by clicking the button and the weight set for the selected option in second Combo-List is removed.

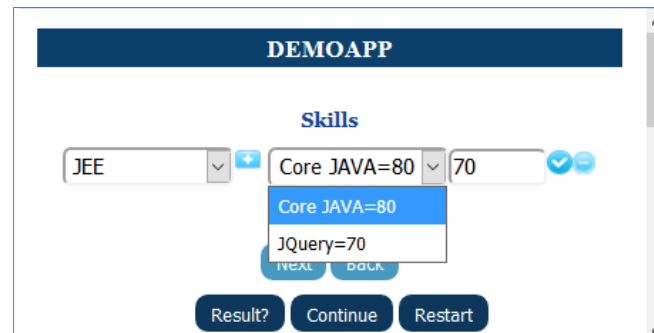


Figure 123: Combo_MultiSelect_Weight Control

4.2.9 Range ScrollBar Control

This option allows setting the range of scroll bar control by setting the minimum value, maximum value and increment value.

1. To set the increment value for variable (*Marks*) already created in section above, first click *Basic Variable Parameters* option from the list of options and the details (Type, Data Type, Element Type etc.) set for variable *Marks* is displayed. Set the desired *Increment Value* (Example: 1) based on which the range of scroll bar is incremented and set the default value (60,80,90) in *Default Value* field.

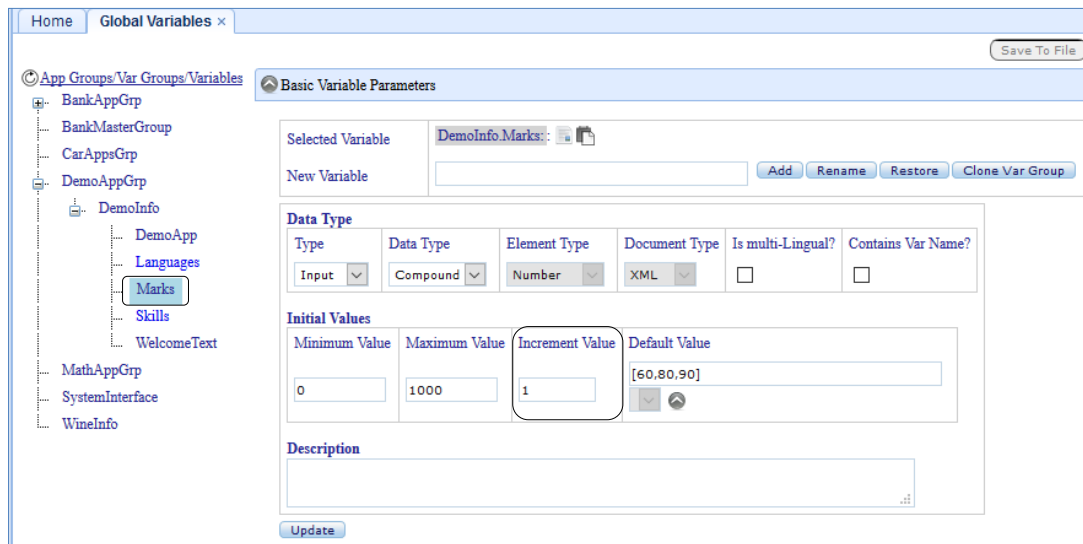


Figure 124: Setting Increment Value

- To set the *Control*, click *HTML Web Page Options 1* from the list of options. Set control (*RangeScrollbar*), and to update the variable click *Update*.

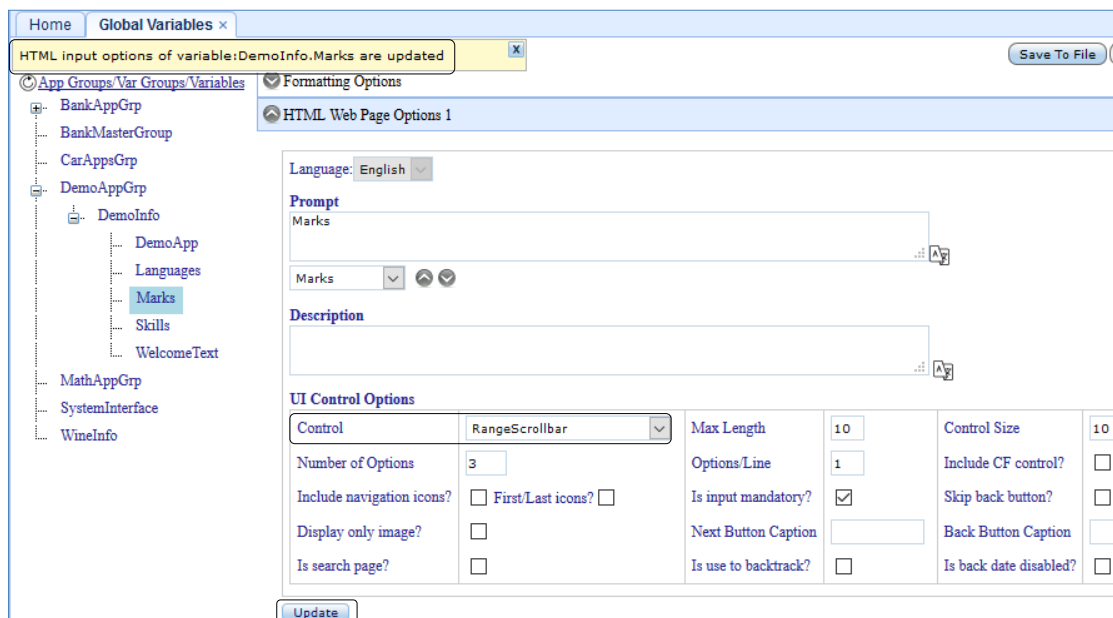


Figure 125: Setting Control and Update Variable

- Since the rule is already created for variable *Marks* in *Rules/Expert Systems* interface explained in above section, only the variable group (*DemoInfo*) and variable (*Marks*) needs to be selected from *Variables and Values* dropdown menu.

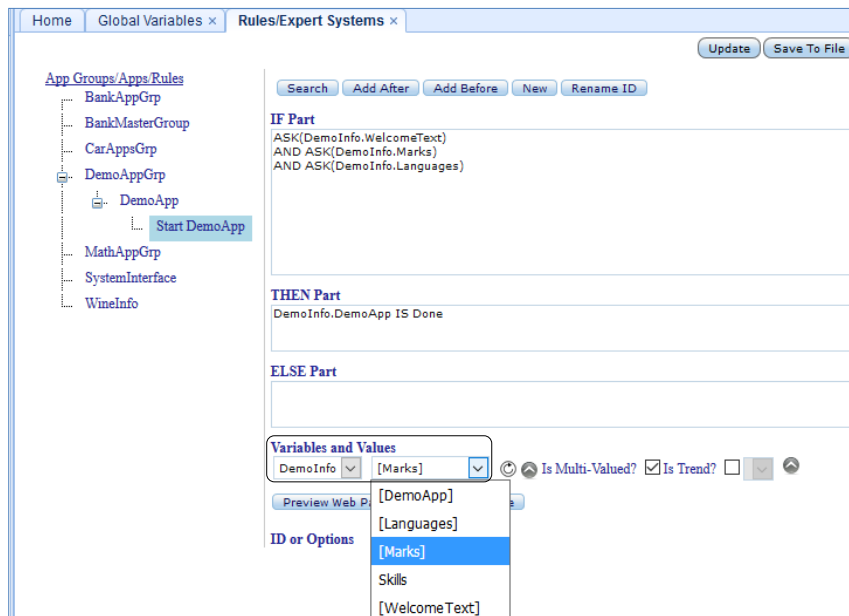


Figure 126: Selecting Variable

- To create a web page for variable, select the variable group (*DemoInfo*) and variable (*Marks*) from *Variables and Values* dropdown menu. Click *Create Web Page* and the following message is displayed.

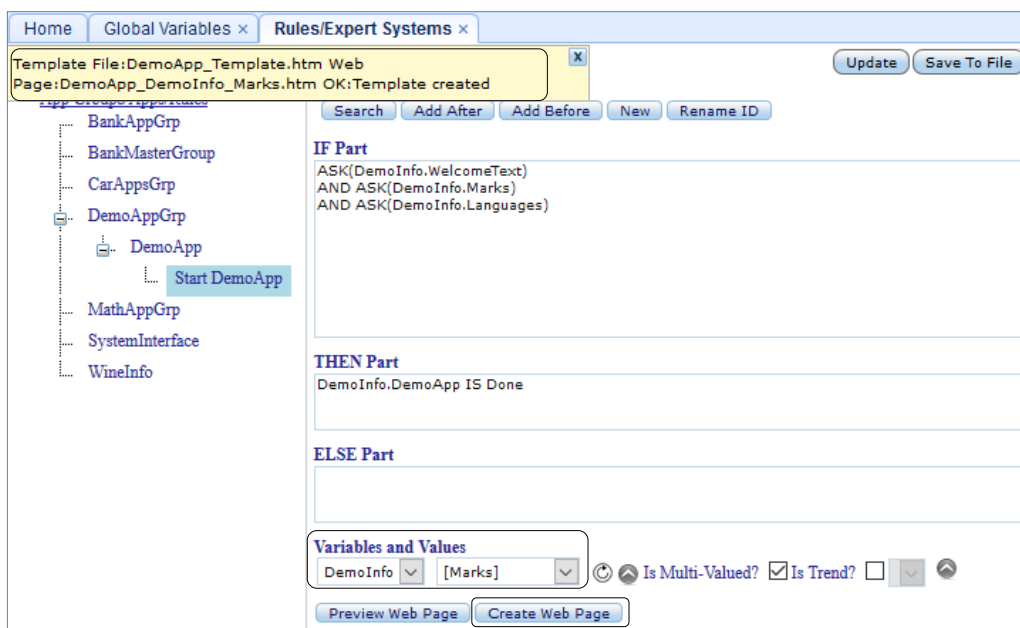


Figure 127: Creating Web Page

- To view the changes, run the application. To run the application, go to *Apps* interface and click *Demo App* and the following screen is displayed

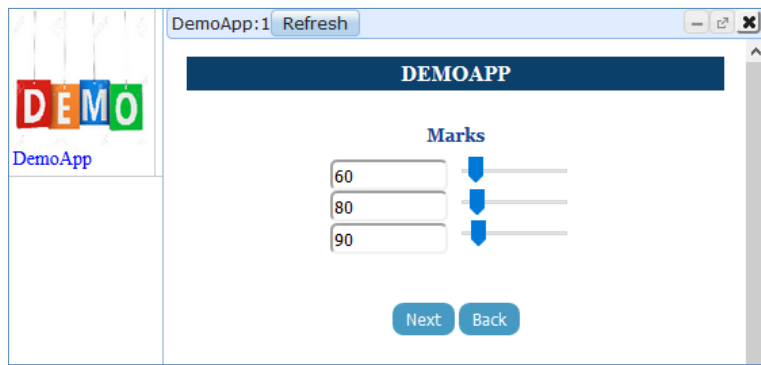


Figure 128: Running the Application

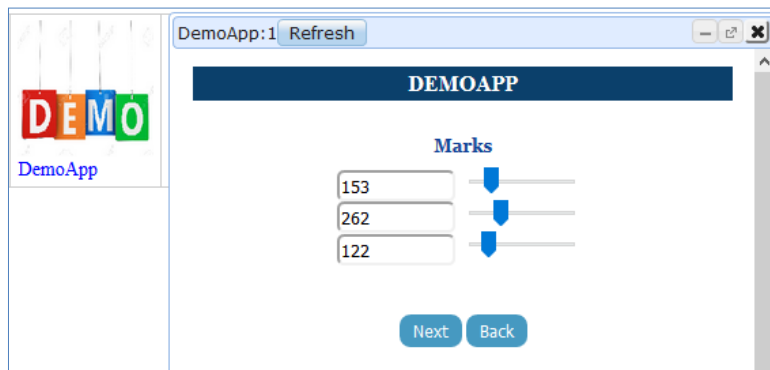


Figure 129: Incrementing the Range of Scroll Bar

As shown in above screen shots, the default value set for scroll bar and the range of scroll bar is displayed.

4.2.10 Password Control

1. To create the variable, refer the above section 1.1.

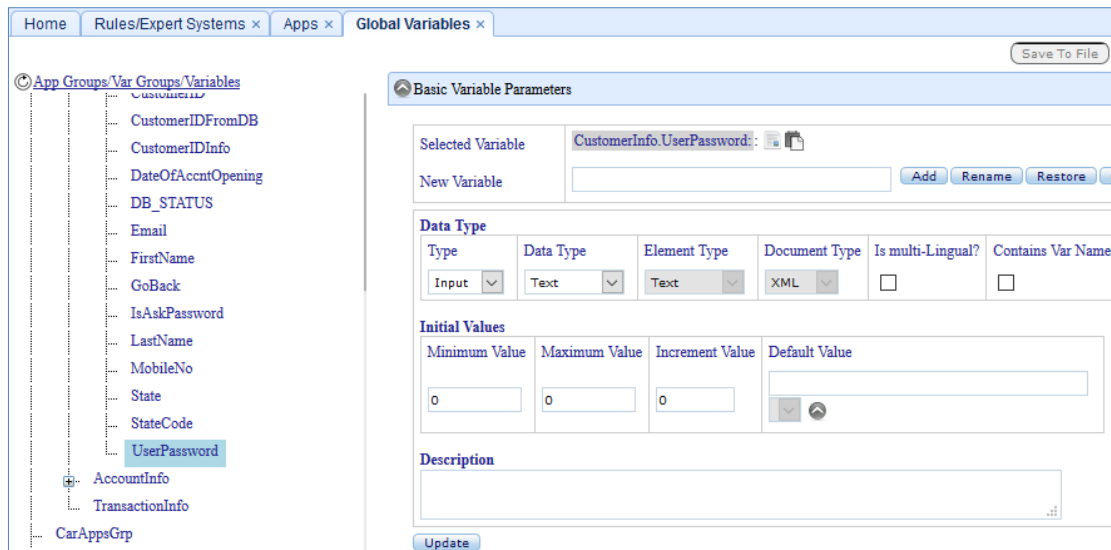


Figure 130: Variable Created

2. After creating a variable, go to HTML Web Page Option 1 and set the control *Password_New*. To update the variable, click *Update*.

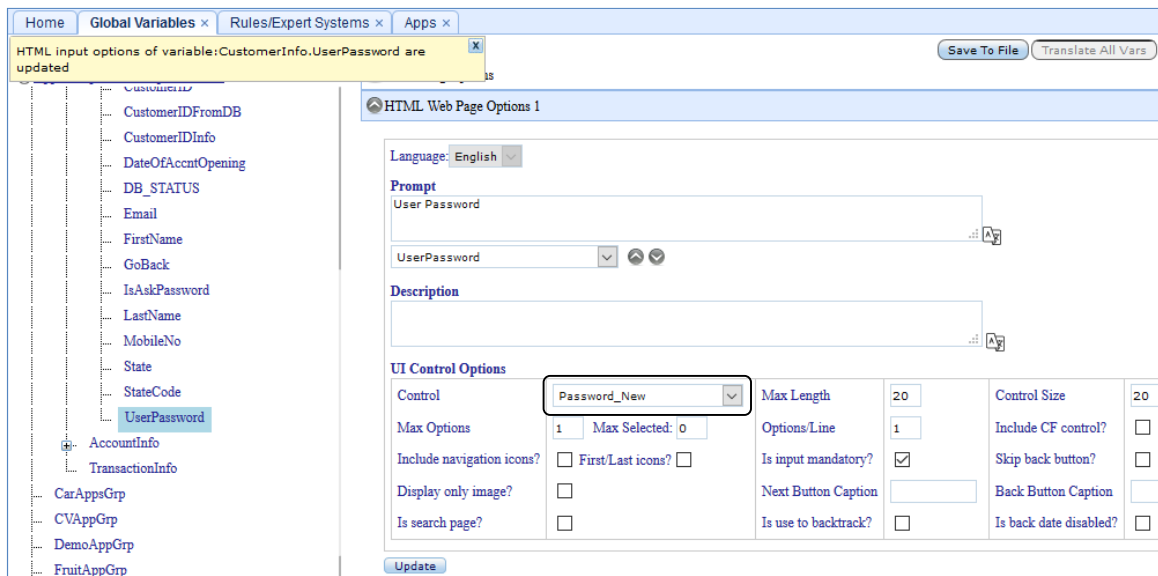


Figure 131: Set the control

3. To ask the variable in rule, go to Rule Interface and ask the variable in rule. To update the rule, click *Update*.

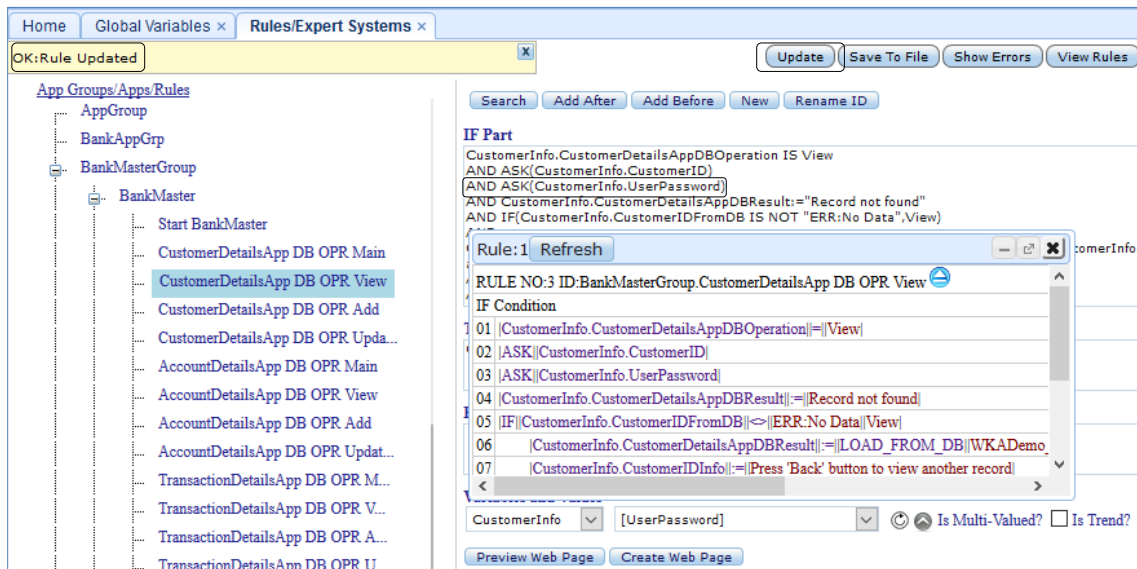


Figure 132: Updating the rule

4. To view the changes, run the application, go to Apps Interface and select the app name (*Bank Master*).

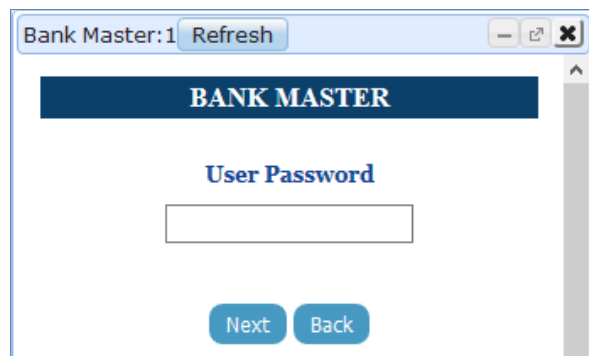


Figure 133: Running the Application

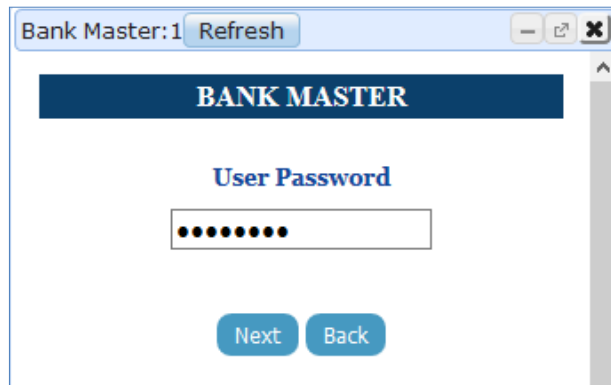


Figure 134: Running the Application

4.3 Removing Back Button

By default, when expert system asks variable value, it has two default buttons NEXT and BACK. If variable is the first variable whose value is asked first, BACK button can be skipped.

To skip BACK button:

1. Go to *Main Menu -> Domain Vocabulary -> Global Variables* and select the variable *Shape*.

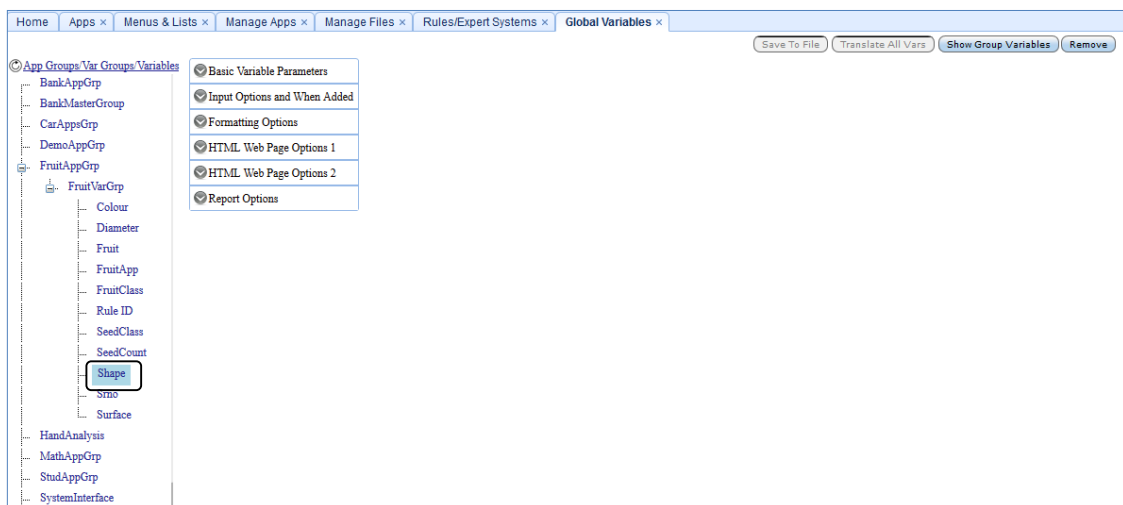


Figure 135: Global Variables Interface

2. Click *HTML Web Page Options 1* from the list of options and check the option *Skip back Button* present in *UI Control Options*.

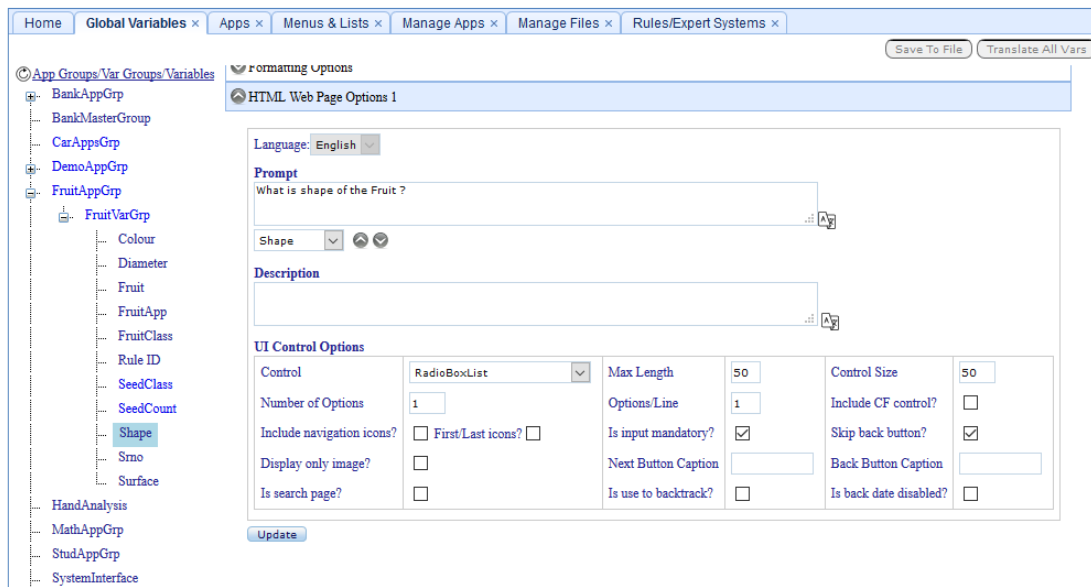


Figure 136: Skipping Back Button

- To update the input options of variable, click *Update* and the following message is displayed.

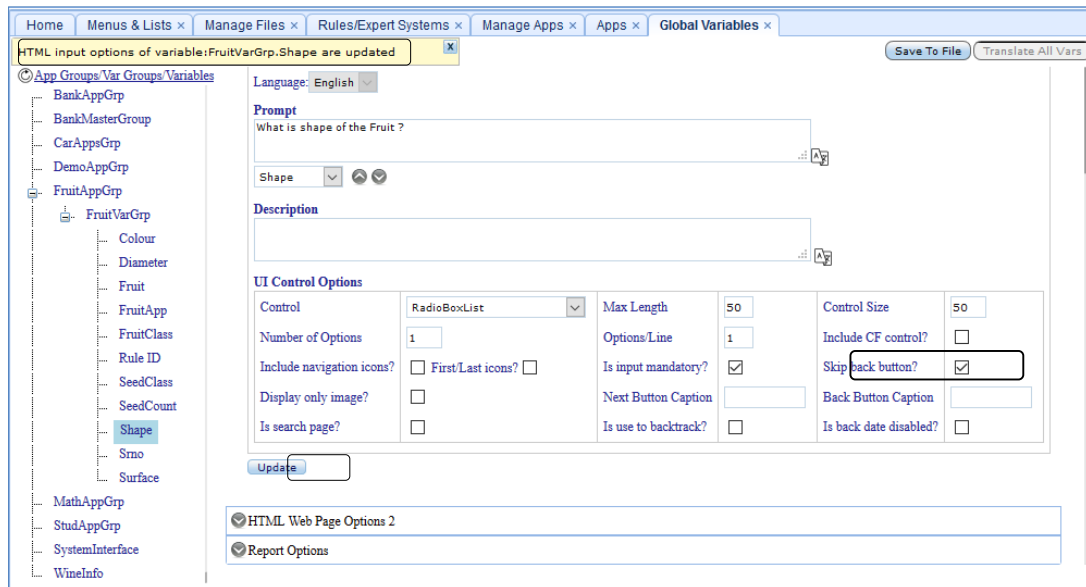


Figure 137: Updating the Input Options of Variable

- To save the changes, click *Save to File* and the following message is displayed.

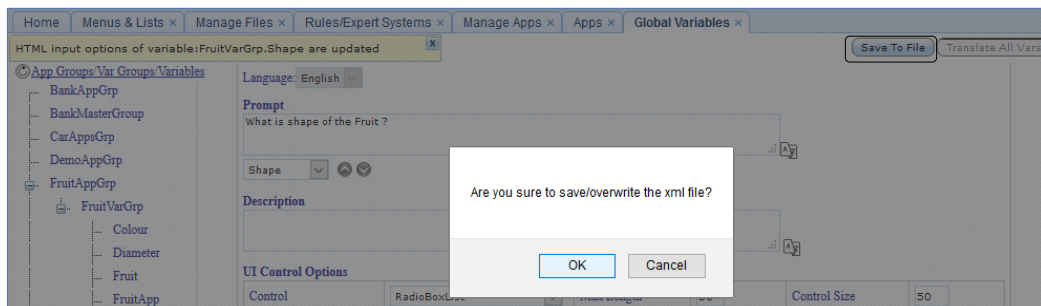


Figure 138: Saving the Changes

- To create web page of a variable for which the changes are required, go to *Main Menu* -> *Core Engine Configs* -> *Rules/Expert Systems*.

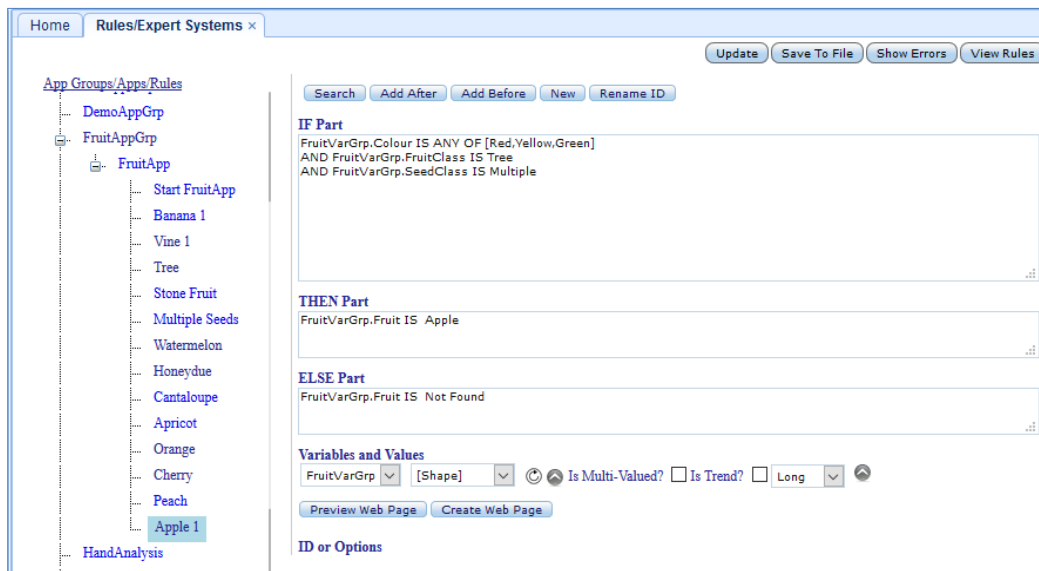


Figure 139: Rules/Expert Systems Interface

6. Select from *Variables and Values* dropdown menu, the required variable group (*FruitVarGrp*) and corresponding variable *Shape*. Click *Preview Web page* to view the web page.

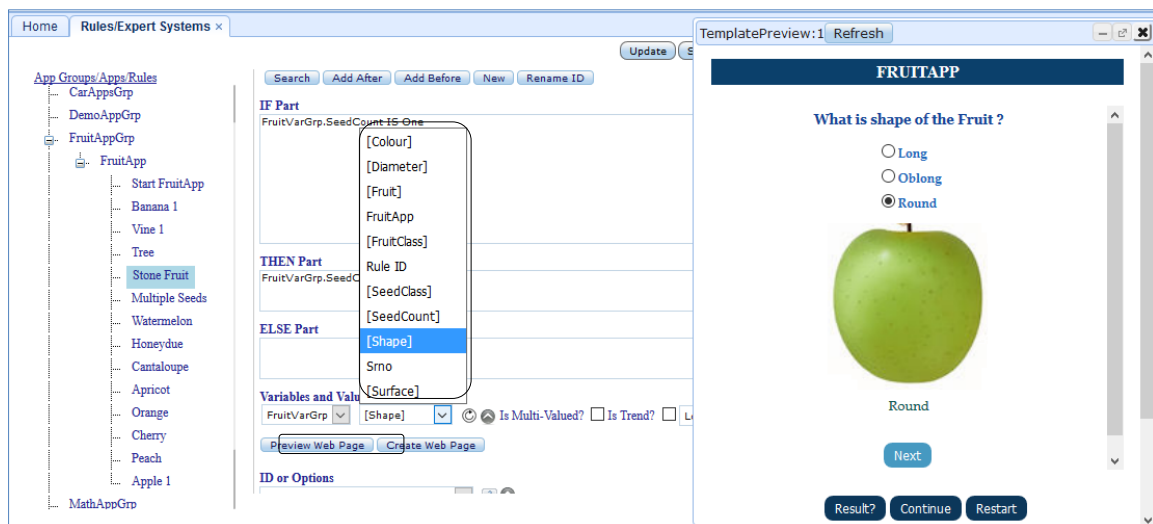


Figure 140: Selecting the Variable and Previewing Web Page

7. To create web page, select variable group (*FruitVarGrp*) and variable (*Shape*) from *Variables and Values* dropdown menu. Click *Create Web Page*.

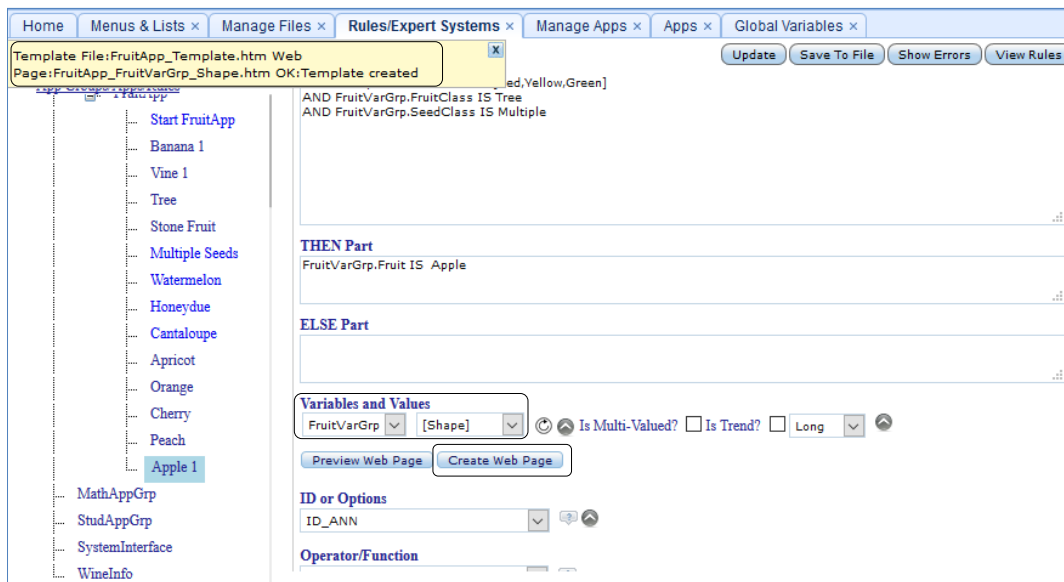


Figure 141: Creating Web Page

- To view the changes, run the application. To run the application, go to *Apps* interface and click *FruitApp*.

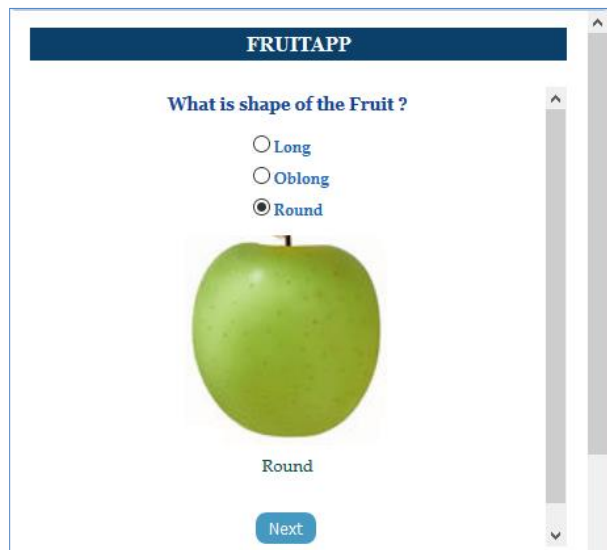


Figure 142: Running the app

As shown in above figure, for variable *Shape*, *Skip* button is removed.

4.4 Changing Next and Back Button Caption

Global Variables interface allows changing next and back button caption.

To change *Next* and *Back* button caption:

- Go to *HTML Web Page Options 1* in *Global Variables* interface. Enter the desired caption for variable *Body* (*CarVarGrp.Body*) for next (Example: Proceed) and back button (Example: Previous) on *Next button Caption* and *Back button Caption* field. To update the changes, click *Update*.

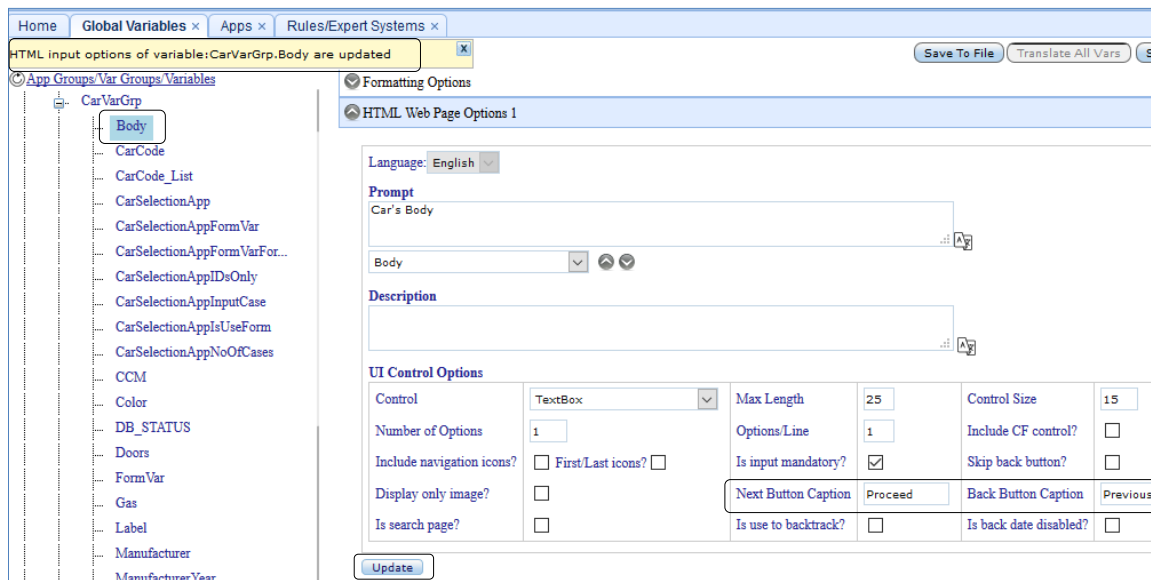


Figure 143: Adding Captions

2. After the variable details are updated, to create web page for a variable *CarVarGrp.Body* to which changes are done, go to *Main Menu -> Core Engine Configs -> Rules/Expert Systems*. Select the variable group *CarVarGrp* and variable *Body* from *Variables and Values* dropdown menu. Click *Create Web Page* and the following message is displayed.

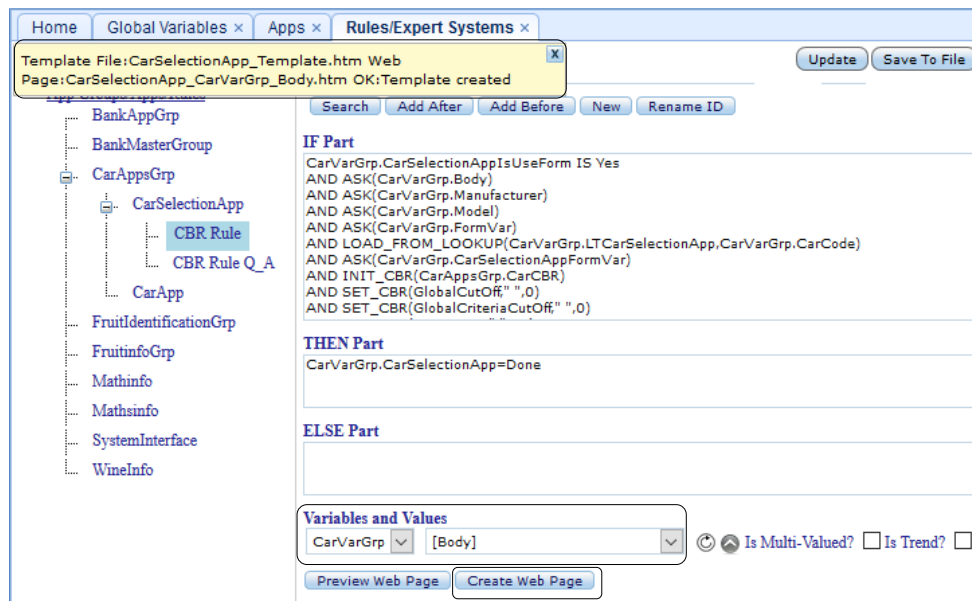


Figure 144: Creating Web Page

3. To view the changes, run the application. To run the application, go to *Apps* interface and click *CAR SELECTION APP*.

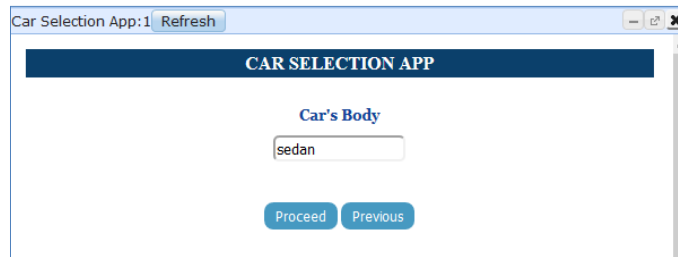


Figure 145: Running the App

As shown in above figure, next and back button caption has been changed to *Proceed* and *Previous*.

4.5 Disabling the Back Date

Global variables interface allows disabling the back date from current date.

To disable the back date:

1. Create Variable *ManufacturerDate* (*CarVarGrp.ManufacturerDate*) as explained above in section 1.1(Adding New Variable). Set *Minimum Value*, *Maximum Value* and *Default Value* for the variable.

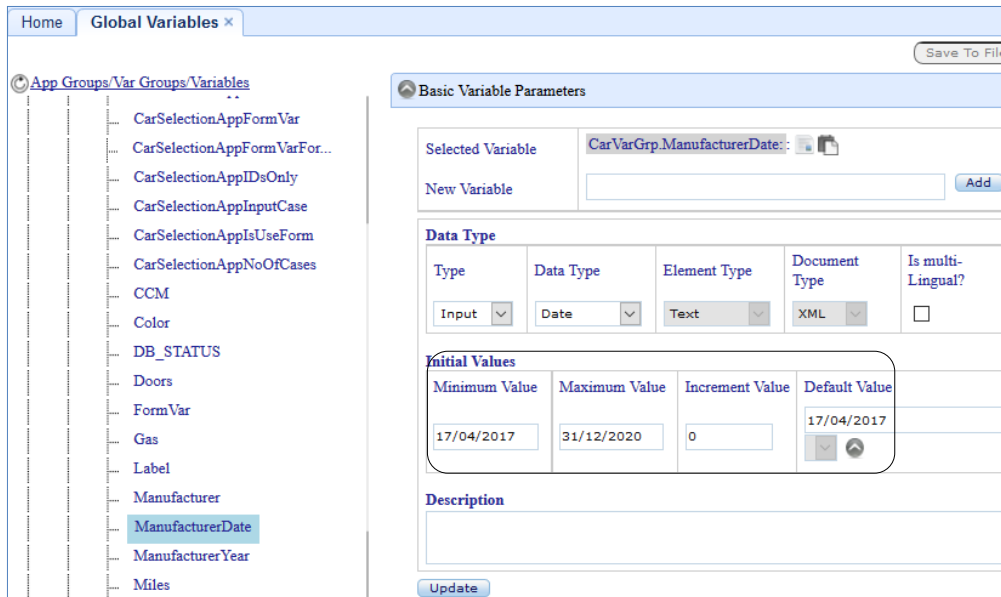


Figure 146: Adding Variable and Setting Values

2. To disable the back date, click *HTML Web Page Options* from the list of options and check the option *Is back date disabled?* To update the input options of variable, click *Update*.

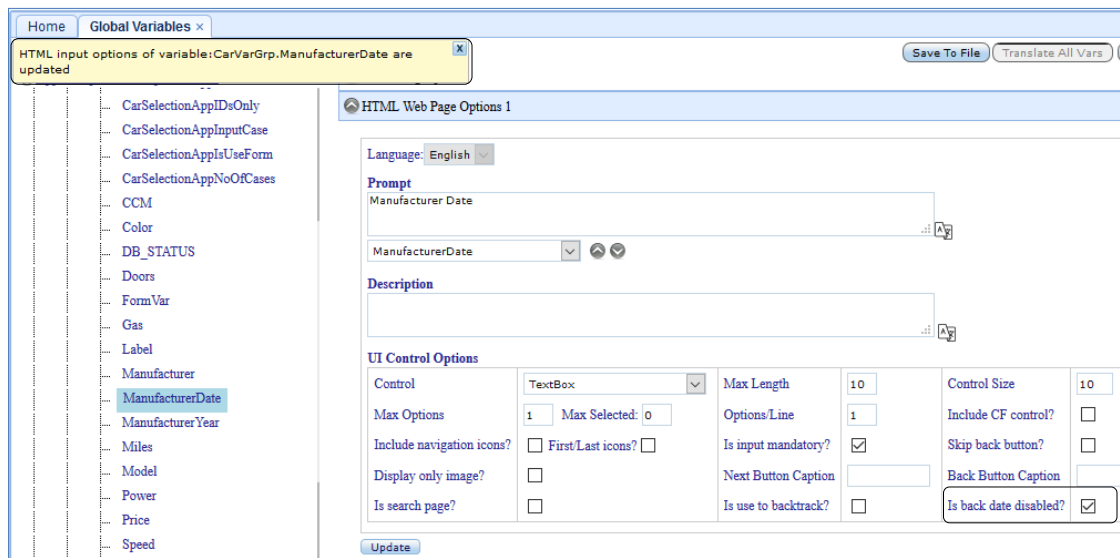


Figure 147: Updating the Variable

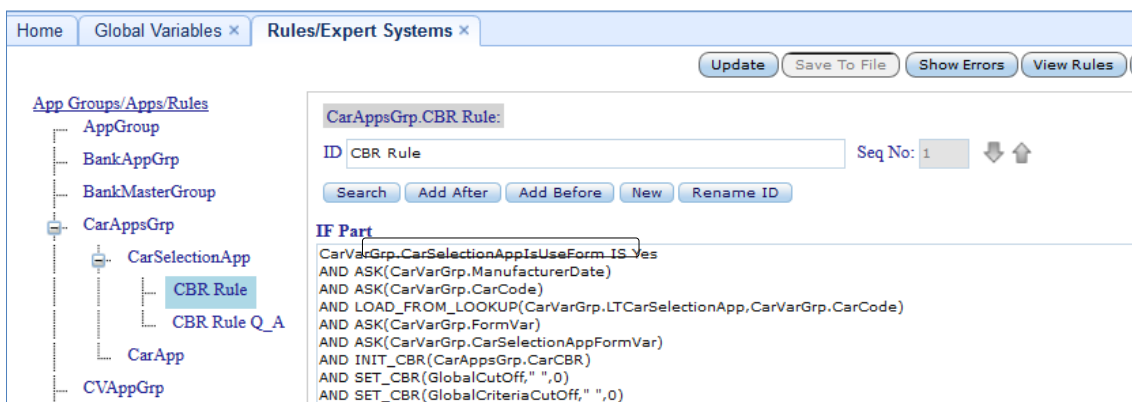


Figure 148: Creating Rule

- To update the rule created, click *Update* and the following message with update screen is displayed.

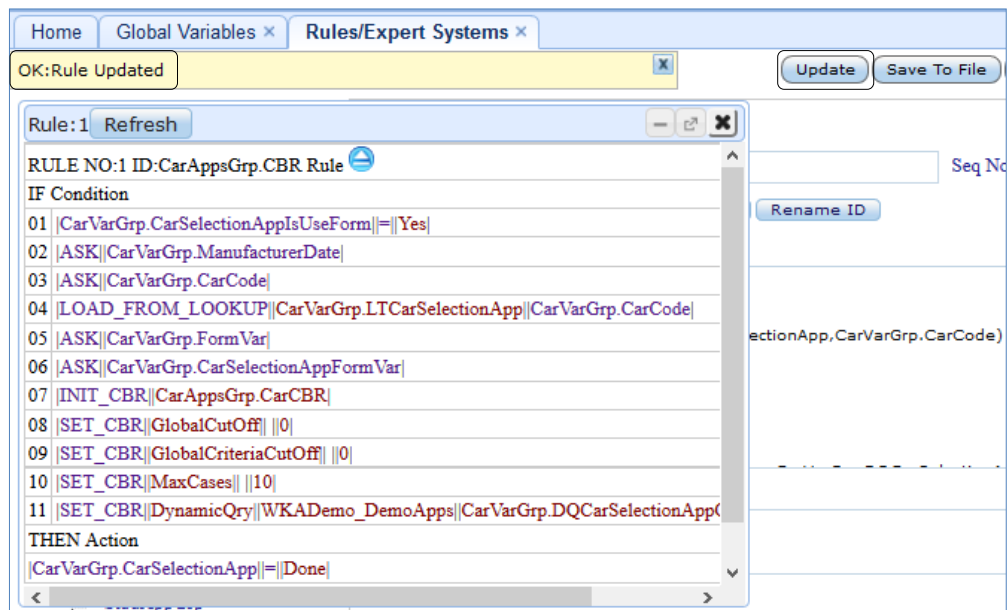


Figure 149: Updating Rule

- To create web page for a variable, click *Create Web Page* and the following message is displayed.

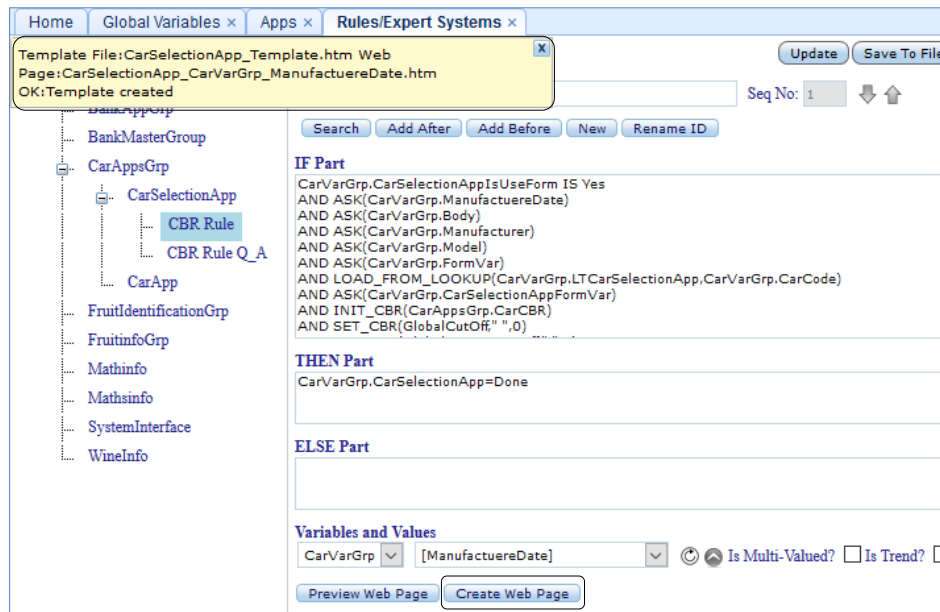


Figure 150: Creating Web Page

- To view the changes, run the application. To run the application, go to *Apps* interface and click *CAR SELECTION APP*. The following screen is displayed.



Figure 151: Running the Application

As shown in above screen shot, the back date from the current date mentioned (17/04/2017) in figure above (Refer Figure 146) is disabled since the option *Is back date disabled?* is checked (Refer Figure 147).

4.6 Is use backtrack?

- To create menu, follow the same steps as explained in menu interface. *MenuGoBack* is created and displayed in *Selected Menu* field and added the two options in it (Main DB operation menu, Exit DB operations). To redirect the page to the page where variable reference is given, select the option (*Main DB operation menu*) from the *Selected Option* dropdown for which the variable needs to be set and enter the required variable name in Code/Class/Group field where is to be redirect.

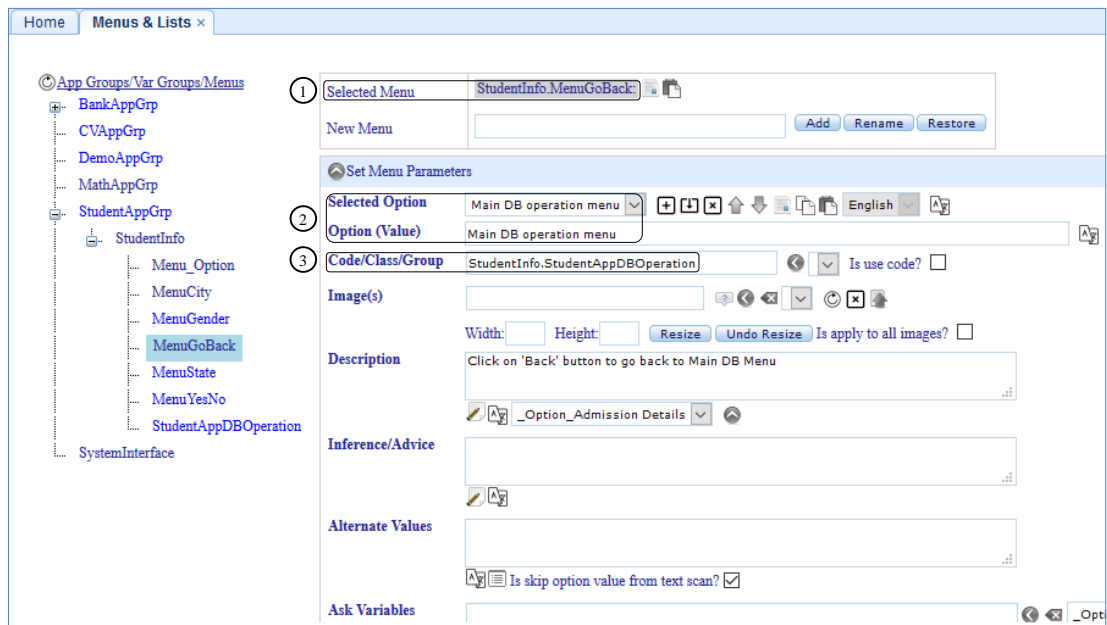


Figure 152: Entering the options in Menu

- To exit from that go back variable to end session report or on the Next page, select the option (*Exit DB operations*) from *Selected Option* dropdown and enter Back in the Code/Class/Group field.

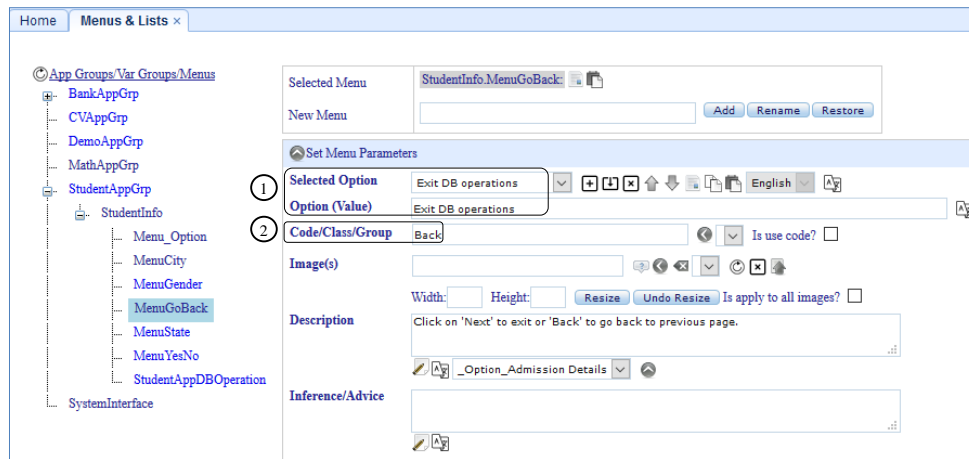


Figure 153: Entering the options in Menu

- To show the details of the menu, click *Show*.

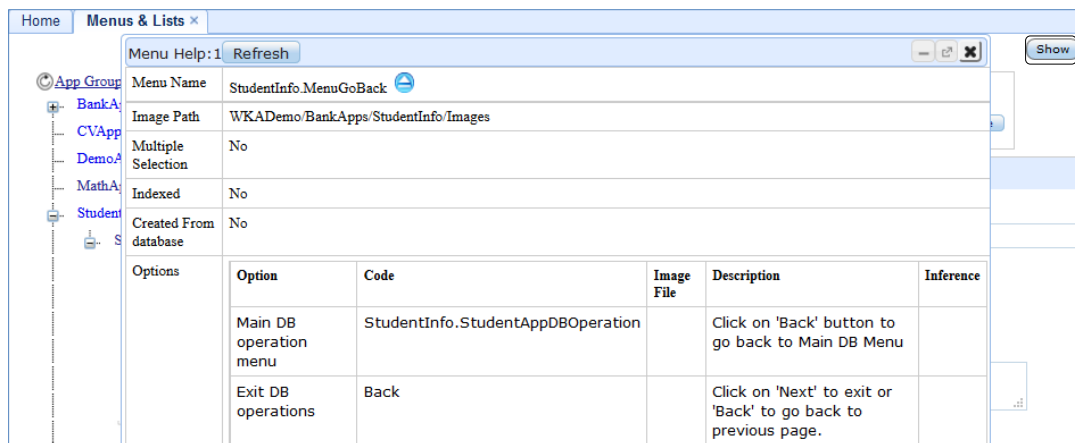


Figure 154: Show Menu Details

- Go back to Global Variable Interface and create a variable (*GoBack*) and link it to the menu created.

The screenshot shows the 'Global Variables' interface. On the left, a tree view shows the variable hierarchy: StudentAppGrp > StudentInfo > GoBack. The main panel is titled 'Basic Variable Parameters' and shows the following configuration for the variable 'StudentInfo.GoBack':

- Selected Variable:** StudentInfo.GoBack
- Data Type:** Type: Input, Data Type: Text, Element Type: Text, Document Type: XML, Is multi-Lingual?: , Contains Var Name?: , Use as DB Operation Flag?:
- Initial Values:** Minimum Value: 0, Maximum Value: 0, Increment Value: 0, Default Value: StudentInfo.StudentAppDBOperation
- Description:** (Empty field)

Figure 155: Variable Created

The screenshot shows the 'Global Variables' interface with the 'Input Options and When Added' configuration for the 'GoBack' variable. The configuration includes:

- Simple Menu:** StudentInfo.MenuGoBack, Is use menu code?:
- Dynamic Menu:** Not Set
- Database Field:** Not Set, Default Value: (Empty)
- Form ID:** Not Set
- When Needed UDF:** Not Set
- When Added UDF:** Not Set

Buttons for 'Update' and 'Formatting Options' are visible at the bottom of the configuration panel.

Figure 156: Linking the Menu

The screenshot shows the 'Global Variables' interface with the 'HTML Web Page Options 1' configuration for the 'GoBack' variable. The configuration includes:

- Language:** English
- Prompt:** DB Operation Result:[StudentInfo.StudentAppDBResult]
What you want to do?
- Description:** (Empty field)
- UI Control Options:**
 - Control: RadioBoxList, Max Length: 20
 - Max Options: 1, Max Selected: 0, Options/Line: 1
 - Include navigation icons?: First/Last icons?: Is input mandatory?:
 - Display only image?: Next Button Caption: (Empty)
 - Is search page?: Is use to backtrack?:

An 'Update' button is located at the bottom of the configuration panel.

Figure 157: Set the Option

Note: Also, value of the variable can be called at runtime in Prompt field.

- To redirect that Go Back page at specific position, check the option Is use to backtrack? And to update the variable, click Update.
- To ask the variable in rule, go to Main Menu -> Core Engine Configs -> Rules/Expert Systems and ask the variable in IF Part section: ASK(StudentInfo.GoBack). To update the rule, click Update.

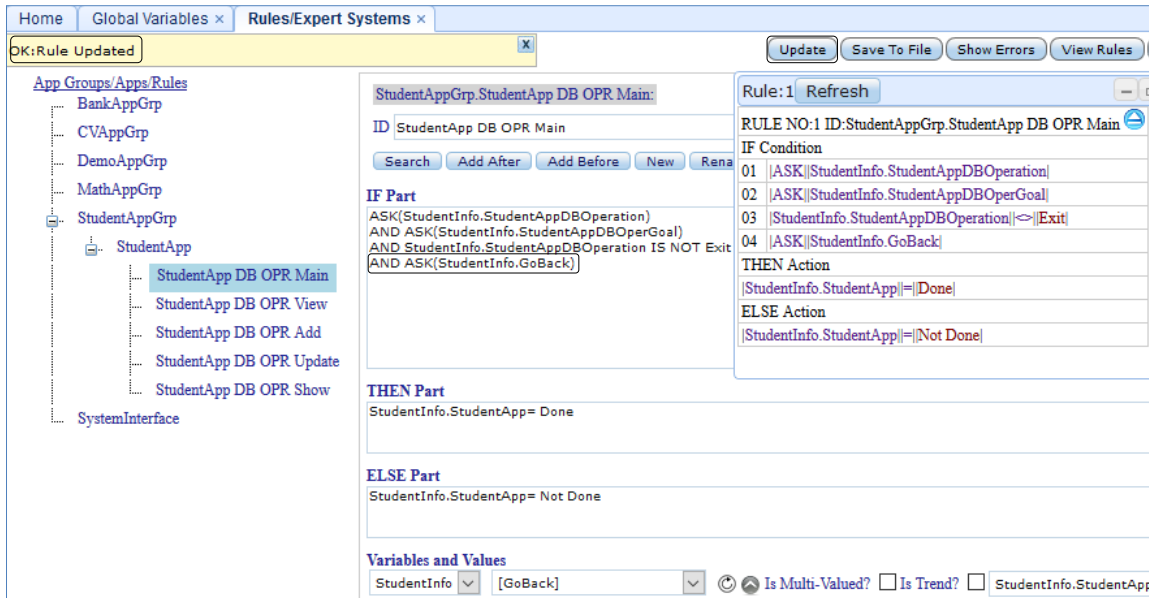


Figure 158: Creating and Updating the Rule

- To create web page for a variable, click *Create Web Page* and the following message is displayed.

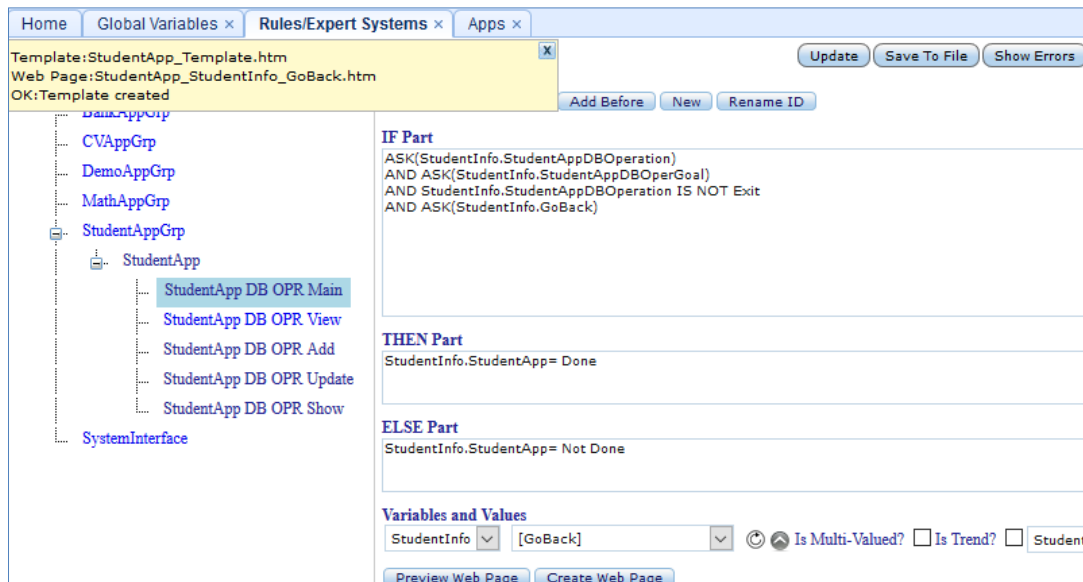


Figure 159: Creating Web Page

- To view the changes, run the application. To run the application, go to *Apps* interface and click *Student Application*. The following screen is displayed.

STUDENTAPP

Select DB Operation:StudentApp

View ▾

Fetches record/data from database and populates into form based on the value of key entered in :StudentID

Next Back

Figure 160: Running the Application

STUDENT APPLICATION

Enter Student ID

101

Next Back

Figure 161: Running the Application

STUDENT APPLICATION

StudentInfo Data

Student ID	101
Name	Prajakta Mahadik
Gender	F
Address	Indu Apt Vidyavihar
City	Mumbai ▾
State	Maharashtra ▾
Date Of Admission	23/07/2015
Fee	6000
Email	prajaktam@gmail.com
StudentIDInfo	

Next Back

Figure 162: Running the Application

- If *Main DB operation menu* option is selected and if Back button is clicked, then the page is redirected to DB operation variable (Figure:160)

STUDENTAPP

Select DB Operation:StudentApp

View ▾

Fetches record/data from database and populates into form based on the value of key entered in :StudentID

Next Back

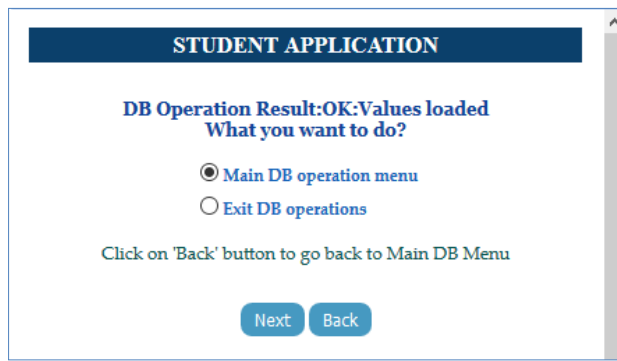


Figure 163: Selecting the Main DB operation

9. If *Exit DB operation menu* option is selected and if Back button is clicked, then the page is redirected to previous page (Figure: 162) or if Next button is clicked then go to the end session report (Figure: 165).

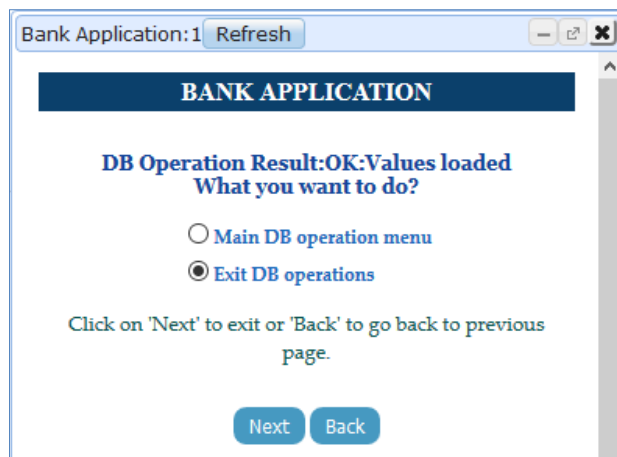


Figure 164: Selecting the Exit DB operation

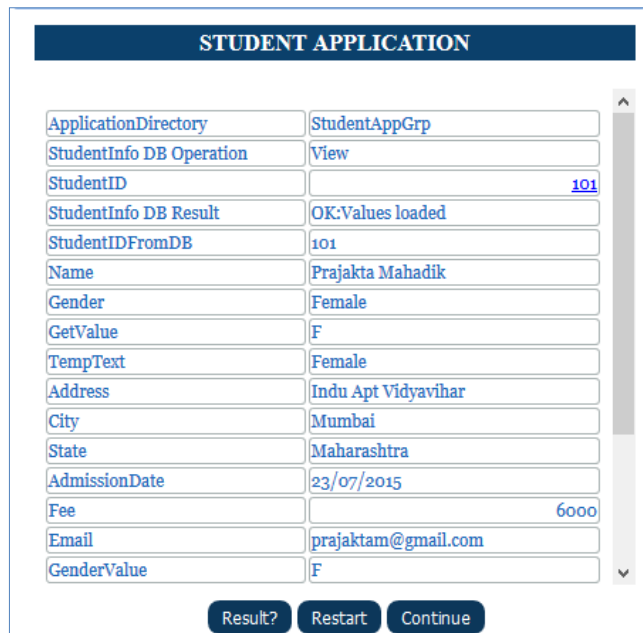


Figure 165: Session Report

4.7 Is search page?

If this option is set, the variable is used to hold search text.

1. To create a variable, refer the above section 1.1. After creating a variable of text type go to HTML Web Page Option 1.

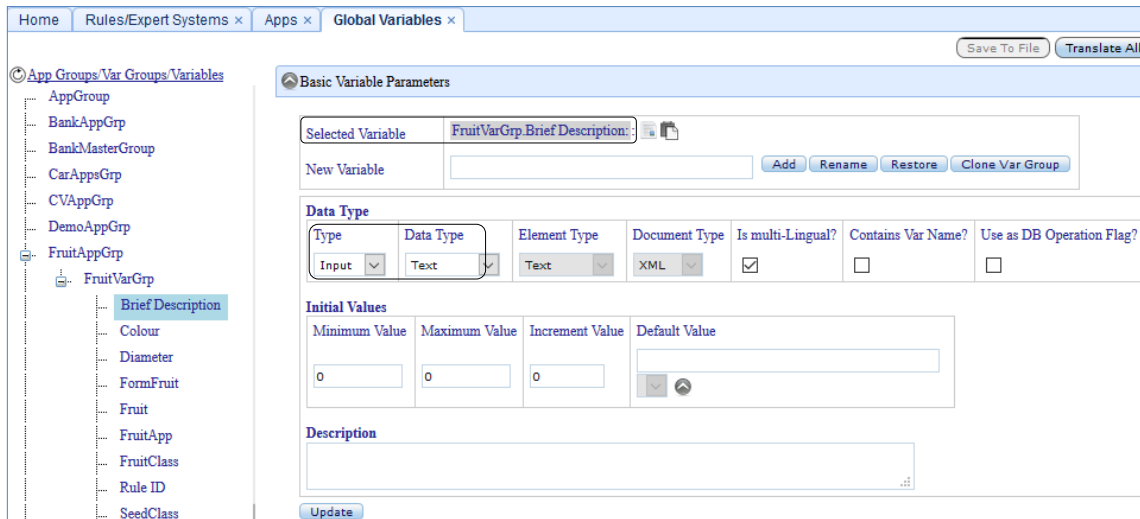


Figure 166: Creating the Variable

2. To hold the search text, check the option *Is search page?* and update the variable.

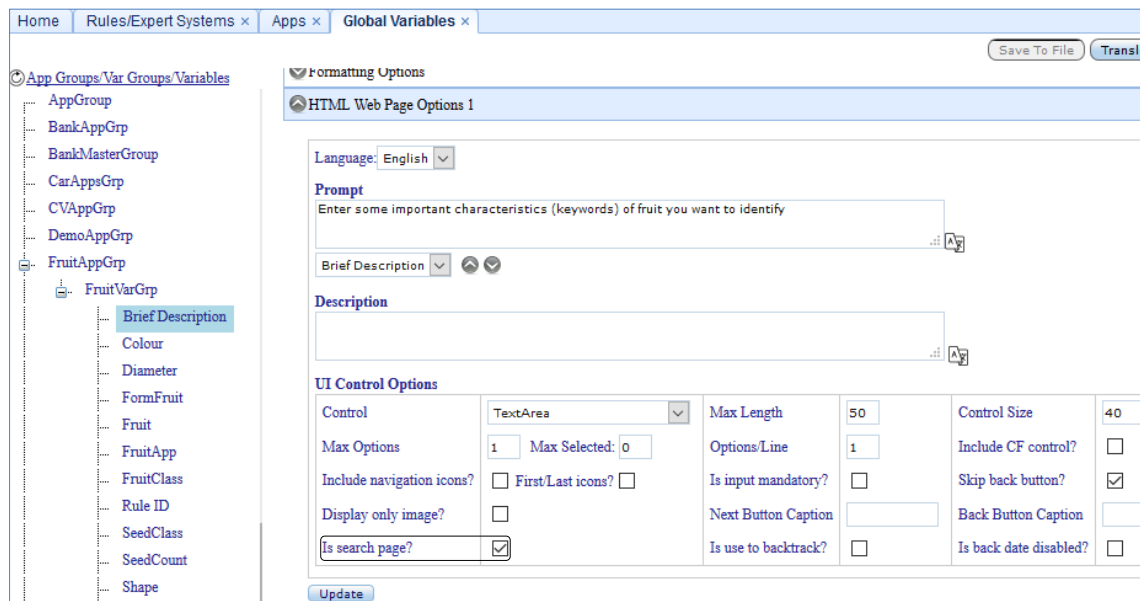


Figure 167: Set the option

3. To ask the variable in rule, go to *Main Menu -> Core Engine Configs -> Rules/Expert Systems* and ask the variable (*FruitVarGrp.Brief Description*). Create web-page for variable.

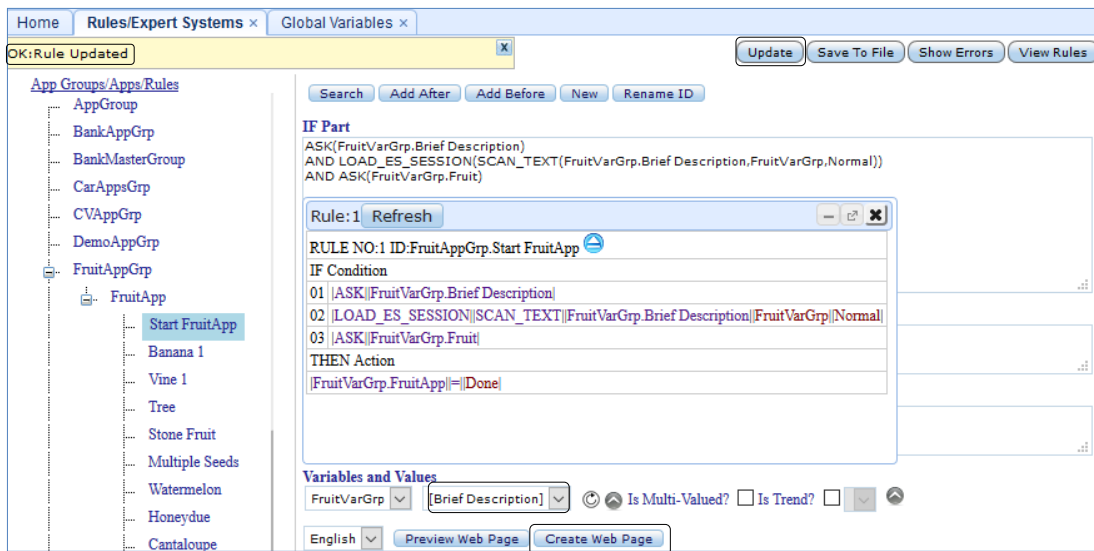


Figure 168: Create web page

- To view the changes, run the application. To run the application, go to *Apps* interface and click *FruitApp*. The following screen is displayed. If the textbox is blank *Skip* button is shown and if entered any text in *Search* button is shown.

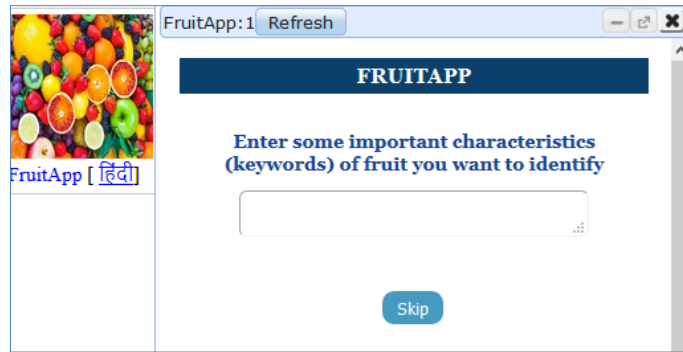


Figure 169: Running the app

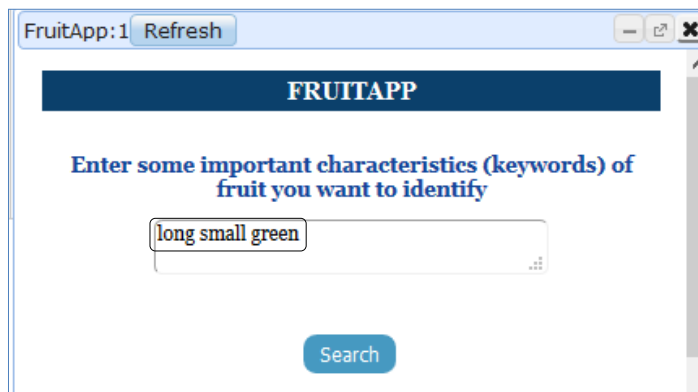


Figure 170: Running the Application



Figure 171: Displaying Session Report

4.8 Max Selected Option

This option is used to restrict number of entries to be checked amongst the available in compound data type and applicable in checkbox view control.

1. To create a variable, refer the above section 1.1. After creating a variable of Compound type, go to HTML Web Page Option 1 and enter the maximum number of option is to be selected in *Max Selected* field.

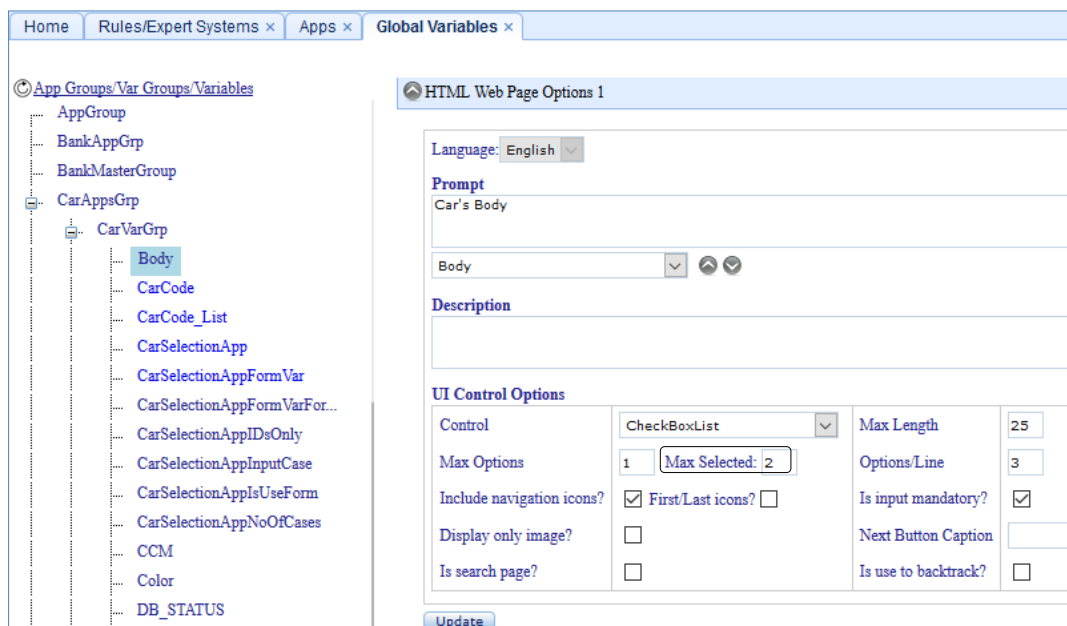


Figure 172: Set the Option

2. To ask the variable in rule, go to *Main Menu -> Core Engine Configs -> Rules/Expert Systems* and ask the variable (*CarVarGrp.Body*). To update the rule, click *Update* and create the web page for the asked variable.

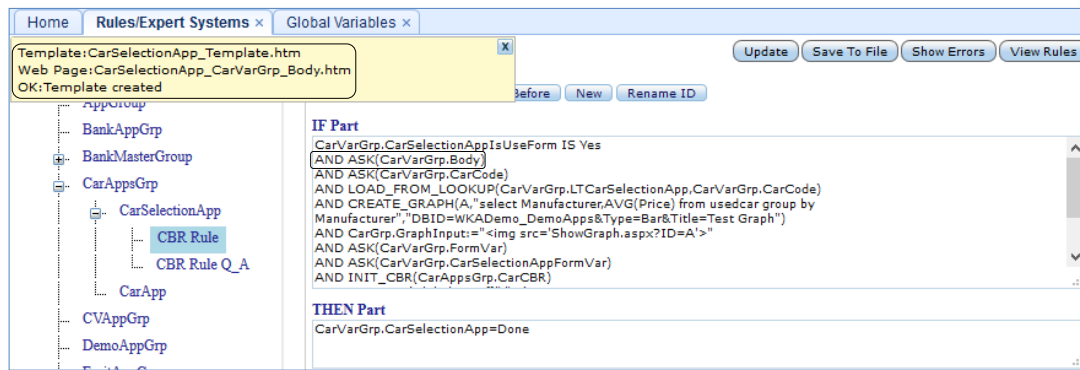


Figure 173: Edit the Rule

- To view the changes, run the application. To run the application, go to *Apps* interface and click *Car Selection App*. The following screen is displayed. If select more than the entered in Max Selected option (2), alert will be displayed as explain below.



Figure 174: Running the Application

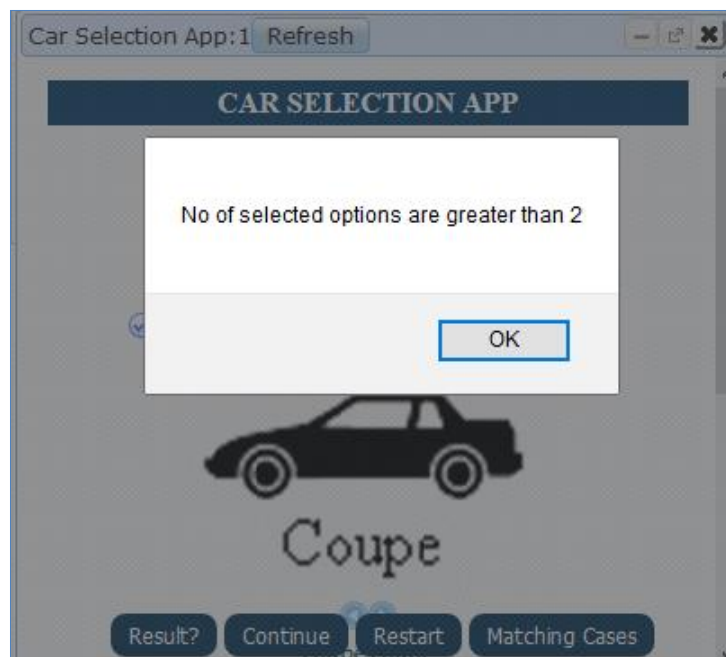


Figure 175: Running the Application

5. HTML Web Page Options 2

This option allows adding Form Title, Validation Condition, Validation Message, File Names etc.

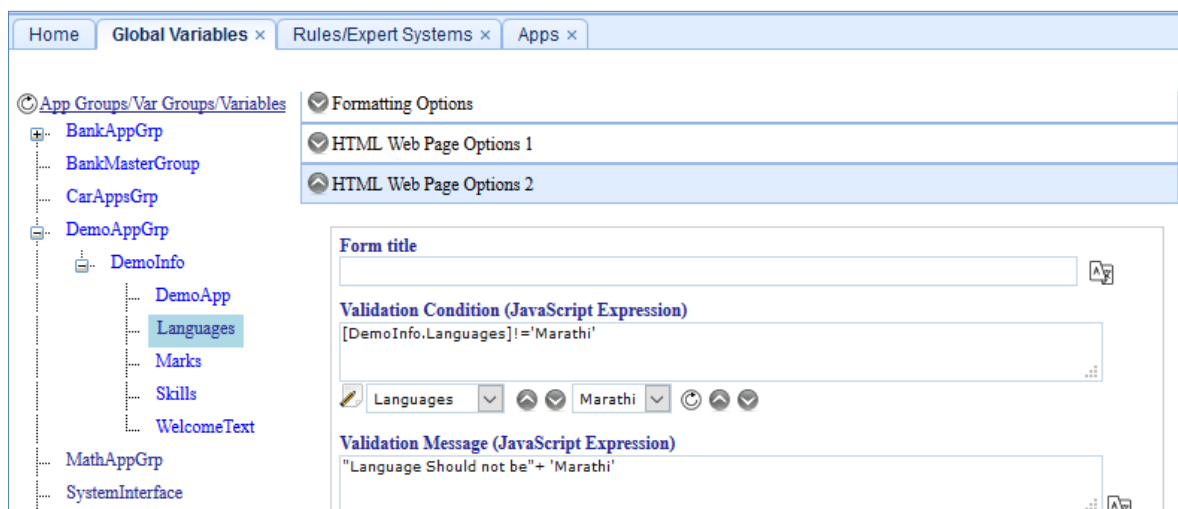


Figure 176: HTML Web Page Options 2

The following table explains the fields of *HTML Web Page Options 2*:

Table 5: Fields of HTML Web Page Options 2

Fields	Description
Form Title	Title of the variable which is used in form, the content type selected must be 'Variable_Title'.
Validation Condition (JavaScript Expression)	JavaScript expression to validate the data entered for this variable at run-time. This expression must be true, if it does not satisfy the condition, validation message is prompted using alert function of JavaScript.
Validation Message (JavaScript Expression)	Message (using JavaScript expression) to be displayed when validation condition is not satisfied. Include text in ^s when text is to be translated into selected language e.g. '^Invalid Colour^:'+ [VarGroup.Colour]
File Names	<ul style="list-style-type: none"> Web Page: File name of web page for input type variable. A HTML webpage is created by this name prefixed with LangCode_AppName_'. This page is automatically invoked by the system at run time whenever variable value is required. Must have htm or html extension. Image File: Any image to be displayed along with webpage.

5.1 Form Title

- To set form title, go to *HTML Web Page Option 2* and enter the title for the variable which is to be displayed on form in *Form Title* field.

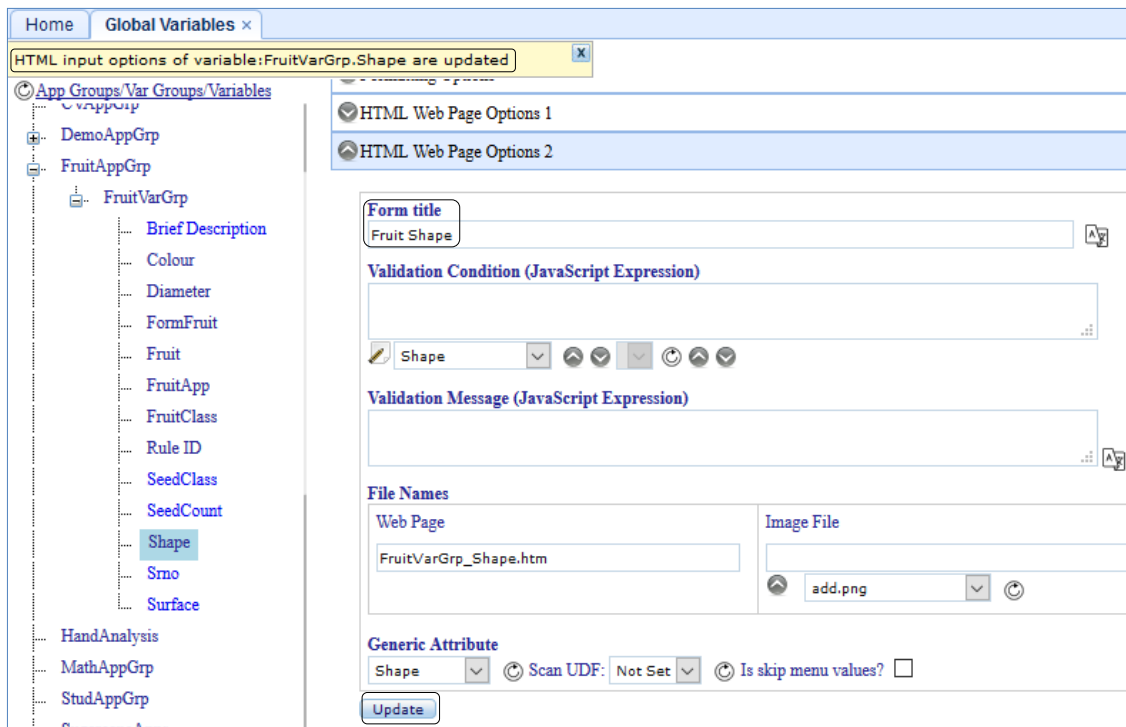


Figure 177: Entering the Form Title

- To set the variable title, go to *Main Menu ->Forms and Reports ->Form Interface* and set the content type as *Variable_Title* in *Content Type* field for the selected cell. To update the changes, click *Update* and to recreate the form, click *Create*.

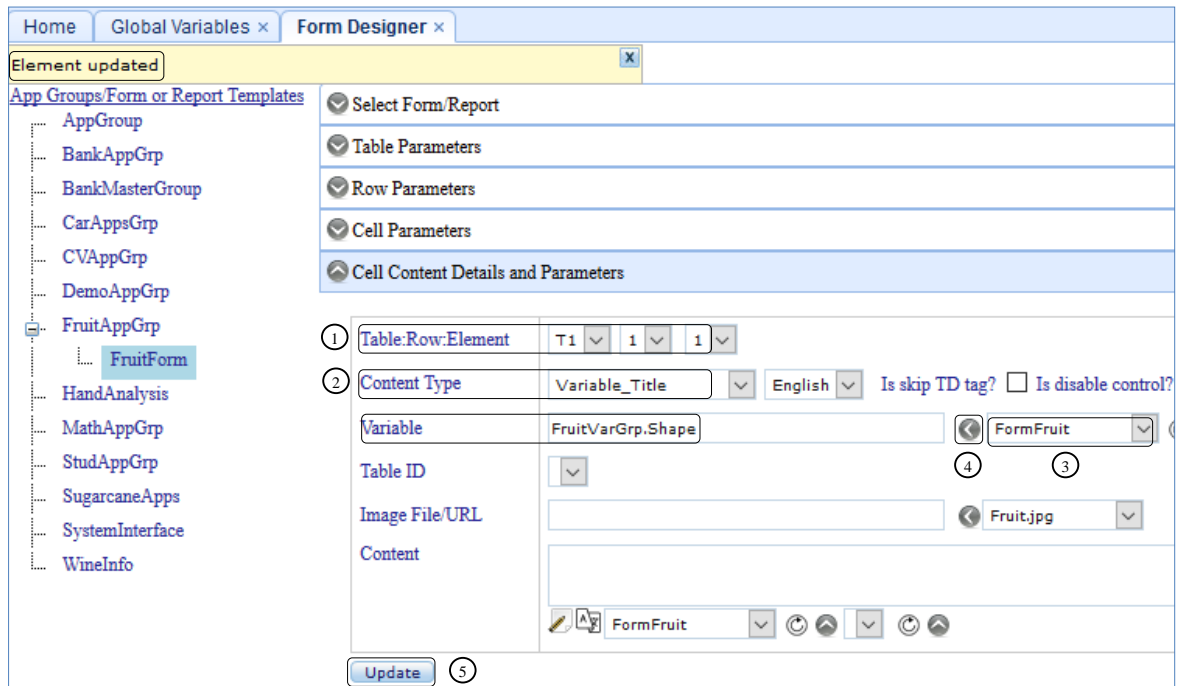


Figure 178: Set the Form Content

- To view the preview, click *Preview*.

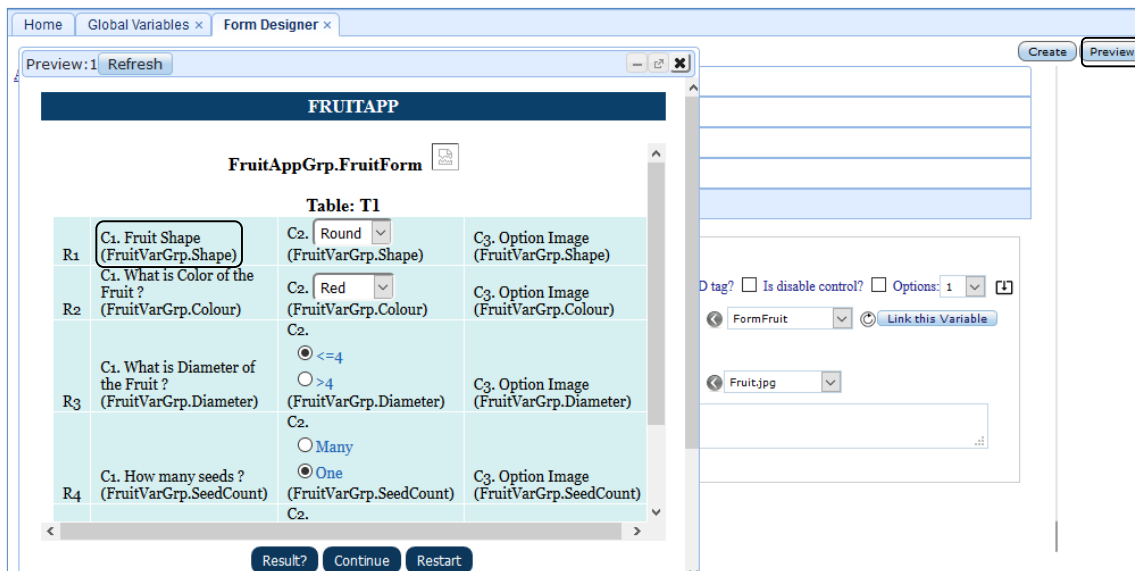


Figure 179: Form Preview

- To view the changes, run the application. To run the application, go to *Apps* interface and click *FRUITAPP*.

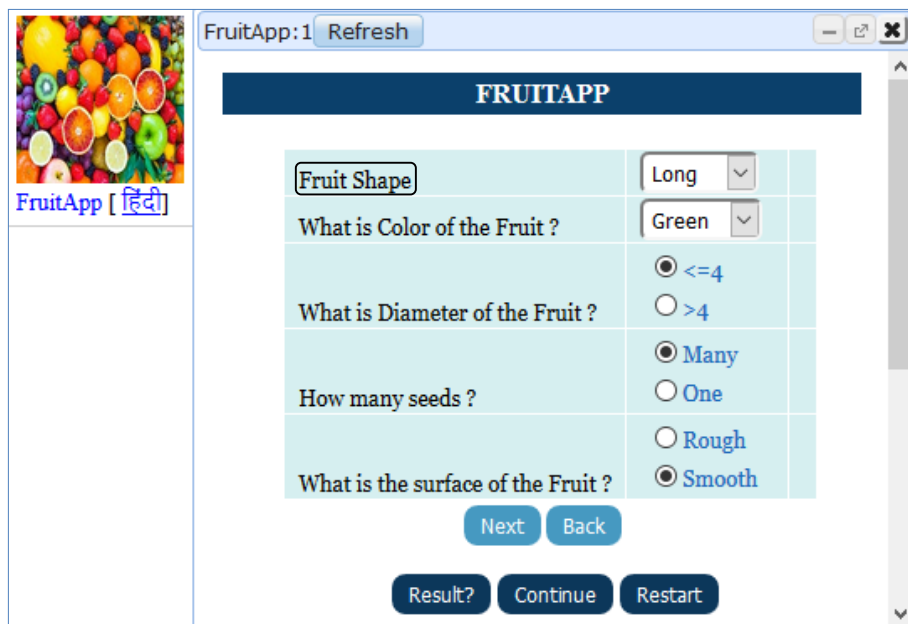



Figure 180: Running the Application

5.2 Add Image to Variable

- To set the image on variable, first upload the image from *Menu & List* (refer *Menu Interface*). After uploading the image will be populated in *Image File* dropdown. Select the image from the *Image File* dropdown and to move the image file, click the button . File name will be populated in the above *Image File* dropdown and click *Update* to update the changes.

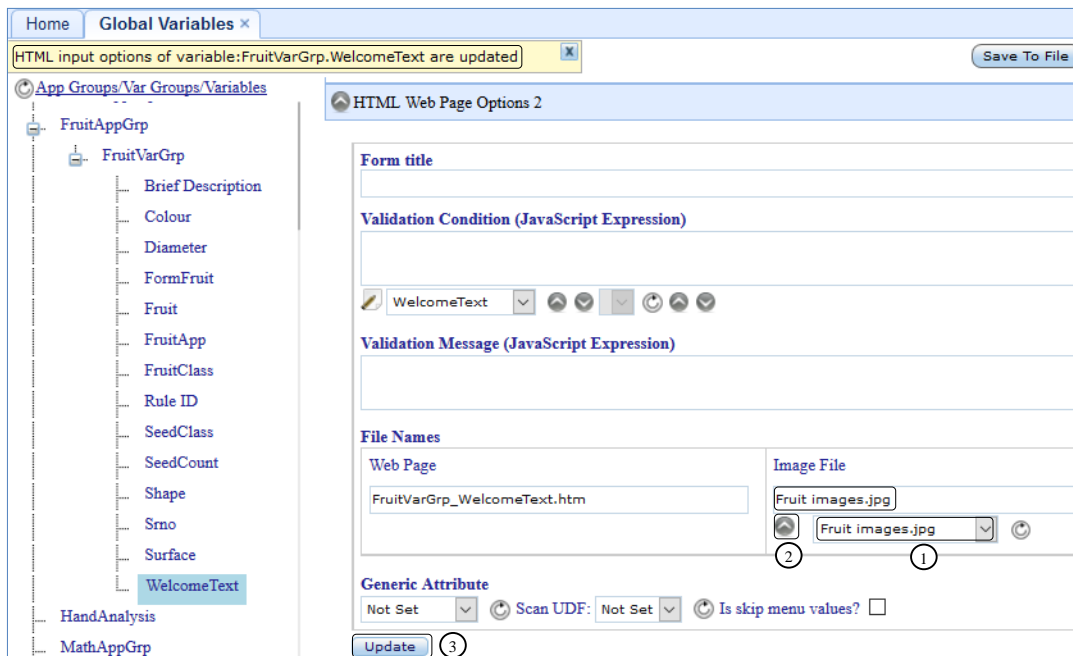


Figure 181: Set the Image

- To edit the rule, go to Rules/Expert System and ask the variable (*FruitVarGrp.WelcomeText*) in rule. To update the rule, click *Update*.

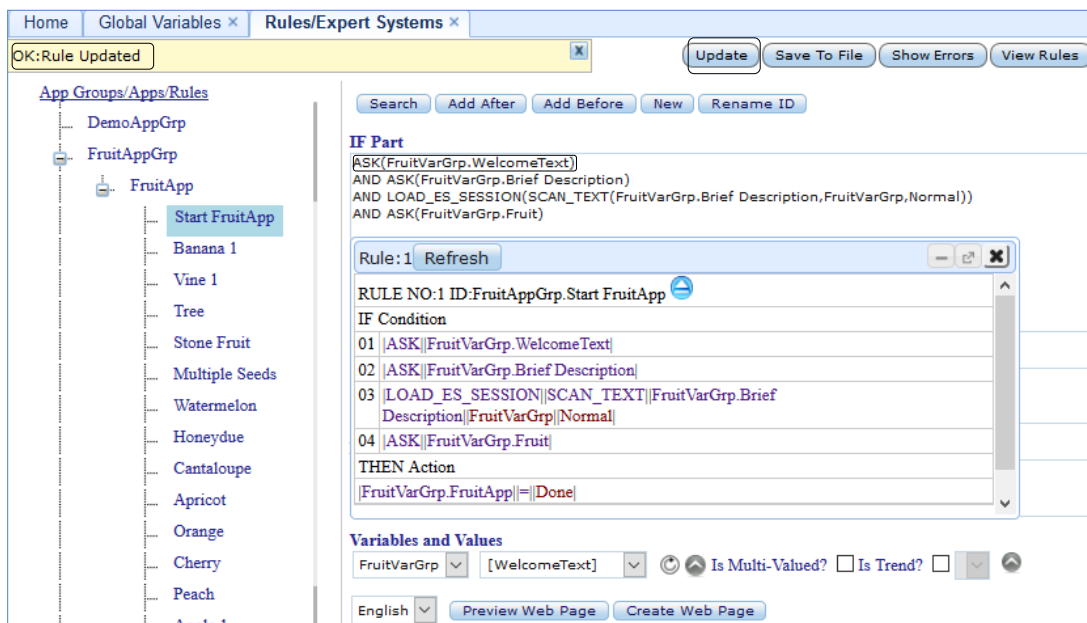


Figure 182: Edit and Update the Rule

- To create the variable, click *Create Web Page*.

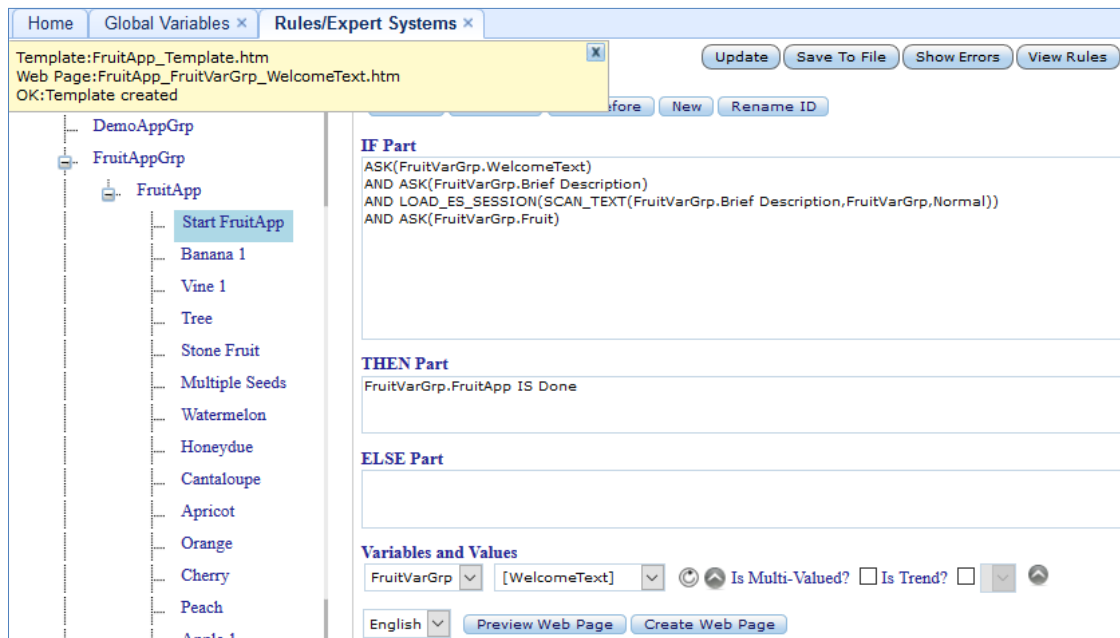


Figure 183: Creating Web Page

- To preview the page, click *Preview Web Page*.



Figure 184: Previewing the Page

- To view the changes, run the application. To run the application, go to *Apps* interface and click *FRUITAPP*.

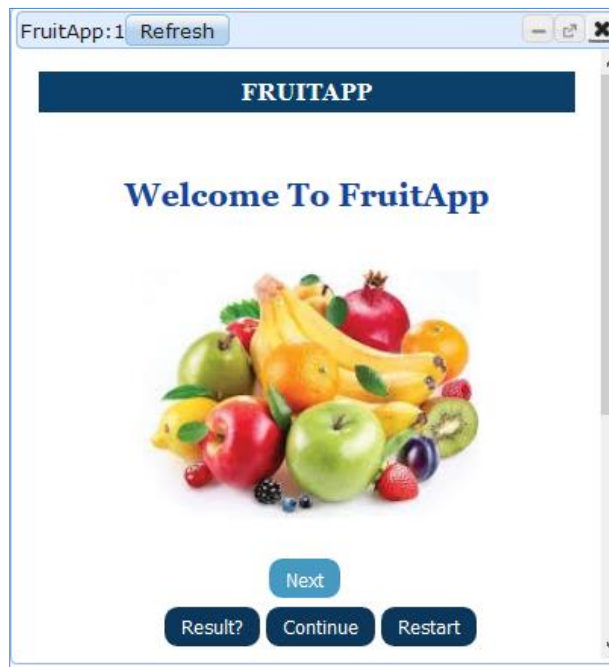




Figure 185: Running the Application

5.3 JavaScript Validation

This is JavaScript expression which validates the data entered for this variable at run-time. This expression must be true, if it does not satisfy the condition, validation message is prompted using alert function of JavaScript. (Some part of JavaScript validation is already explained in section 3.2 (Capitalize Each Word) and refer figure 85). WKAS variables can be included in the expression (provided their values are already entered or being entered through form) by including them in square brackets. For example, condition colour should not be green is [VarGroup.Colour]!='Green'. The system automatically inserts extra code to get variable values when web page/form is generated.

1. To insert JavaScript expression in *Validation Condition(JavaScript Expression)* field for variable (*Languages*), first select the variable and its value (*Marathi*) from drop down menu and click the button  to insert the variable in *Validation Condition(JavaScript Expression)* field. Now, enter the required condition in *Validation Condition (JavaScript Expression)* field and if it does not satisfy the condition then it should go to the *Validation Message*. Enter the required message in *Validation Message(JavaScript Expression)* field and click the button  to move the value (*Marathi*) in *Validation Message(JavaScript Expression)* field.

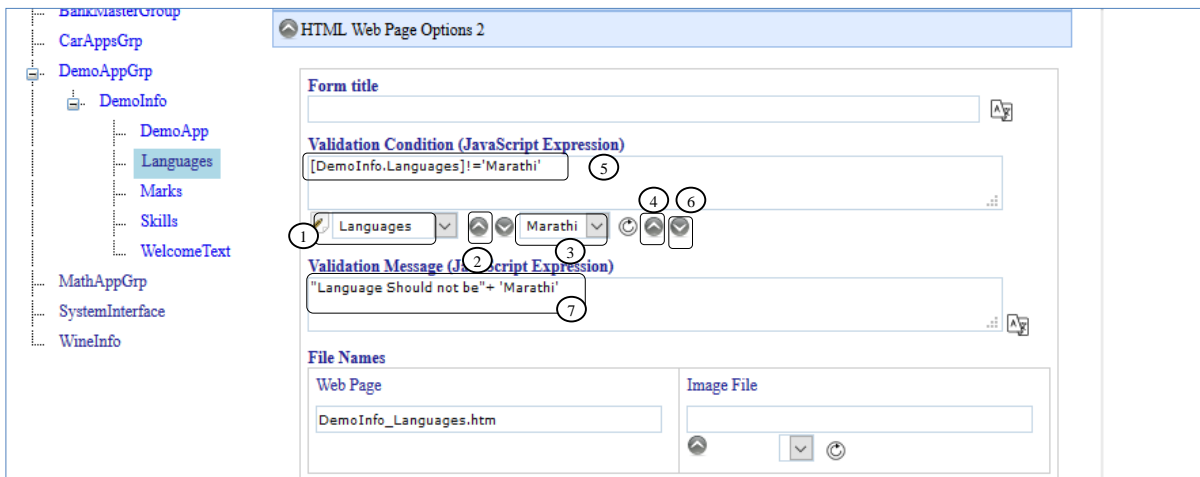


Figure 186: Entering Validation Condition and Validation Message

- To update the input options of variable, click *Update* and the following message is displayed.

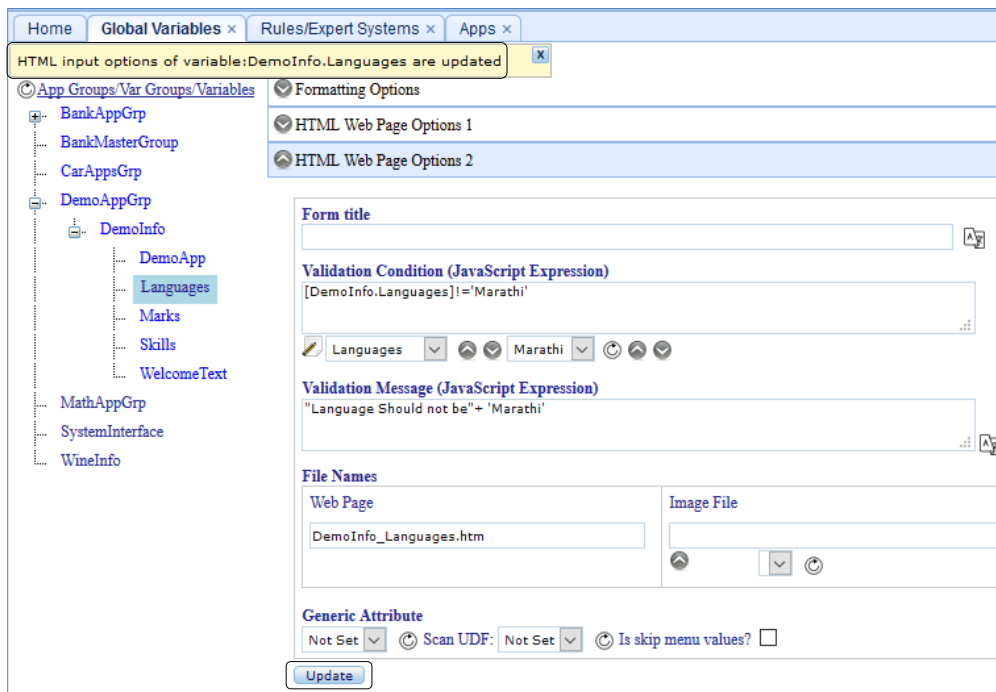


Figure 187: Updating Variable

- To update the rule already created for variable (*DemoInfo.Languages*), click *Update* and the following message with update screen is displayed.

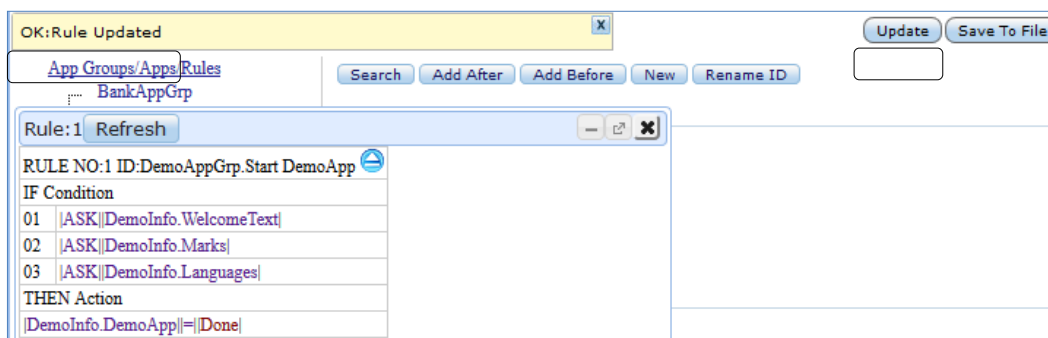


Figure 188: Updating Rule

- To create a web page, first select the variable group (*DemoInfo*), variable (*Languages*) from *Variables and Values* dropdown menu and click *Create Web page*.

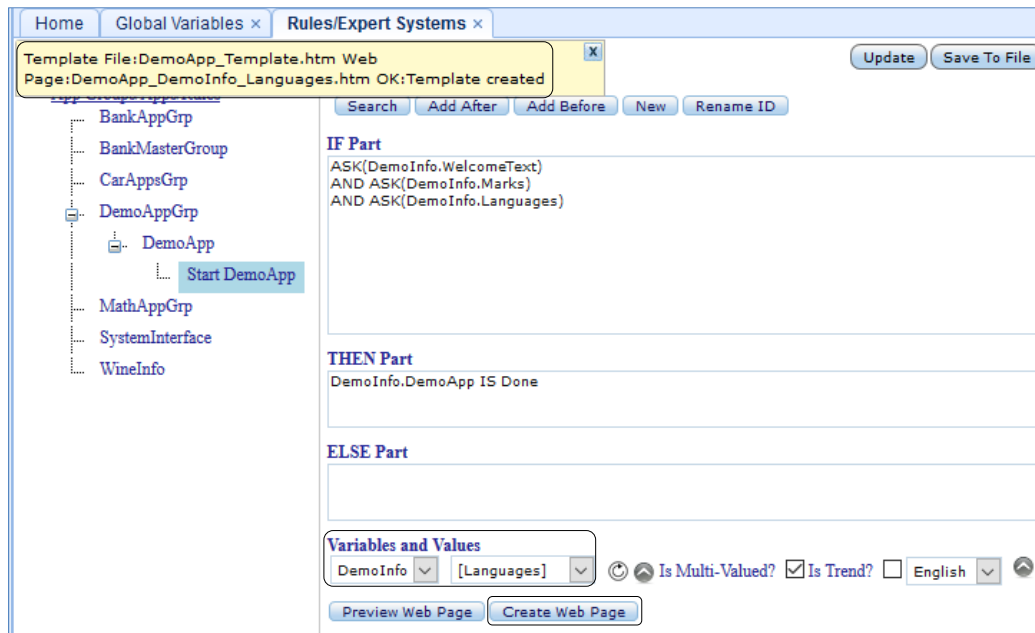


Figure 189: Creating Web Page

- To view the changes, run the application. To run the application, go to *Appsinterface* and click *Demo App*.

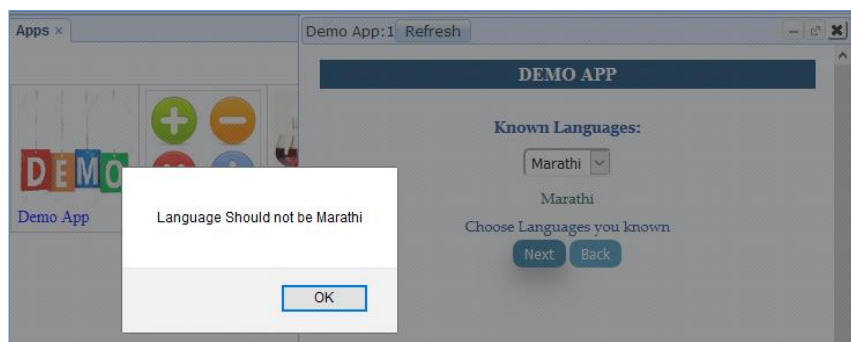


Figure 190: Showing validation message

As shown in above screen shot, since the language selected is *Marathi* so according to the condition entered above, an alert with validation message is shown.

- Similarly, if some other condition is entered in *Validation Message (JavaScript Expression)* field. For example: If the language selected is other than *Marathi* then the variable (*DemoInfo.Languages*) can be called at run time in *Validation Message (JavaScript Expression)* field showing an alert. To update the variable details, click *Update*.
- To update the rule already created and does not have variable add to rule (*DemoInfo.Languages*), click *Update*.

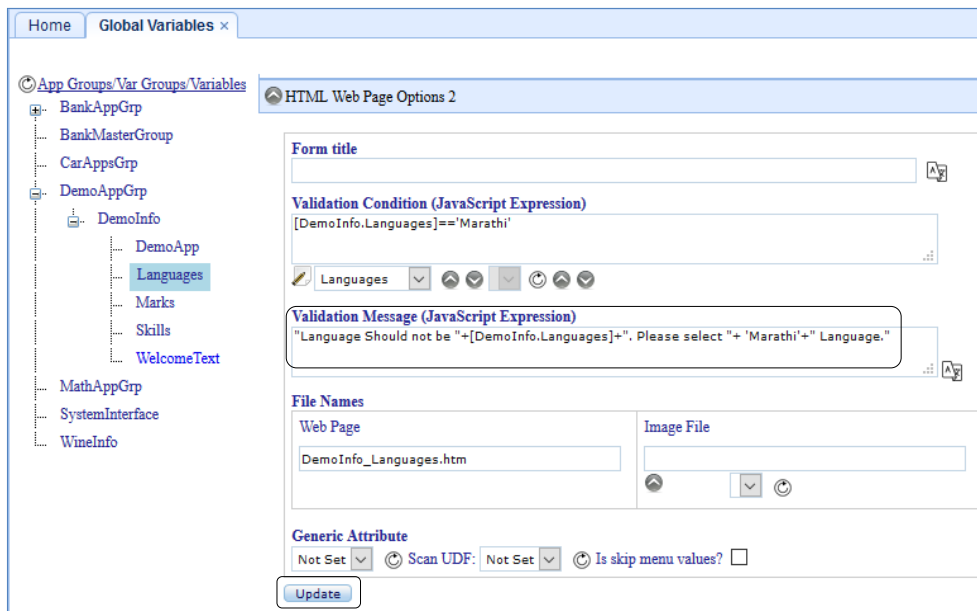


Figure 191: Validation Condition

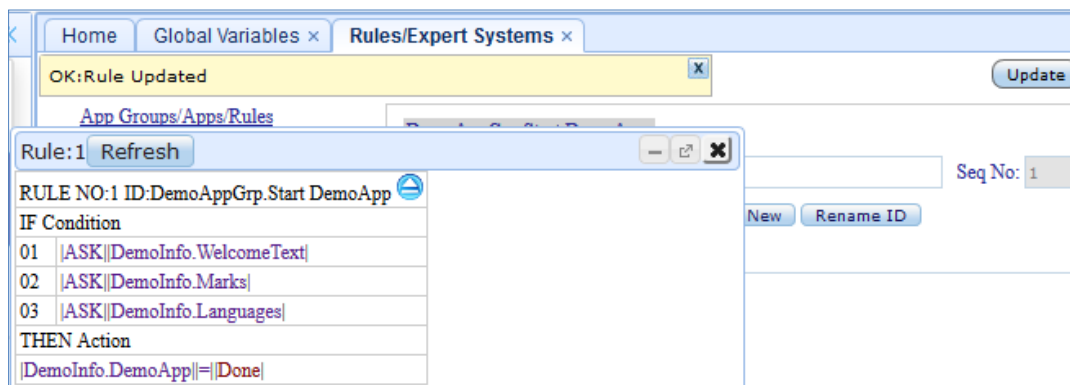


Figure 192: Updating Rule

- To create a web page, first select the variable group (*DemoInfo*), variable (*Languages*) from *Variables and Values* dropdown menu and click *Create Web page*.

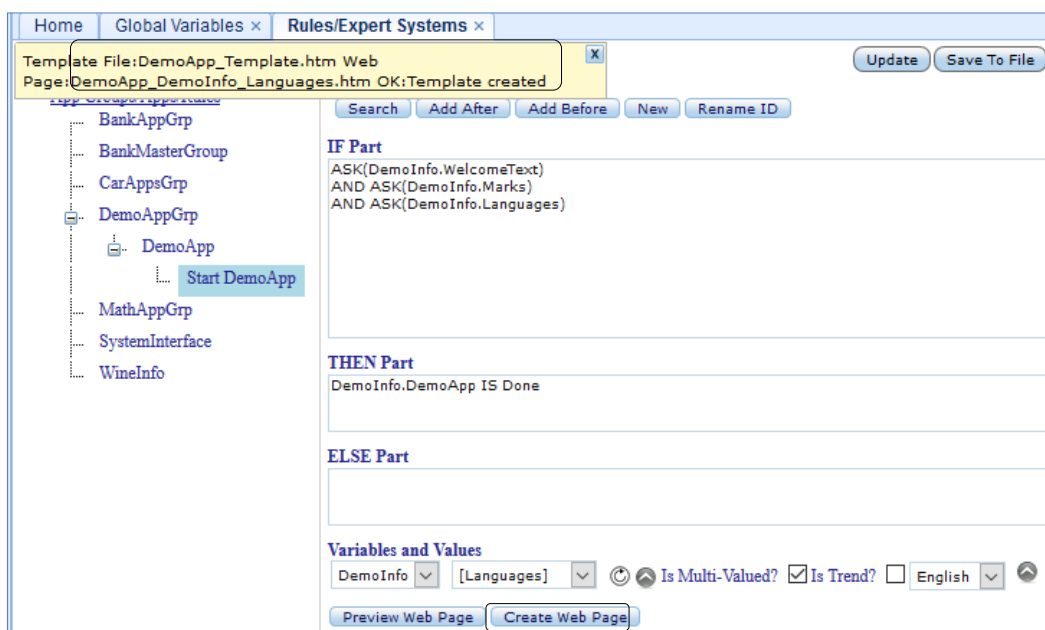


Figure 193: Creating Web Page

- To view the changes, run the application. To run the application, go to *Apps* interface and click *Demo App*.

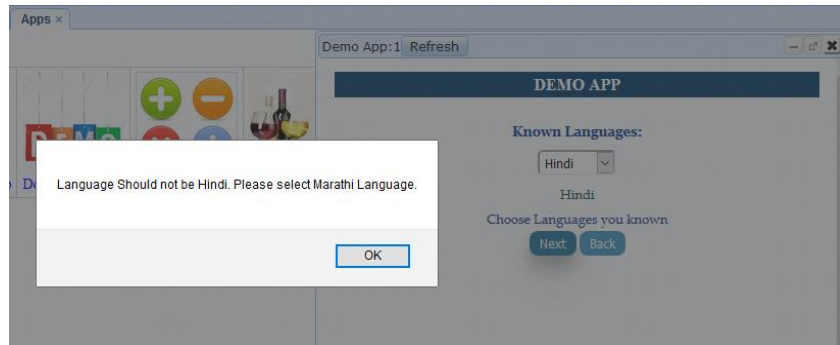


Figure 194: Validation message alert

As shown in above screen shot, since the language selected is Hindi so according to the condition entered above, an alert is shown.

Handling JavaScript Errors

This section explains for what reason JavaScript error can occur and how it can be resolved.

- Enter the condition `[DemoInfo.Languages]==Marathi` for variable (`DemoInfo.Languages`) in "Validation Condition" textbox. To update the variable details, click *Update*. *Note: the current version does not need expression in message list if it is plain substitution of variables e.g. expression can be: Language should not be [DemoInfo.Language]. Please Select Marathi Language, in the following screen shot.*

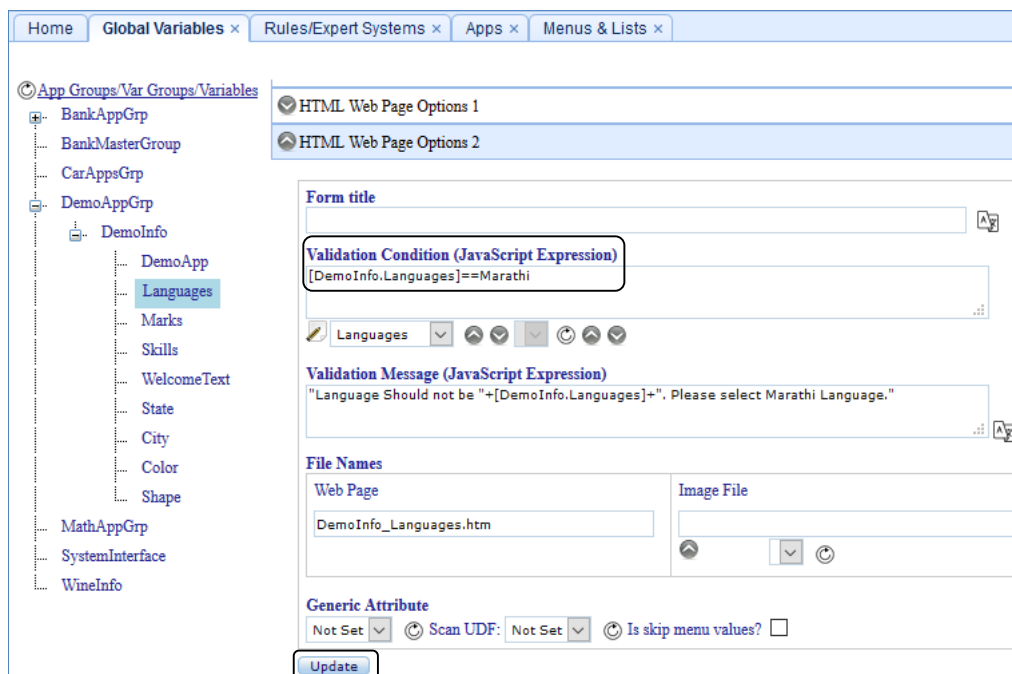


Figure 195: Entering the Condition

- To create a web page, first select the variable group (`DemoInfo`), variable (`Languages`) from *Variables and Values* dropdown menu and click *Create Web page*.

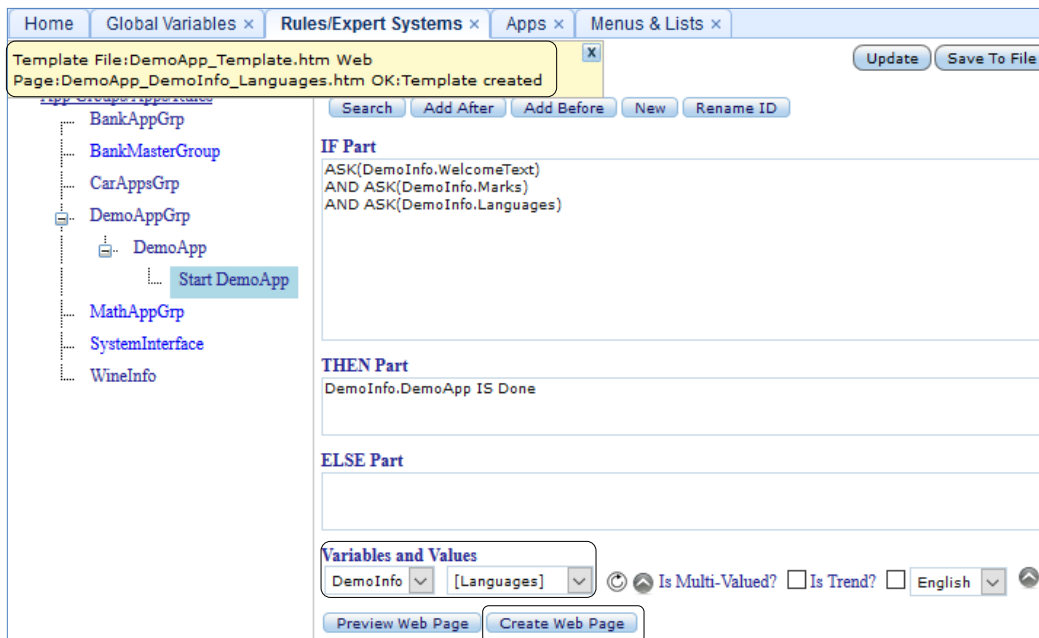


Figure 196: Creating Web Page

- To view the changes, run the application. To run the application, go to *Apps* interface and click *Demo App*. Select the language from *Known Languages* dropdown menu and click *Next*. It will not proceed further since the JavaScript error occurred.

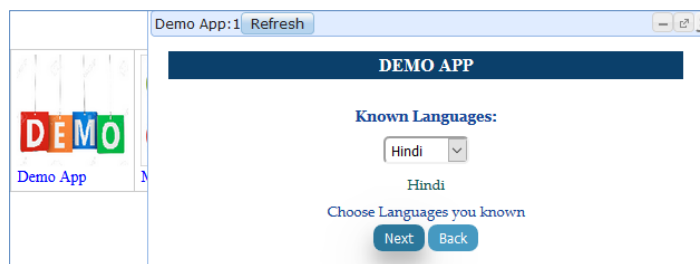


Figure 197: Selecting Language

- To view the JavaScript error in Mozilla Firefox, click the button  present in extreme right corner and click *Developer* -> *Web Console* option.

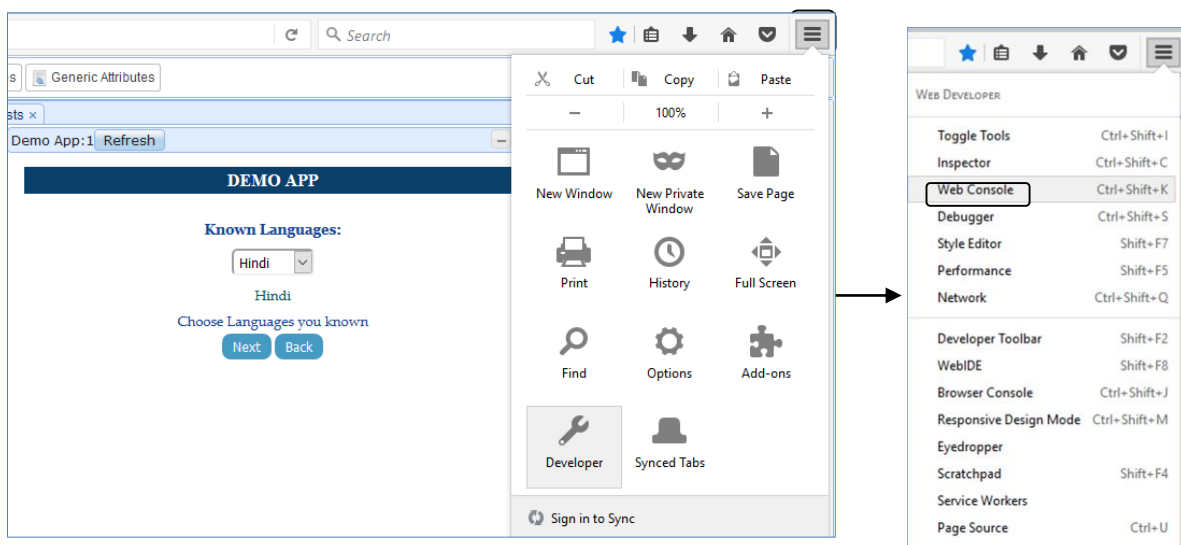



Figure 198: Viewing JavaScript Error

- Console screen is displayed highlighting the error as shown in screen shot below.



Figure 199: Viewing JavaScript Error

- Click the button  to view more about the error and Validate Condition, Validate etc. functions shows the flow of how the application runs.

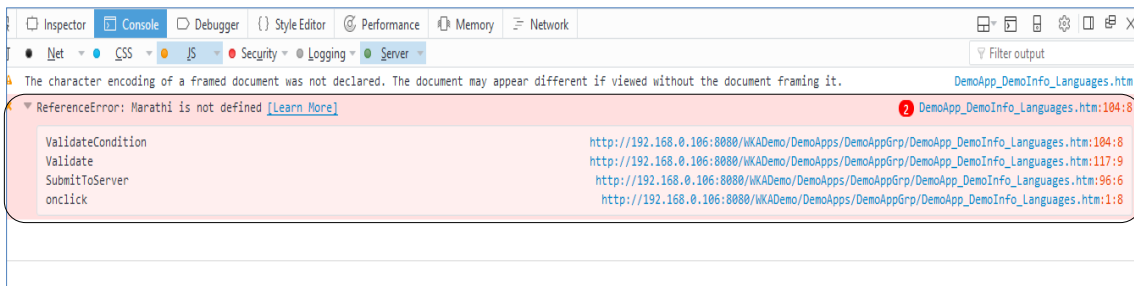


Figure 200: Viewing JavaScript Error

- To view the *Debugger* screen, click *Debugger* and the error can be detected.

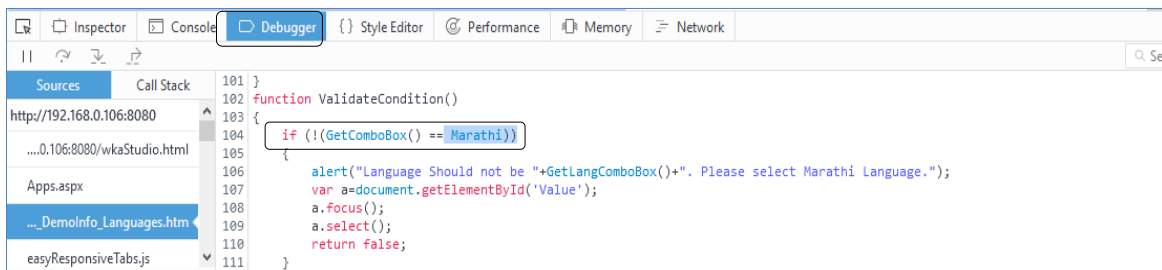


Figure 201: Viewing JavaScript Error

- If mistakenly, the condition entered in “*Validation Condition*” textbox for variable (*DemoInfo.Languages*) is `[DemoInfo.Languages]==Marathi` with quotes missing then JavaScript error is occurred as shown in screen shot above (Refer Figure 195).
- To resolve the error, go to *HTML Web Page Options 2* (Refer Figure 191) and change the condition to `[DemoInfo.Languages]== 'Marathi'`.

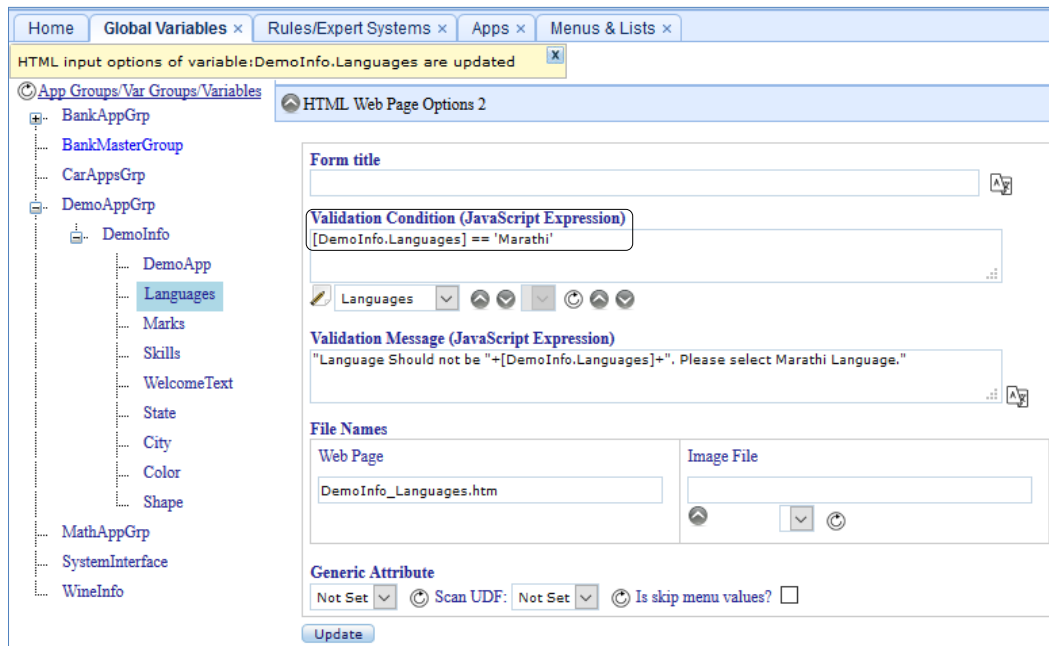


Figure 202: Resolving JavaScript Error and Updating

Note: Similarly, follow the same steps to add condition and message for variables DemoInfo.Color and DemoInfo.Shape in Validation Condition (JavaScript Expression) and Validation Message(JavaScript Expression)field as shown in screen shots below.

- Enter the condition and update the variable.

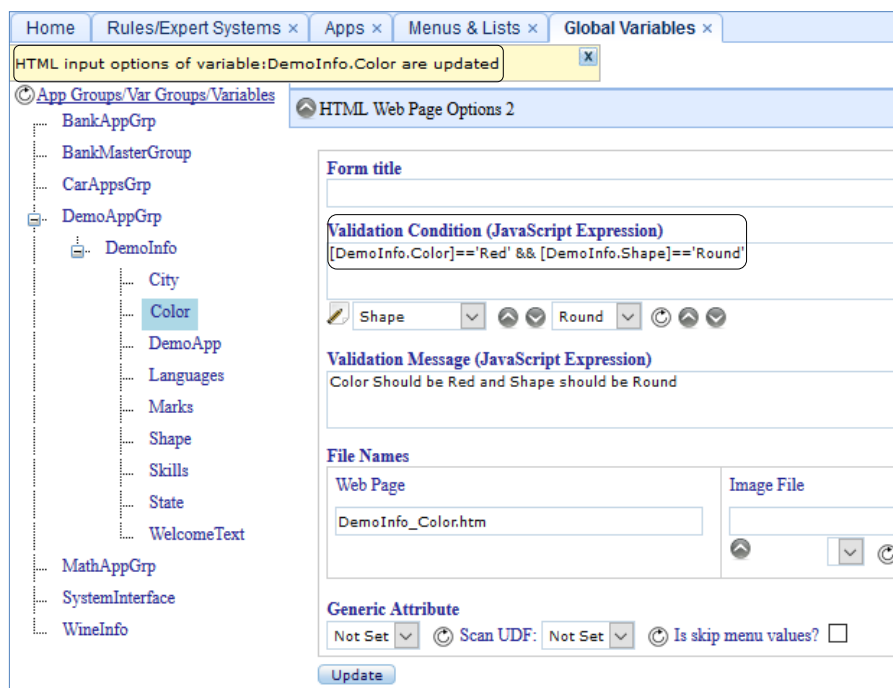


Figure 203: Entering the Condition

2. If the variables (*Color and Shape*) are not asked in rules, then that variable first needs to be asked in rules in *Rules/Expert Systems* interface as shown in screen shot below. To update the rule created, click *Update* and the following message with update screen is displayed.

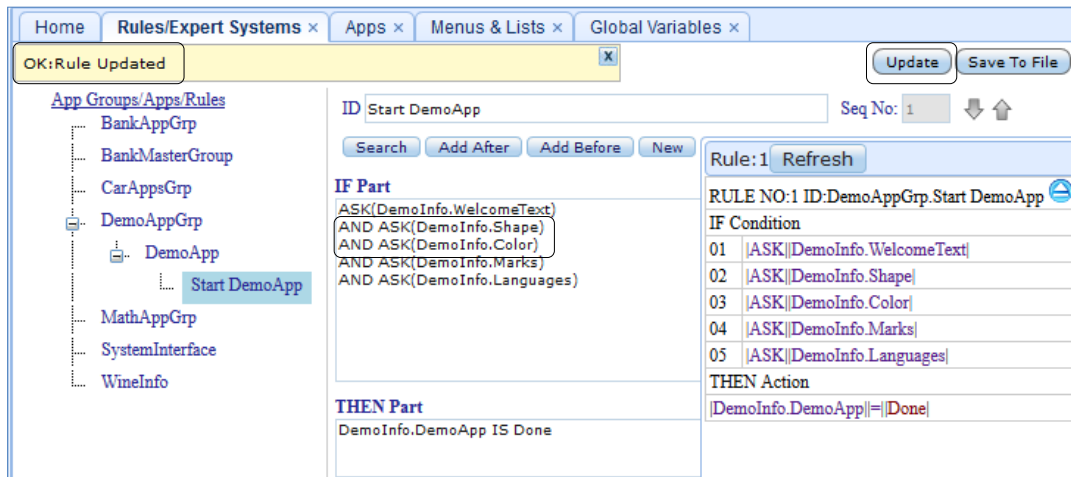


Figure 204: Updating the Rule

3. To create a web page, first select the variable group (*DemoInfo*), variables (*Shape and Color*) from *Variables and Values* dropdown menu and click *Create Web Page*.

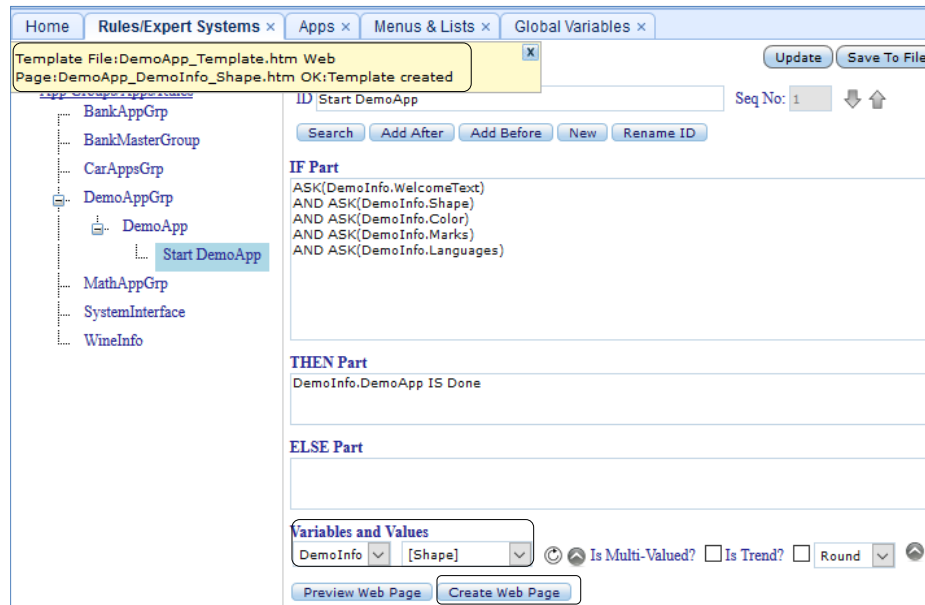


Figure 205: Creating Web Page for Shape

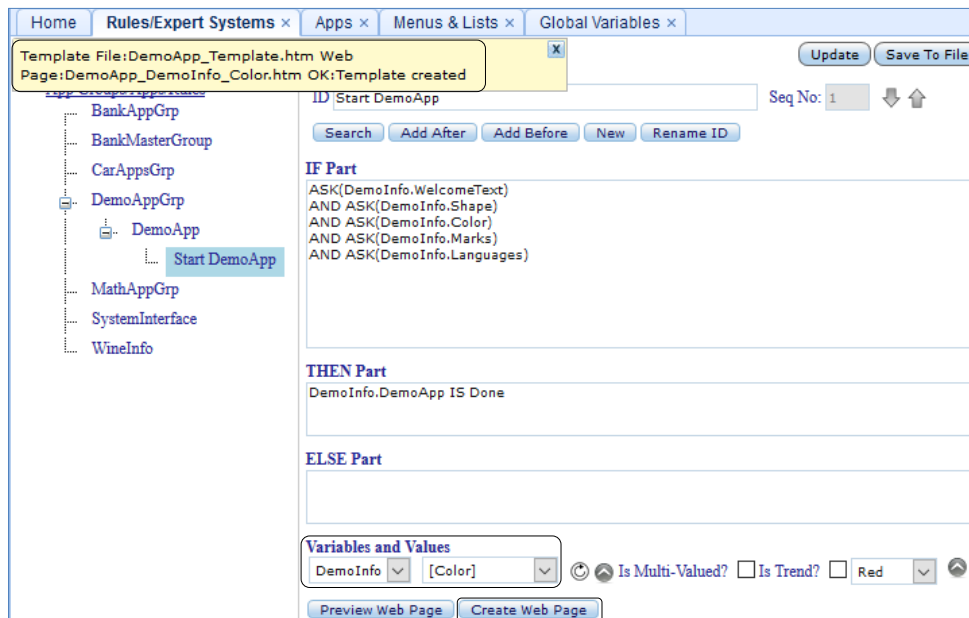


Figure 206: Creating Web Page for Color

- To view the changes, run the application. To run the application, go to *Apps* interface and click *Demo Ap*. Select the *Shape* (Example: *Long*) and click *Next*.

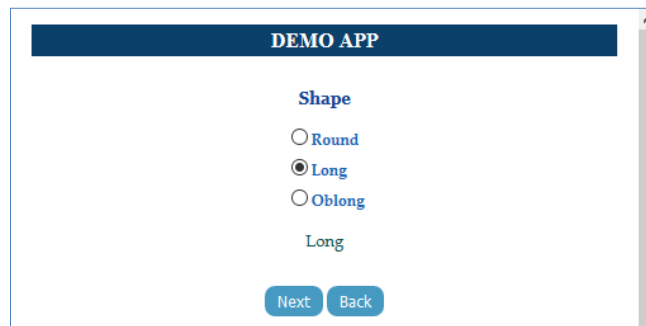


Figure 207: Selecting Shape

- Select the *Color* (Example: *Orange*) from drop down menu and click *Next*.

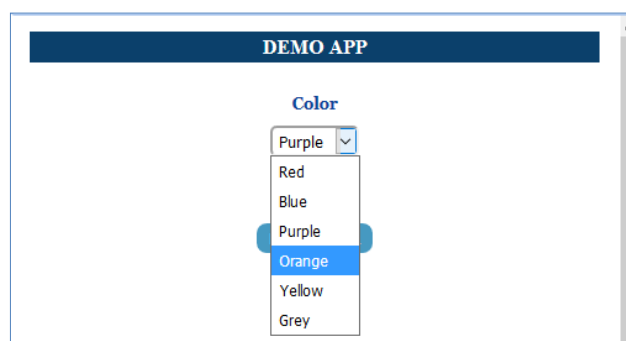


Figure 208: Selecting Colour

- Since the *Shape* selected is *Long* and *Color* selected is *Orange* so according to the condition entered above if color and shape is other than Red and Long, an alert is shown.

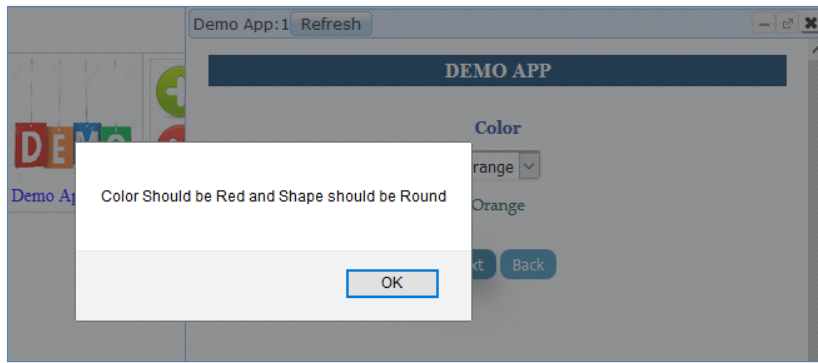


Figure 209: Showing Alert

7. To view the changes, run the application and select *Shape* as *Round* and *Color* as *Red*.

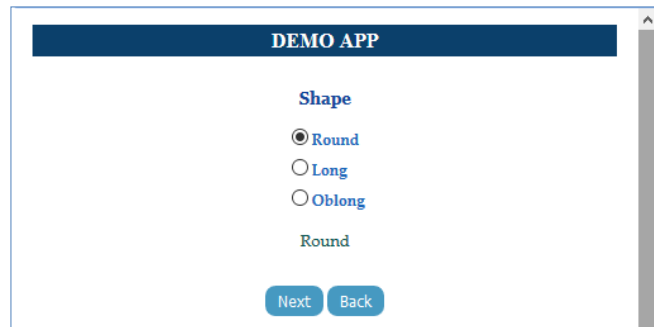


Figure 210: Selecting Shape

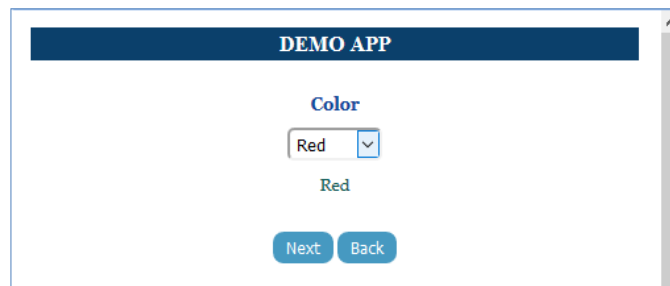


Figure 211: Selecting Color

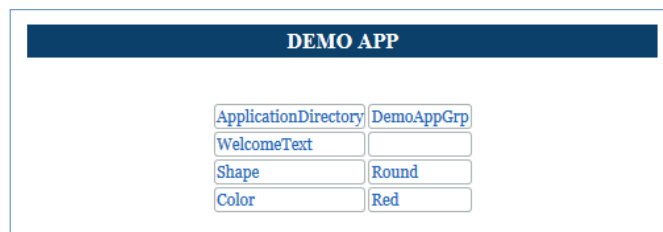


Figure 212: Session Report

As shown in above screen shots since the condition entered (Refer Figure 163) is satisfied for variables (*DemoInfo.Color* and *DemoInfo.Shape*) so the session report is shown.

5.4 Multilingual Option

Multilingual application allows creating application in multiple languages (Hindi or Marathi).

1. Click *Basic Variable Parameters* option from the list of options. Select the variable (Example: *Colour*) from the list of variables and details (Type, Data Type, Default

Value etc.) corresponding to variable is displayed. Check the option *Is multi-Lingual?* and to update the variable details click *Update*.

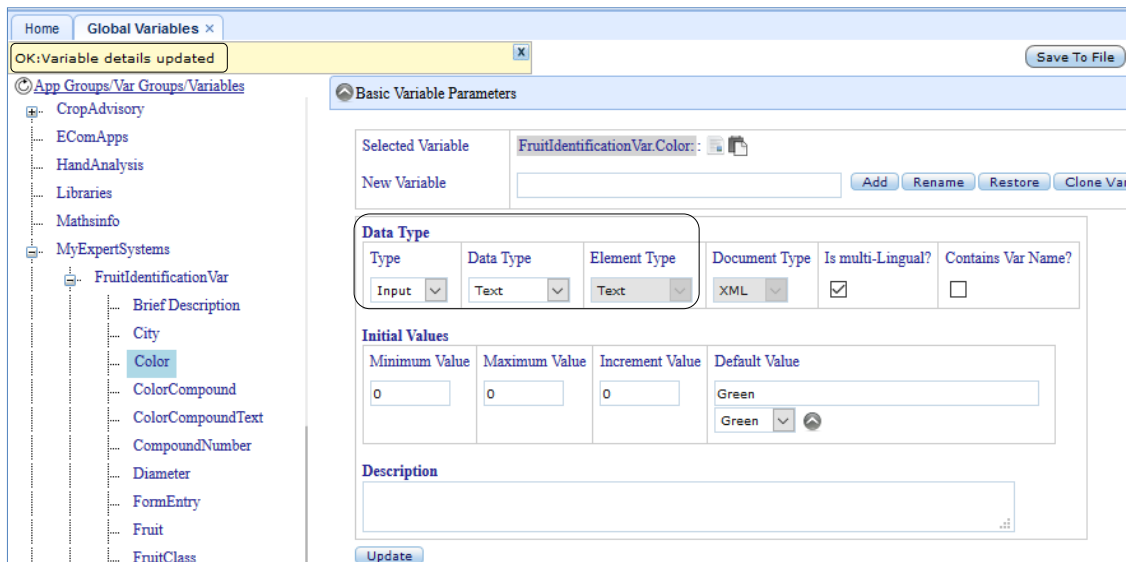


Figure 213: Basic Variable Parameters Option

2. Select the menu (*FruitIndentificationVar.Color*) created for variable *Color* from *Simple Menu* dropdown and to update the variable details, click *Update*.

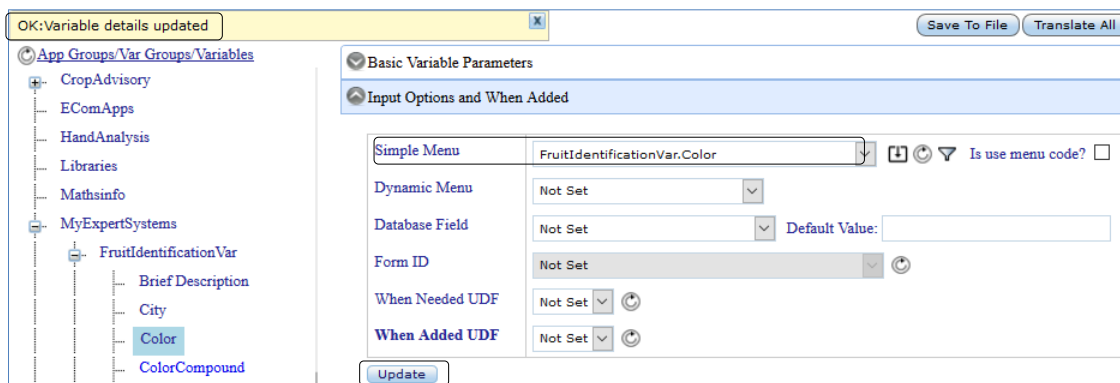


Figure 214: Input Options and When Added

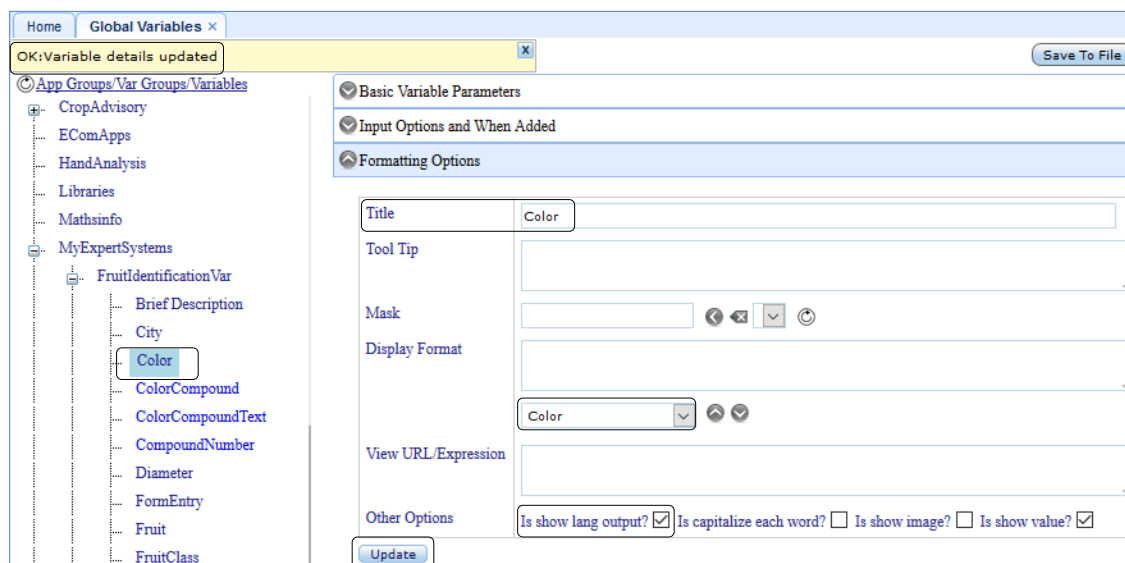


Figure 215: Formatting Options

2. Click *Formatting Options* from the list of options and the details (*Title, Display Format*) corresponding to variable *Color* is displayed. Check the option *Is show lang output?* to convert the language text into English text and variable will hold English value. To update the variable details, click *Update*.
3. Click *HTML Web Page Options 1* from the list of options and the details (*Prompt, Description, UI Control Options* etc.) corresponding to variable are displayed and can be edited as per the requirement.

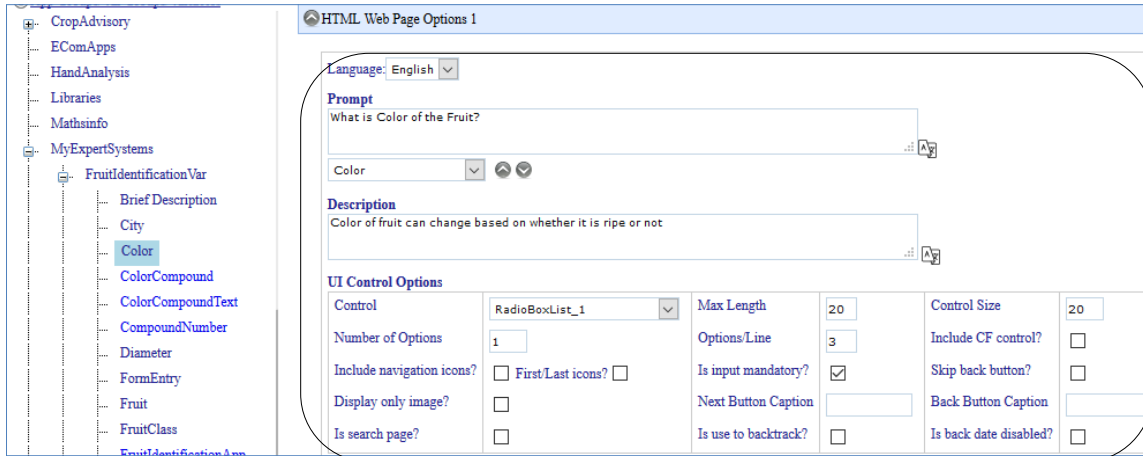


Figure 216: HTML Web Page Options 1

4. Enter the required condition in *Validation Condition (JavaScript Expression)* and *Validation Message* field for variables *Shape* and *Color* as shown in screen shot below. The values entered in the operator (^ ^) will be converted in the selected language. (Refer section 5.3 JavaScript Validation for more details). To update the input options of variable, click *Update*.

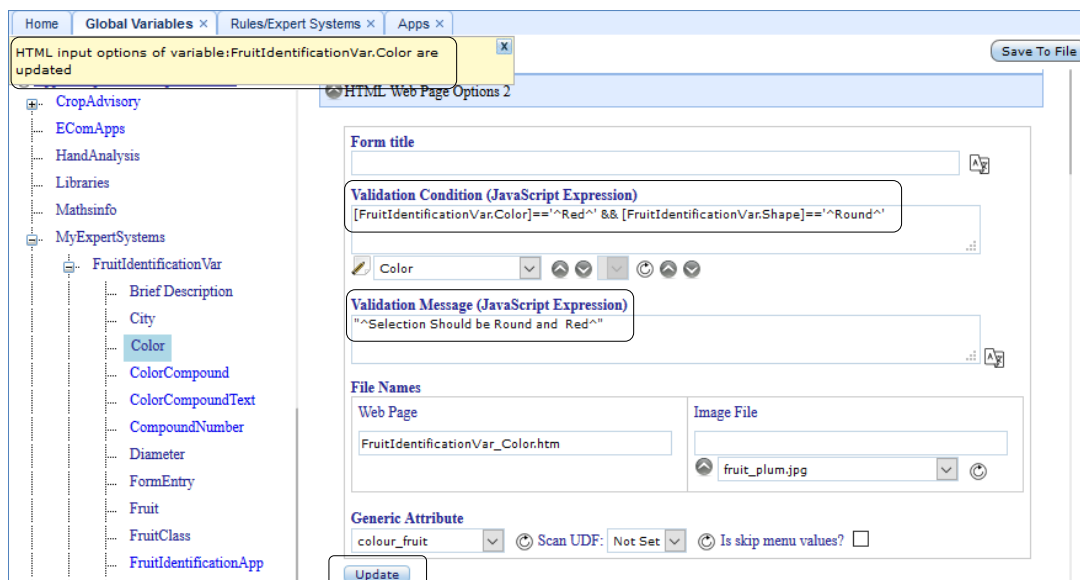


Figure 217: HTML Web Page Options 2

5. To update the rule created for variables *Color* and *Shape*, go to *Rules/Expert Systems* interface, and click *Update*, the following message with update screen is displayed.

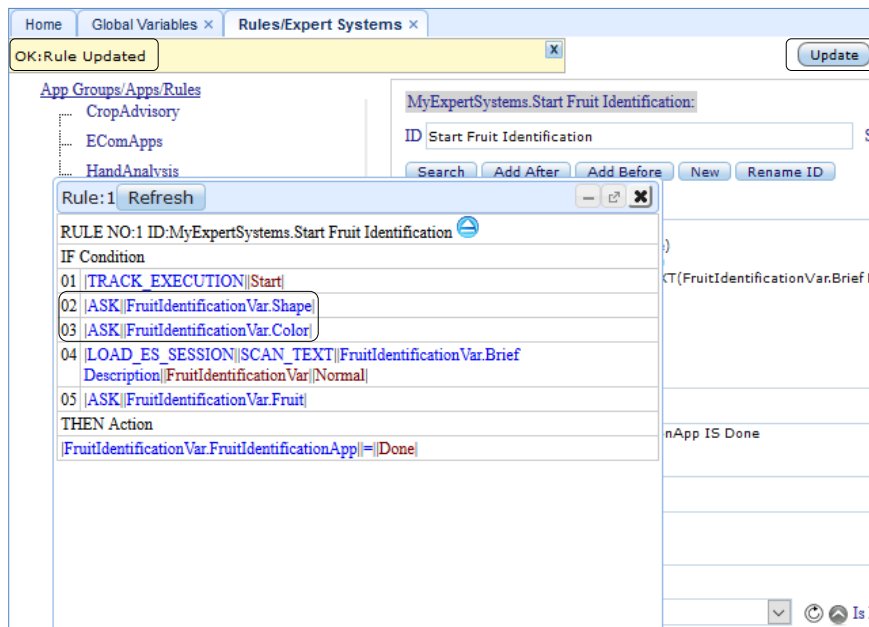


Figure 218: Updating Rule

- To create a web page for variables *Color* and *Shape*, click *Create Web Page* and the following message is displayed as shown in screen shots below.

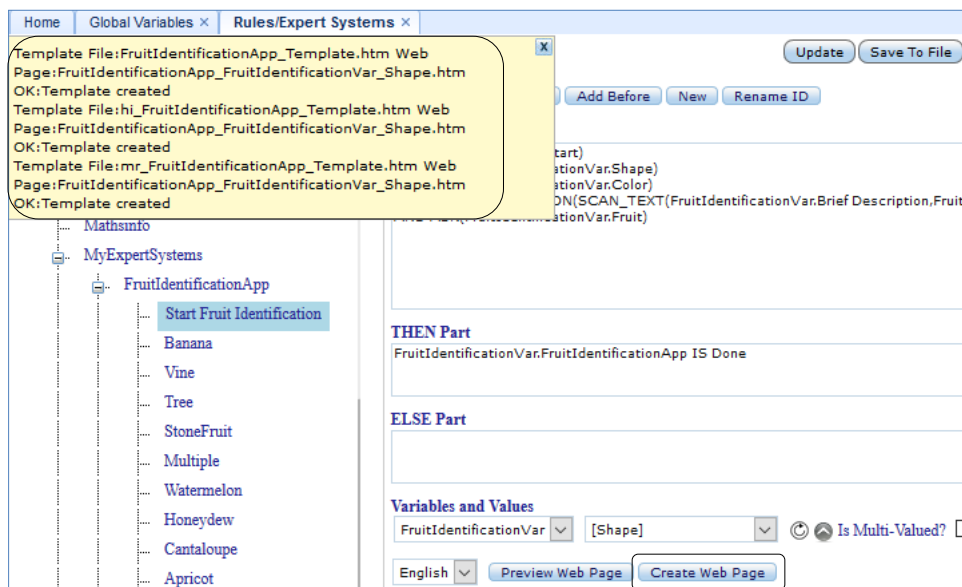


Figure 219: Creating Web Page for Shape

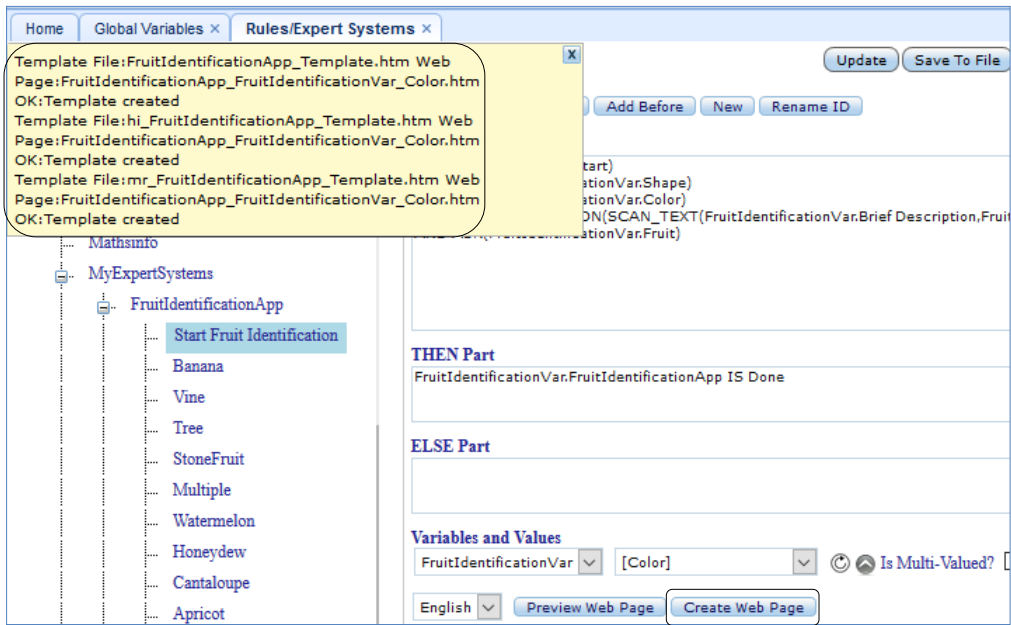


Figure 220: Creating Web Page for Color

- To view the changes, run the application. To run the application, go to *Apps* Interface and click *Fruit Identification*. The following screen shots are displayed and click *Next* on each screen to proceed further.



Figure 221: Selecting Shape



Figure 222: Selecting Shape



Figure 223: Selecting Color

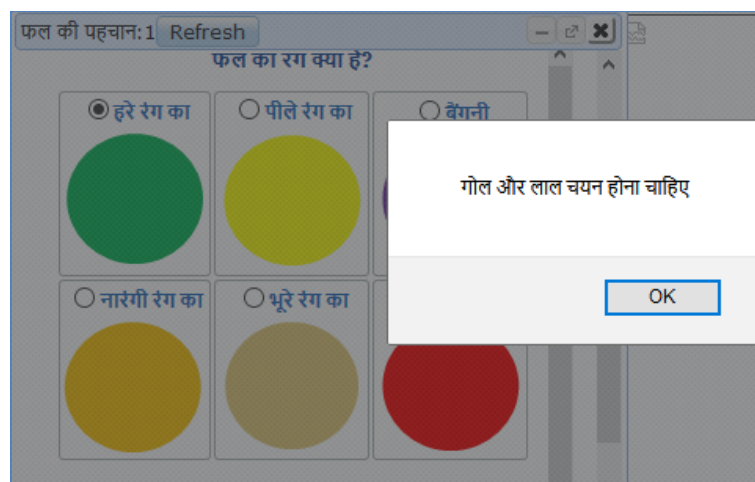


Figure 224: Showing Alert

As shown in the above screen shot, since color and shape selected is Green and Long so according to the condition entered above, an alert is shown.



Figure 225: Selecting Shape

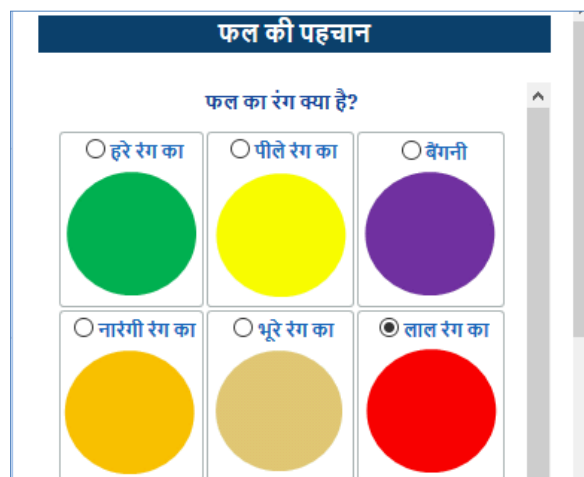


Figure 226: Selecting Colour

As shown in above screen shots, since the condition entered in *Validation Condition* field is satisfied so either session report is displayed or click *Next* to proceed further.

To know about generic attributes of section *HTML Web Page Options 2*, refer to document: [Adding keyword search to the App.pdf](#) for details.

6. Import variables from CSV files

Variables can be imported from text files.

1. Go to variable interface, select the variable group in which variables to be imported. Click import interface button. Import data popup appears showing what fields/columns the text file containing variable should have. Except name of variable everything is optional.

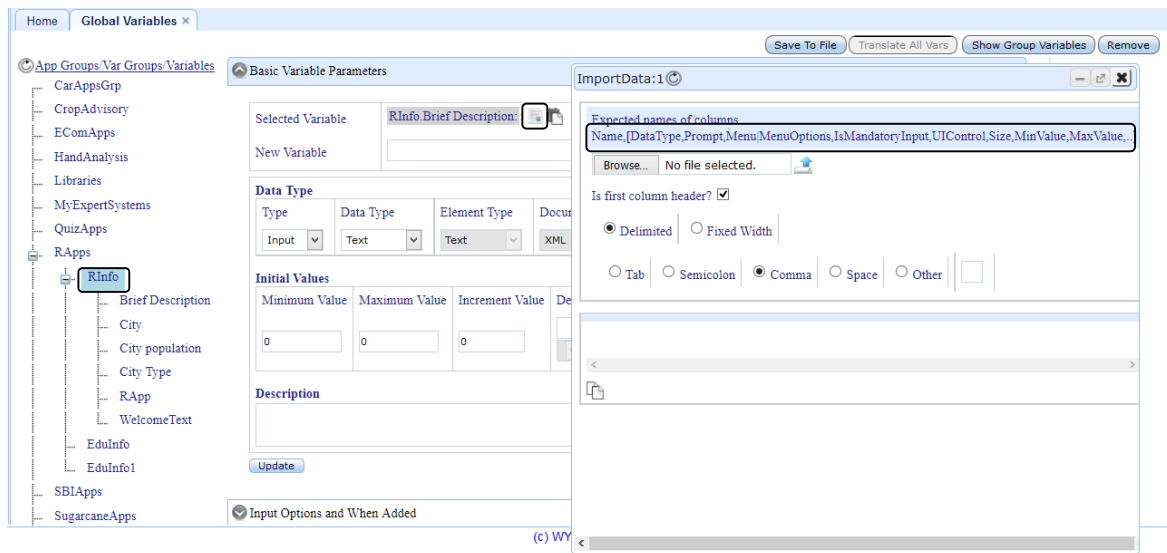


Figure 227: Import popup

2. Prepare text file which contains variables. Following figures shows text file with 4 variables. Menu options are included in square brackets separated by comma or |.

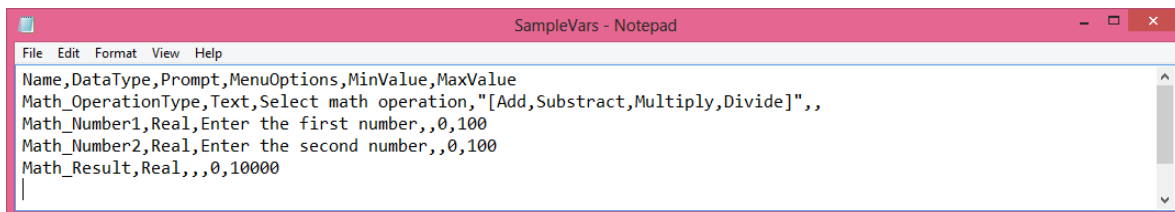


Figure 228: Text file containing variables

3. Select the text file by clicking *Browse* button.

Figure 229: Selecting text file

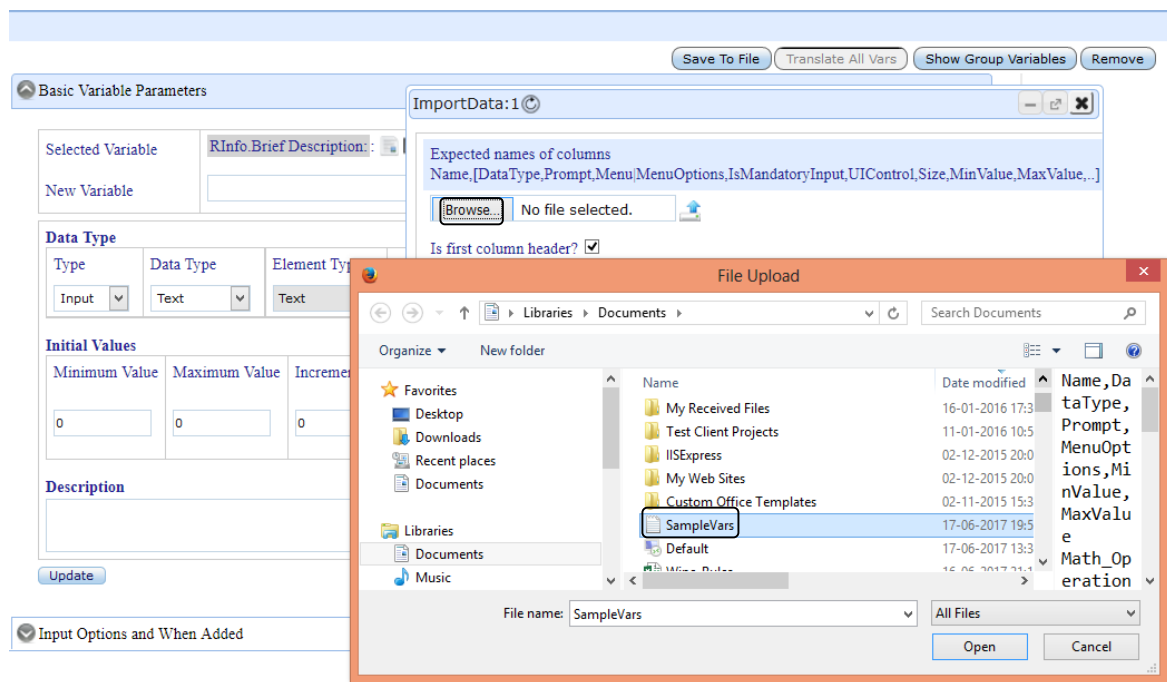


Figure 230: Text file selected

4. Click upload button.

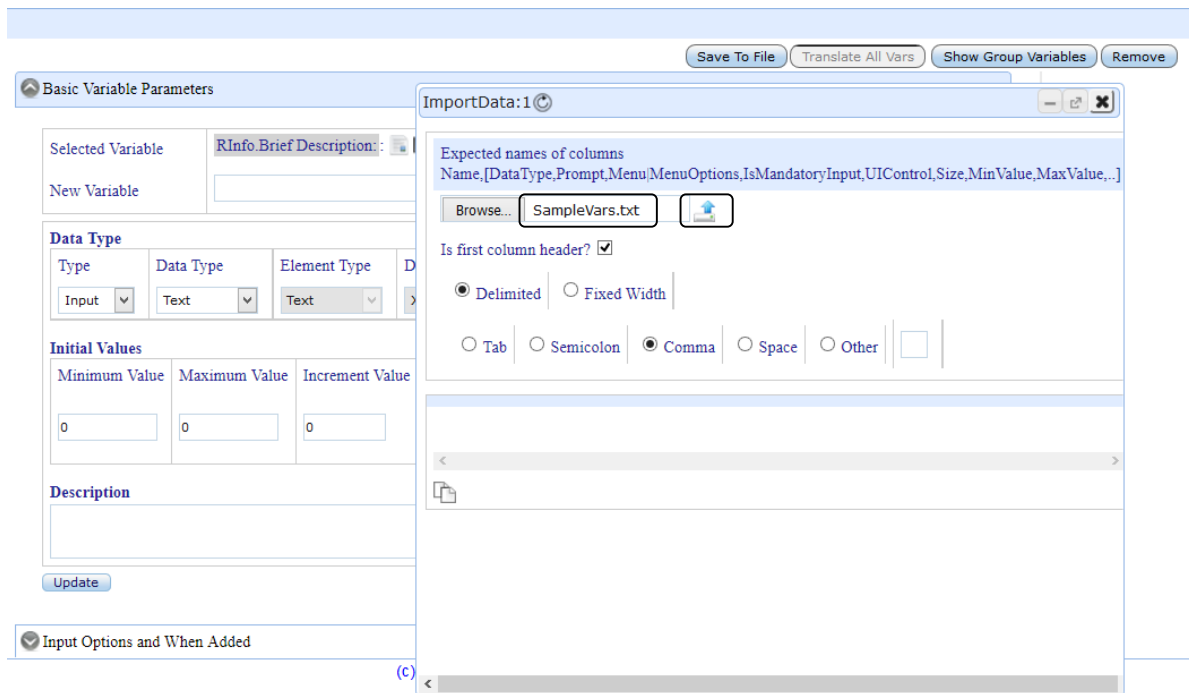


Figure 231: Text file selected

5. Variable details are shown in popup. After verifying details, click copy button.

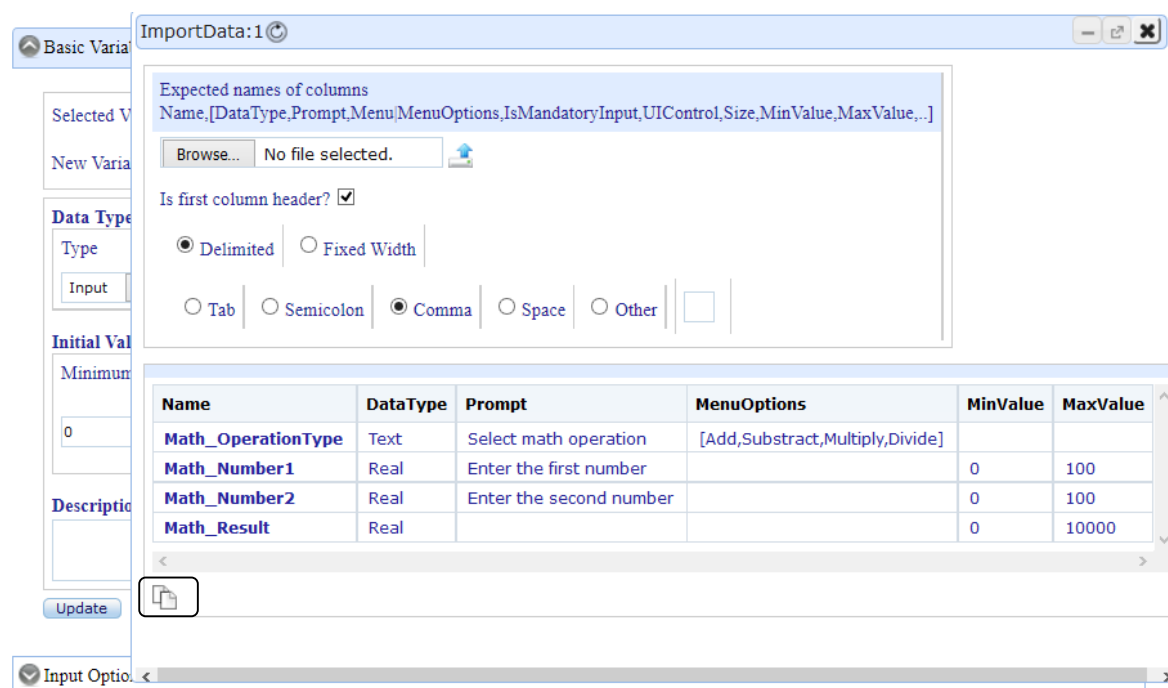


Figure 232: Text file data populated

6. Message is displayed: *Data is copied and ready for pasting*. Close the popup.

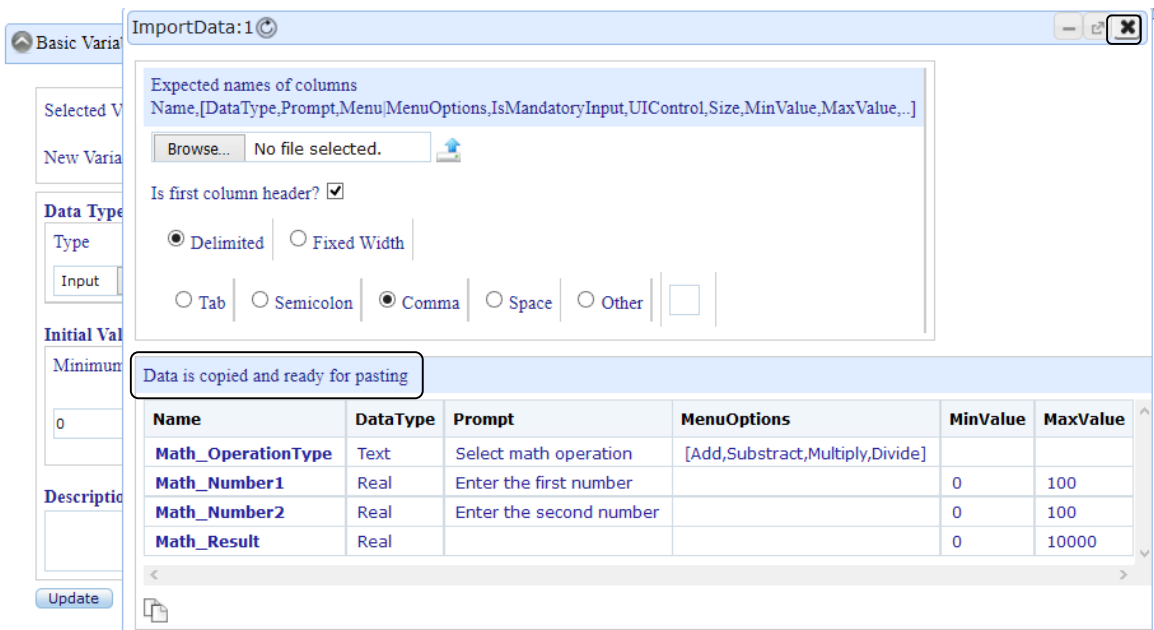


Figure 233: Variable details are copied

7. Click paste button. Variables are added in selected variable group.

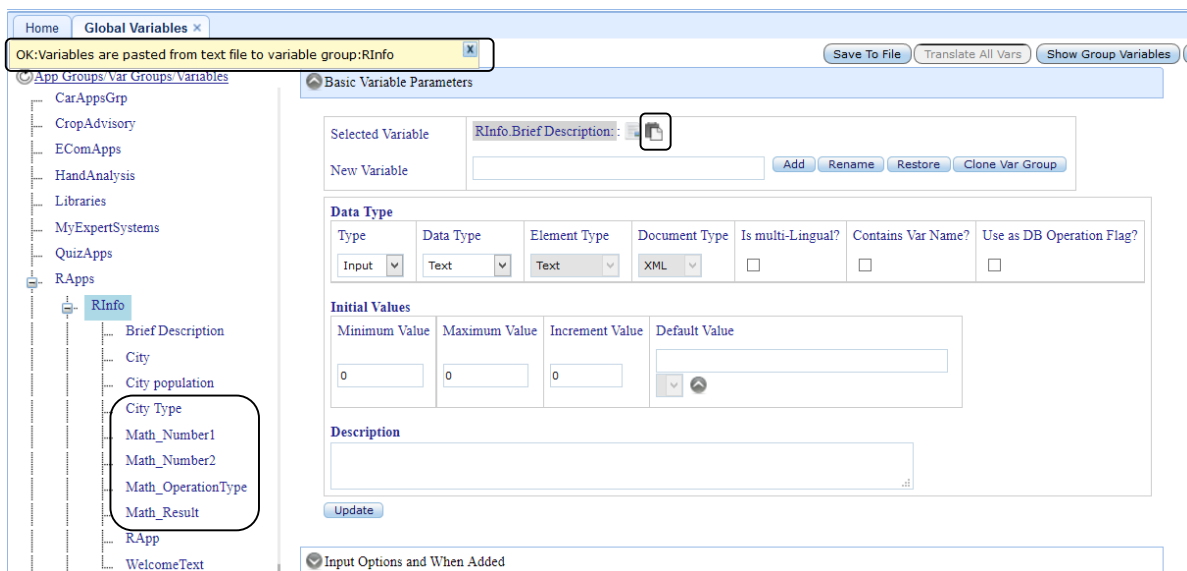


Figure 234: Variables added in variable group

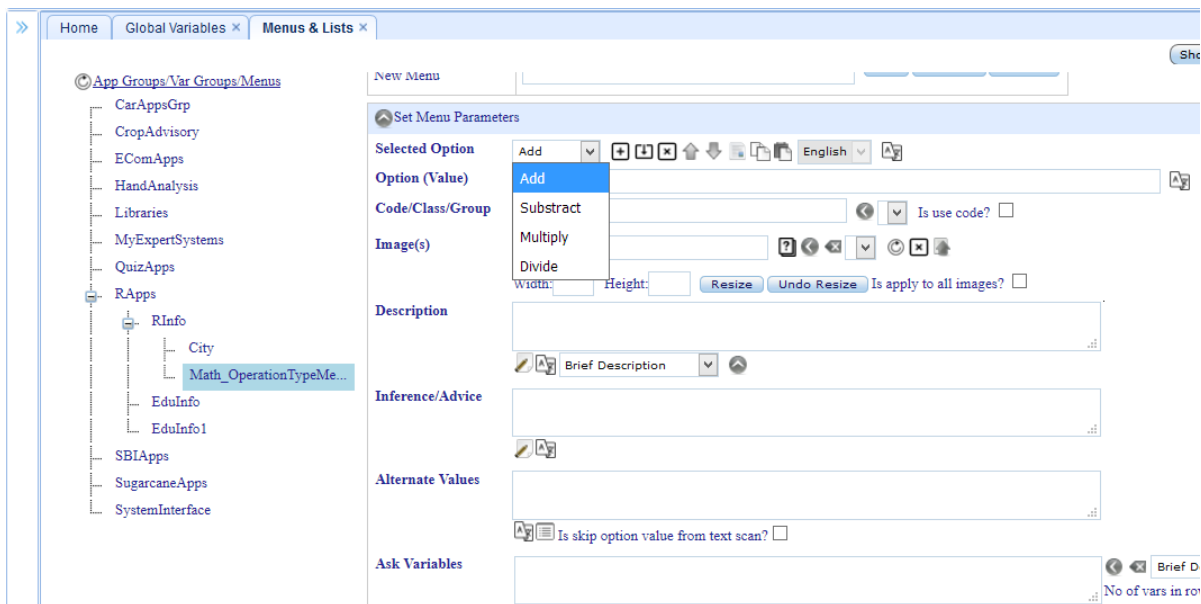


Figure 235: Menu created

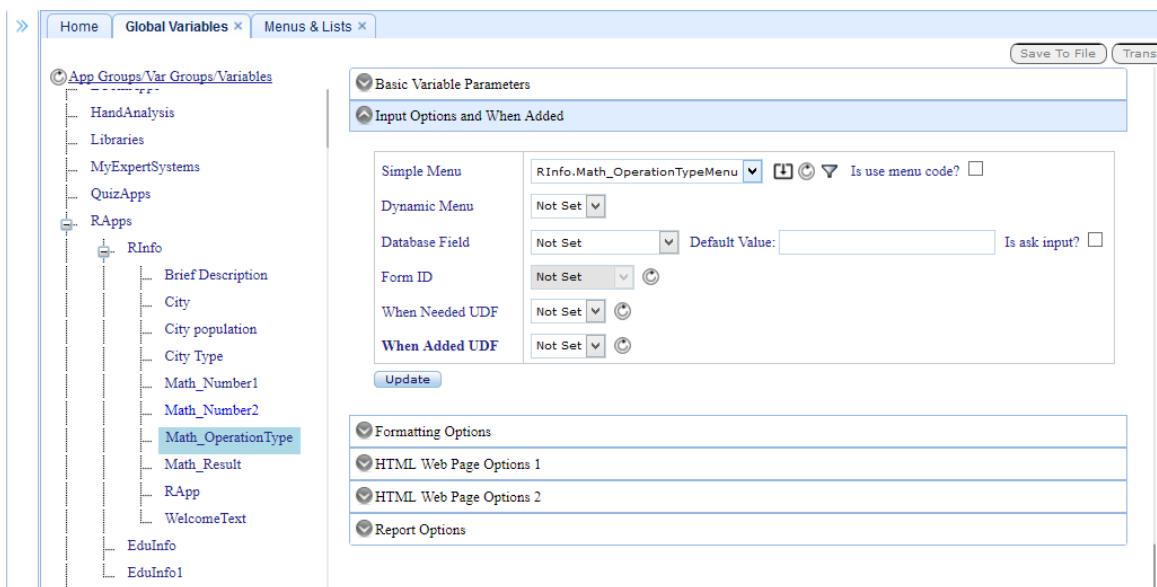


Figure 236: Menu is linked to variable

7. New features in variable interface

7.1 Using text boxes with radio box and check box controls

This feature is added HTML Web Page Options 1. Some apps need users to enter additional options that don't exist in predefined options (menu) using textboxes. Additional Text Boxes option can be used to add such options in checkbox and *radiobox* controls. Following figure shows two options are added to existing colour options to be entered by the end-user at run-time. Whenever end-user enters value in textboxes, the checkbox is automatically checked. Additional values are populated when this control is displayed. Figures 243 onwards show use of textbox in *radiobox* list.

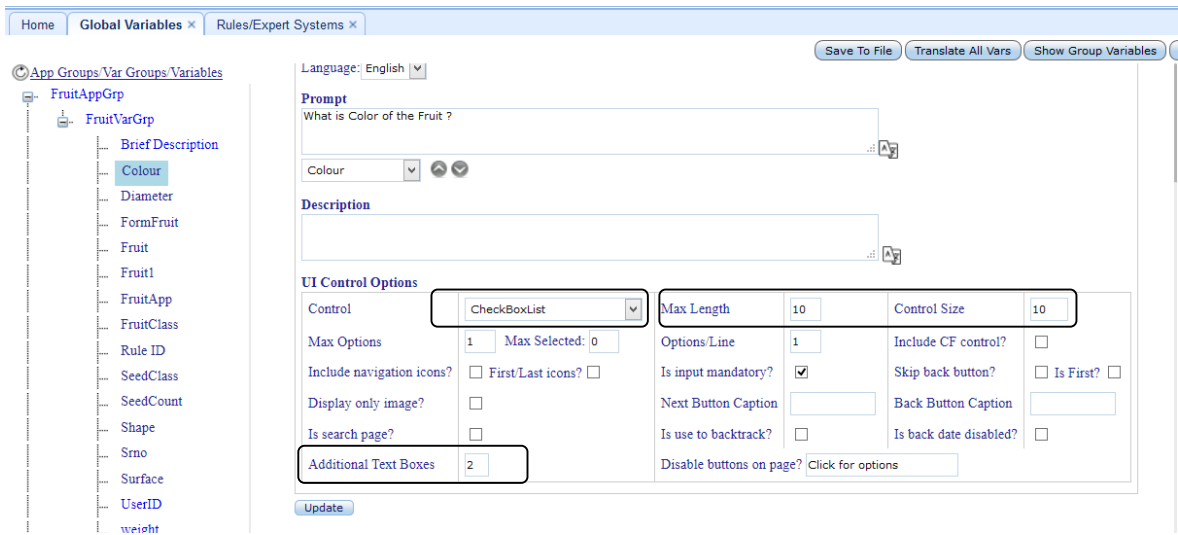


Figure 237: Using text box controls with checkbox control

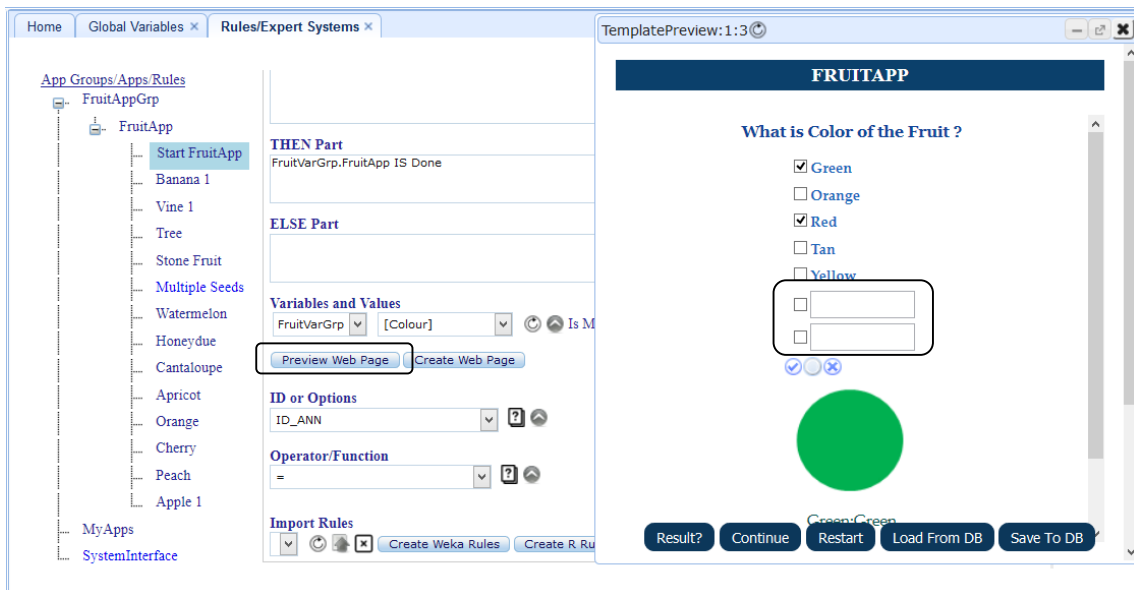


Figure 238: Previewing text box controls with checkbox control

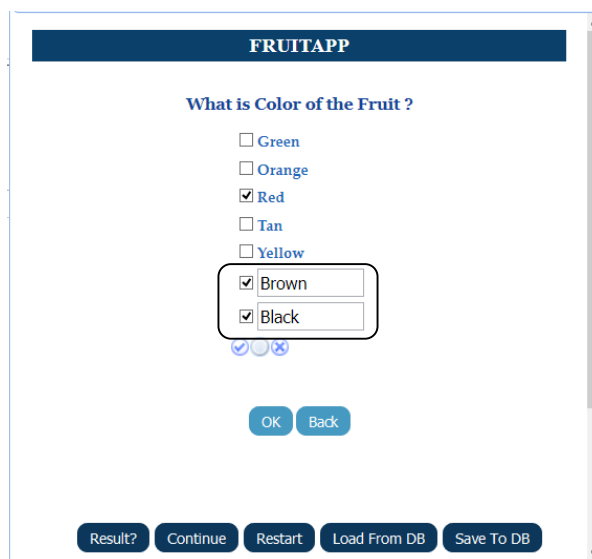


Figure 239: Running app, entering values in text boxes

FRUITAPP

ApplicationDirectory	FruitAppGrp
Colour	[Red,Brown,Black]

Figure 240: Values entered in textboxes are added to Colour compound variable

FRUITAPP

What is Color of the Fruit ?	<input type="radio"/> <input style="width: 100px;" type="text"/> <input type="checkbox"/> Green <input type="checkbox"/> Orange <input checked="" type="checkbox"/> Red <input type="checkbox"/> Tan <input type="checkbox"/> Yellow <input checked="" type="checkbox"/> <input style="width: 50px;" type="text"/> Brown <input checked="" type="checkbox"/> <input style="width: 50px;" type="text"/> Black
What is Diameter of the Fruit ?	<input checked="" type="radio"/> <=4 <input type="radio"/> >4
How many seeds ?	<input type="radio"/> Many <input checked="" type="radio"/> One
What is the surface of the Fruit ?	

Figure 241: Using textboxes in form


Home Global Variables x Rules/Expert Systems x Apps x Form Designer x

TemplatePreview: 1:11

FRUITAPP

What is shape of the Fruit ?

Long
 Oblong
 Round



Round

Figure 242: Using textboxes with radio box

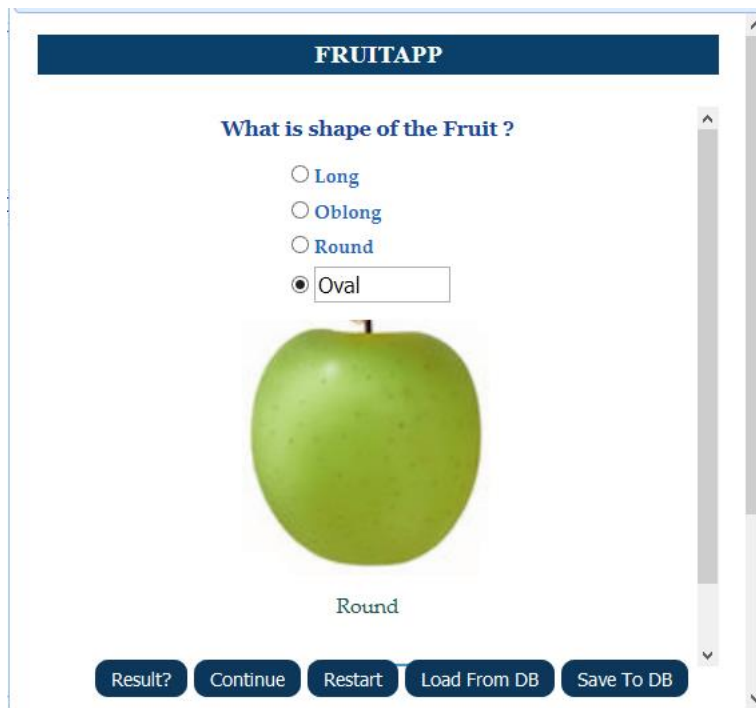


Figure 243: Using textboxes with radio box

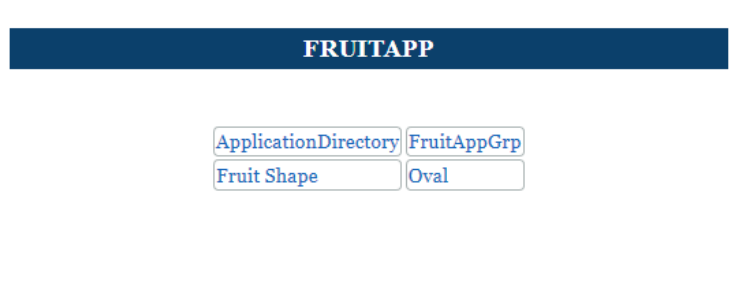


Figure 243: Textbox value is passed to the variable with radio box control

7.2 Disabling app main buttons

This feature is added HTML Web Page Options 1. It can be used to hide main buttons in app which are set in application generic template. By default, all main buttons in all web-pages set in application generic template are shown. Following figure show three buttons: Restart, Continue and Show Report (result) will be disabled at run-time. Figure 245 shows preview of web-page where three buttons are not seen (see figure 238 where all buttons are shown).

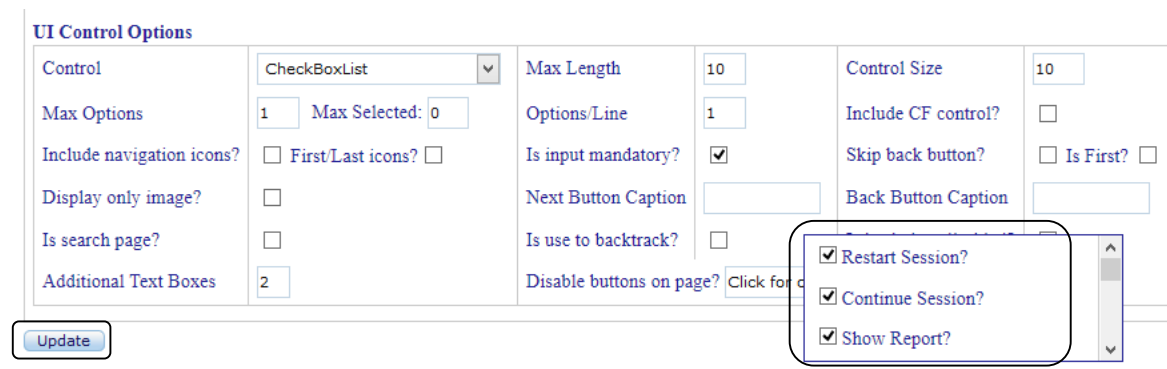


Figure 244: Disabling (not displaying) main buttons on web-page

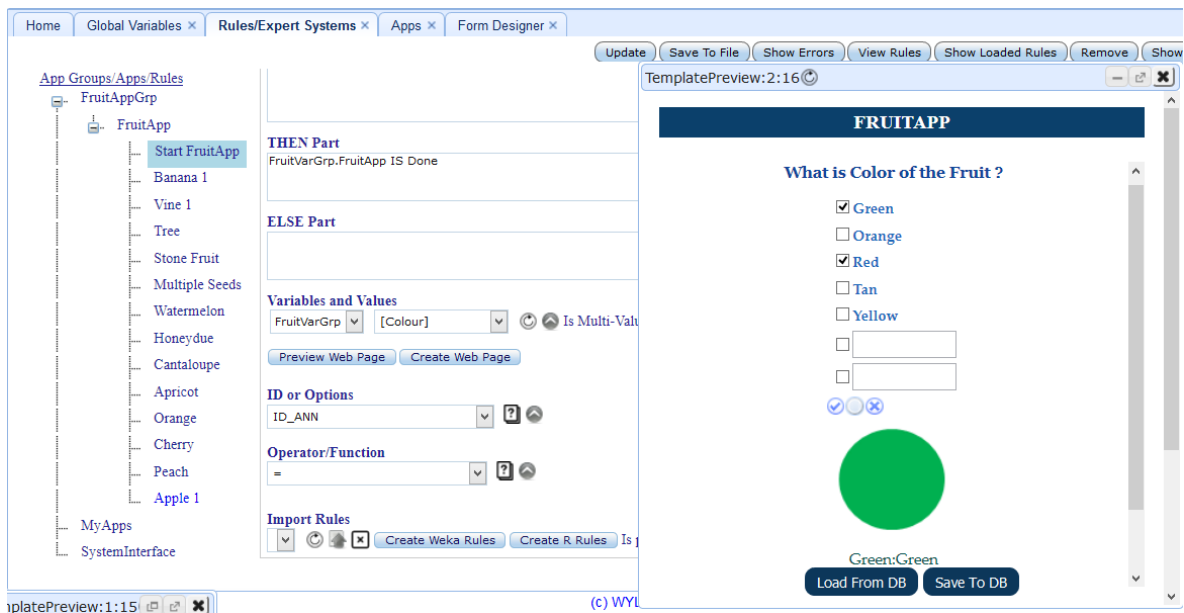


Figure 244: Previewing page with three buttons disabled (invisible).

7.3 Using Retain Value and Use Value Across Apps flags

This option is added in Basic Variable Parameters. Retain Value can be used when value assigned to any variable once is to be maintained till the current browser session ends, it can be reset using RESET_VAR or CLEAR function while ‘Is use value across app?’ option is used when value assigned to any variable by any of the applications in the project, is to be maintained across the applications and it can be reset using RESET_VAR or CLEAR by any application.

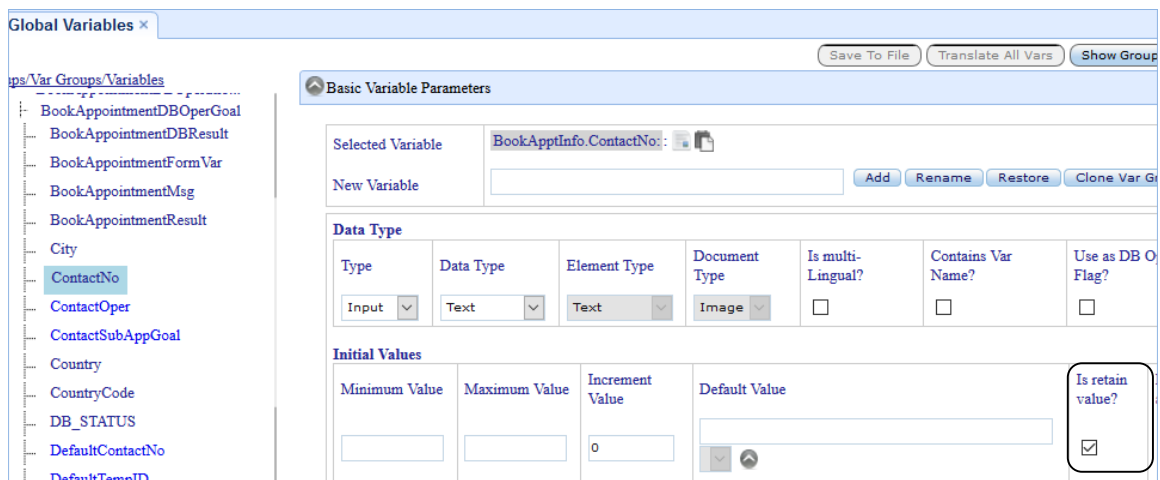


Figure 245: Check ‘Is retain value’ Option

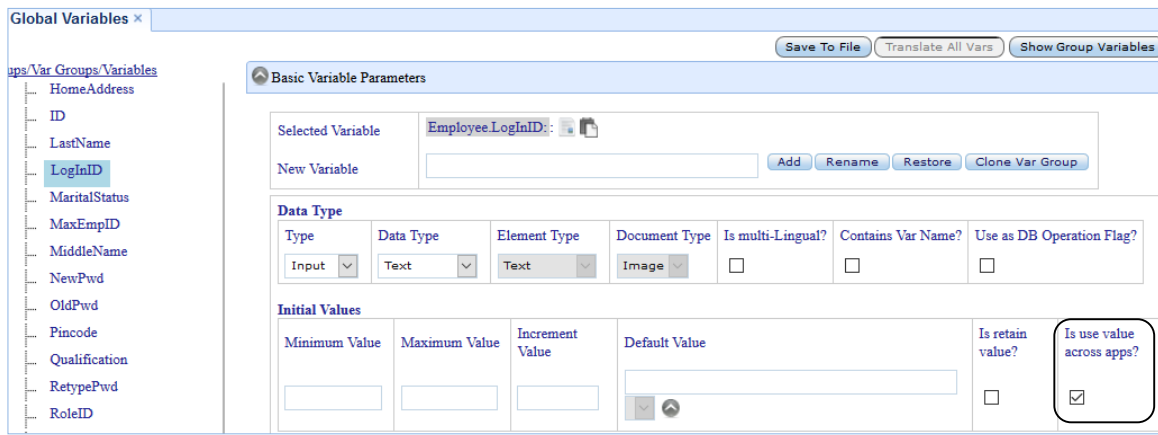


Figure 246: Check 'Is use Value across apps' Option

7.4 AutoComplete and ComboList for Dynamic Menu

This feature is added HTML Web Page Options 1-> UI Control Options -> Control.

1. To set AutoComplete control for a variable, go to *Main Menu -> Domain Vocabulary -> Global Variables*. By default, *Basic Variable Parameters* option is shown. Select the variable *State* and the selected variable gets displayed in *Selected Variable* field (*Employee.State*).
2. Select the required menu (*Employee.StateMenu*) from *Dynamic Menu* dropdown according to the selected variable. (How to create dynamic Menu is explained in *Dynamic Query Interface*)

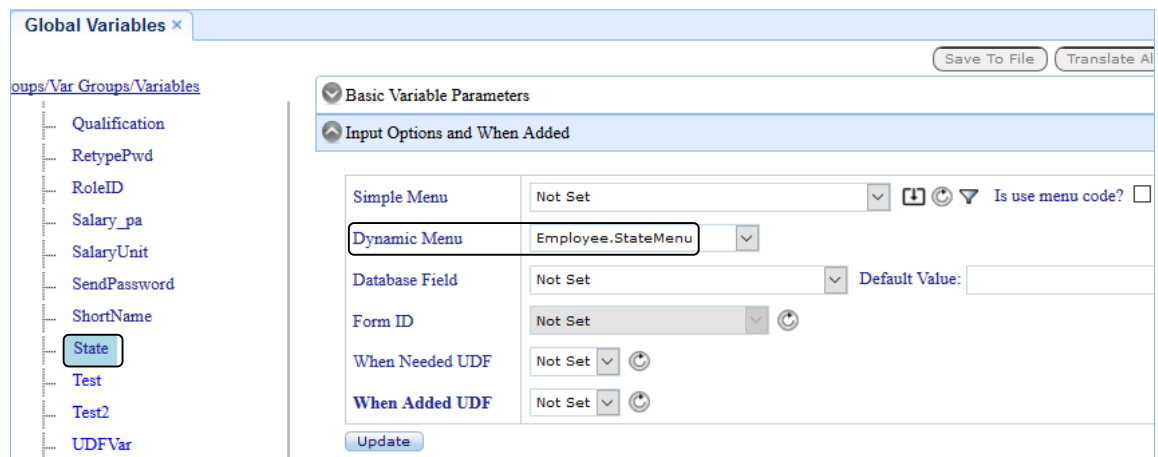


Figure 247: Set Dynamic Menu

3. Click *HTML Web Page Options 1* from the list of options. Select the *Control* (Example: *AutoComplete*) for the required variable from *UI Control Options-> Control* dropdown menu and to display the proper control size, enter the control size in *Control Size* Option.

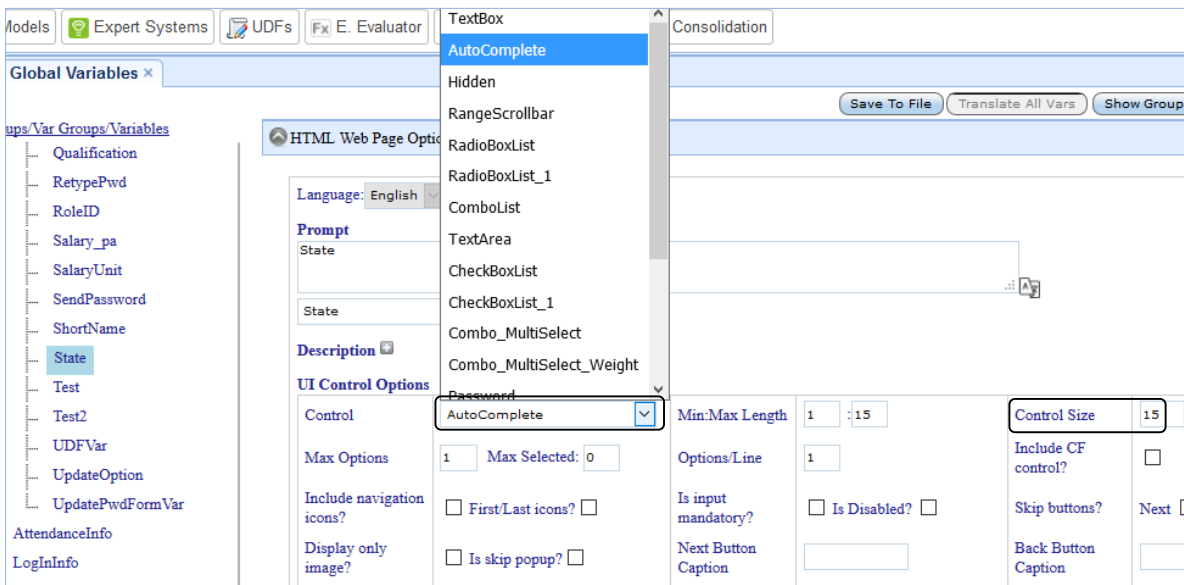


Figure 248: Select AutoComplete Control

4. To display the control on single page, ask the variable in Rules/Expert System Interface.

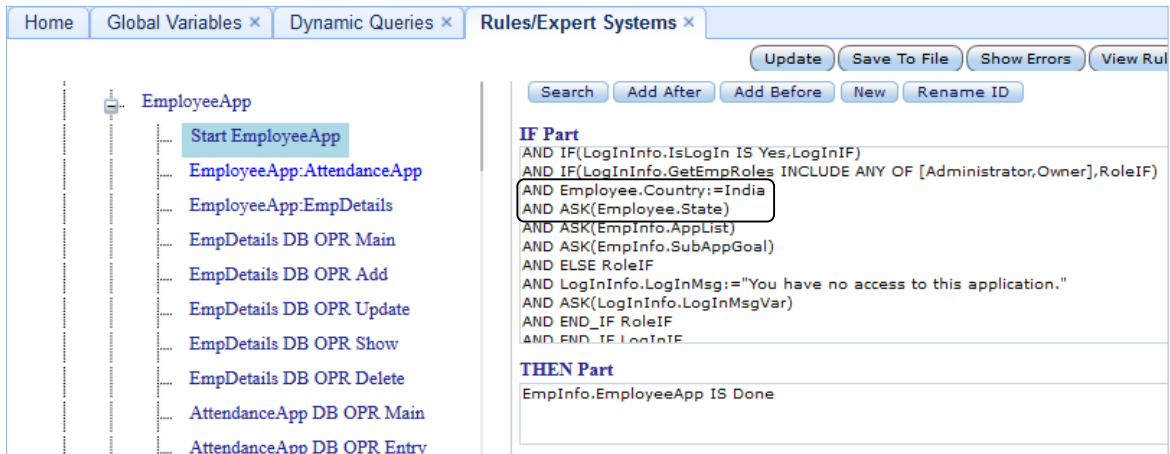


Figure 249: Ask Variable in Rules

5. To view the changes on web page, run the application. To run the application, go to Apps Interface.

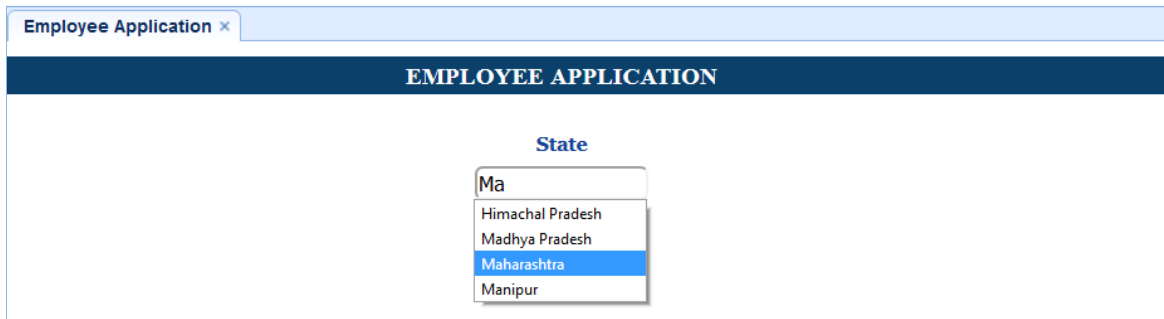


Figure 250: AutoComplete Control

The screenshot shows an 'Employee Application' form with the following sections:

- Qualification:** MSC
- Profile:** (Collapsed)
- Employee Roles:**
 - Frontdesk
 - Administrator
 - Owner
 - Doctor
 - Nurse
- Residency Details:**
 - Permanent Address:** Gurukrupa Society, Baner
 - Residential Address:** Sunshine Apt Malad
 - Country:** India
 - State:** Punjab (dropdown menu open with suggestions: Punjab, Manipur, Tripura)
 - City:** (dropdown menu open with suggestions: Punjab, Manipur, Tripura)
 - Pincode:** (empty)

Buttons: Next, Back

Figure 251: autoComplete Control on Form

Note: To set Combo-List Control, follow the same steps as explained above for autoComplete Control and additionally check Is skip popup option.

The screenshot shows the 'HTML Web Page Options 1' configuration window with the following settings:

- Language:** English
- Prompt:** City
- Description:** (empty)
- UI Control Options:**
 - Control:** ComboList
 - Min:Max Length:** 1 - 15
 - Control Size:** 15
 - Max Options:** 1
 - Max Selected:** 0
 - Options/Line:** 1
 - Include navigation icons?:** First/Last icons?
 - Is input mandatory?:** Is Disabled?
 - Display only image?:** **Is skip popup?:**
 - Is search page?:** Is use to backtrack?
 - Next Button Caption:** (empty)
 - Is oninput event?:**
 - Include CF control?:**
 - Skip buttons?:** Next
 - Back Button Caption:** (empty)
 - Is date disabled?:** Back

Figure 252: Set ComboList Control

- On selection of state, dynamic city list is populated in the dropdown control as shown below figure.

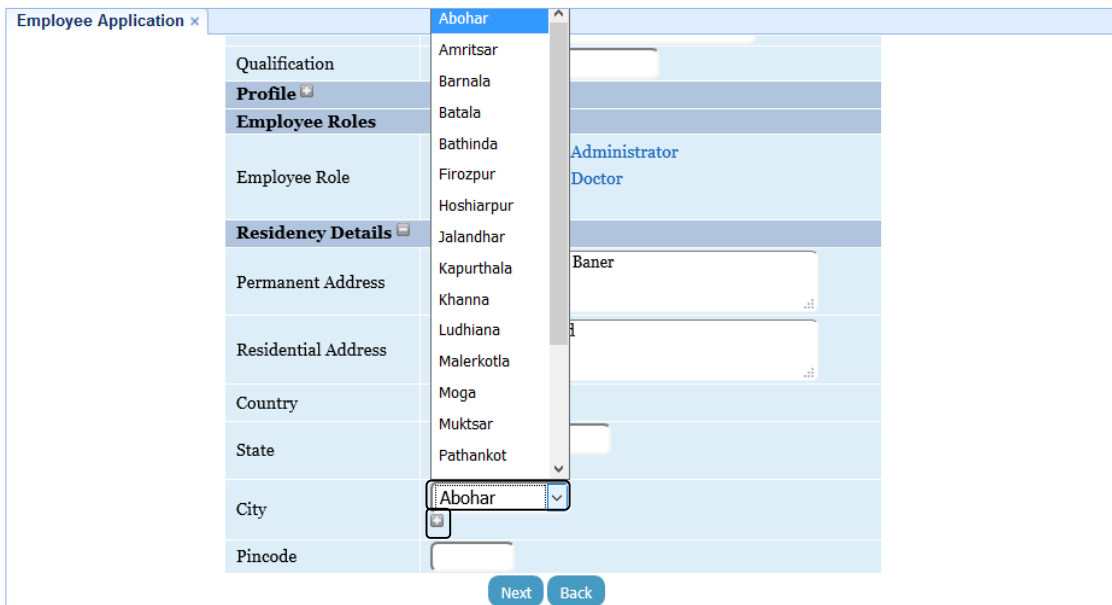





Figure 253: ComboList Control

- To add a new city in the dropdown list, click the button  and textbox is opened. Enter the city in the textbox, click the button  and a message is displayed as shown below. To close the textbox, click the button . Refer to dynamic query documentation about how to configure dynamic query to add inputs at run-time.

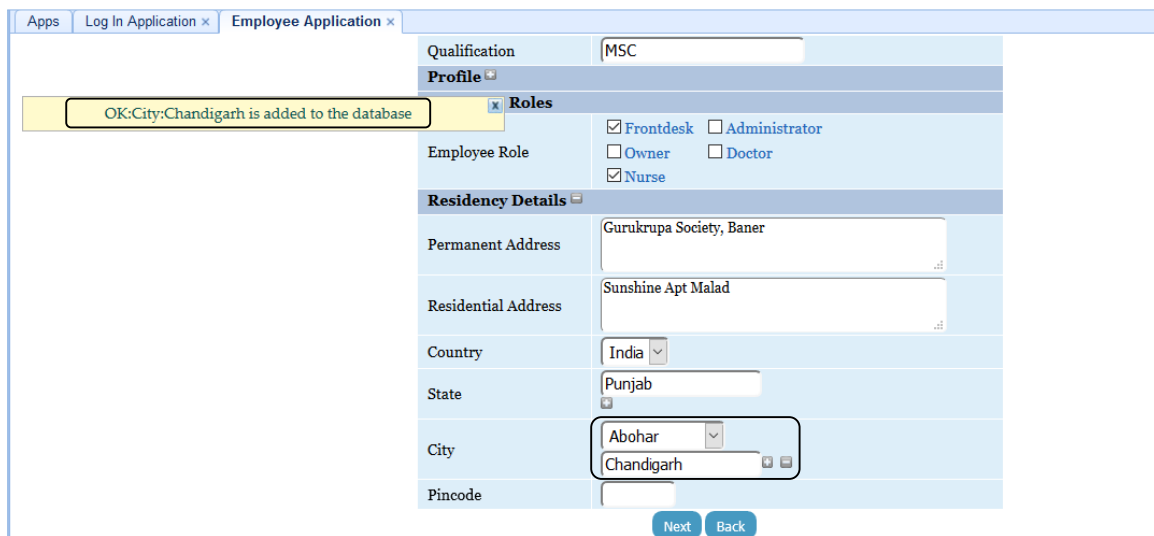


Figure 254: ComboList Control

7.4 Other UI Control Options

7.4.1 Validation Options

This feature is added in HTML Web Page Options 1-> UI Control Options-> Validation Options. It is used to validate any type of text in textbox control.

- To set the validation for the selected variable, select the variable and set the control as textbox. Check the options which are to be set for the variable. (example: check *Is email ID?* option for email validation.)

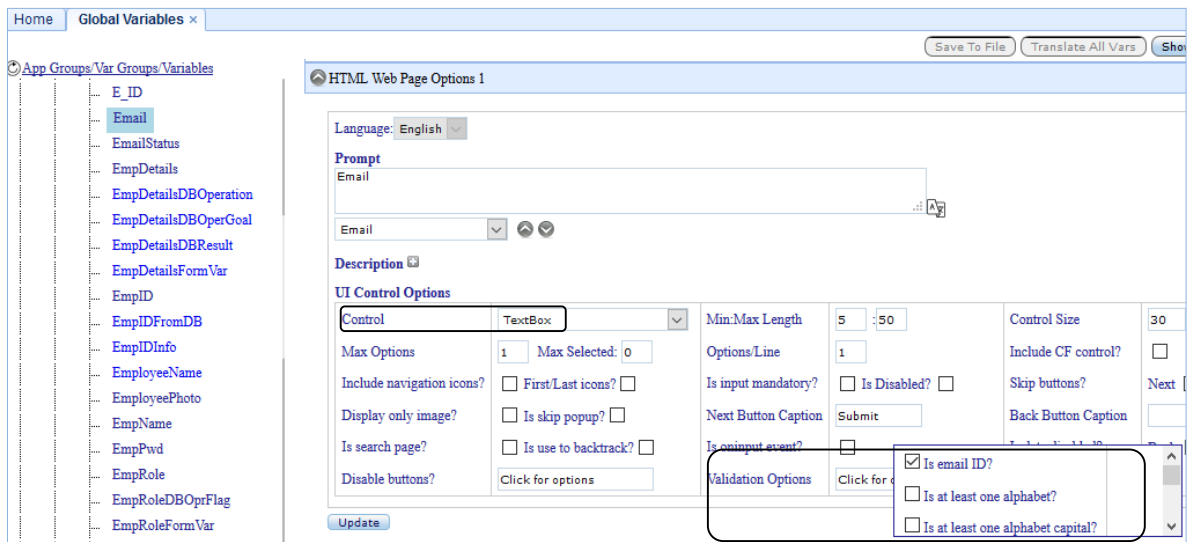


Figure 255: Set Validation Options

2. The option *Is email ID?* is used to validate whether the entered email ID is valid or not, if it is invalid then an error message is displayed as shown below.

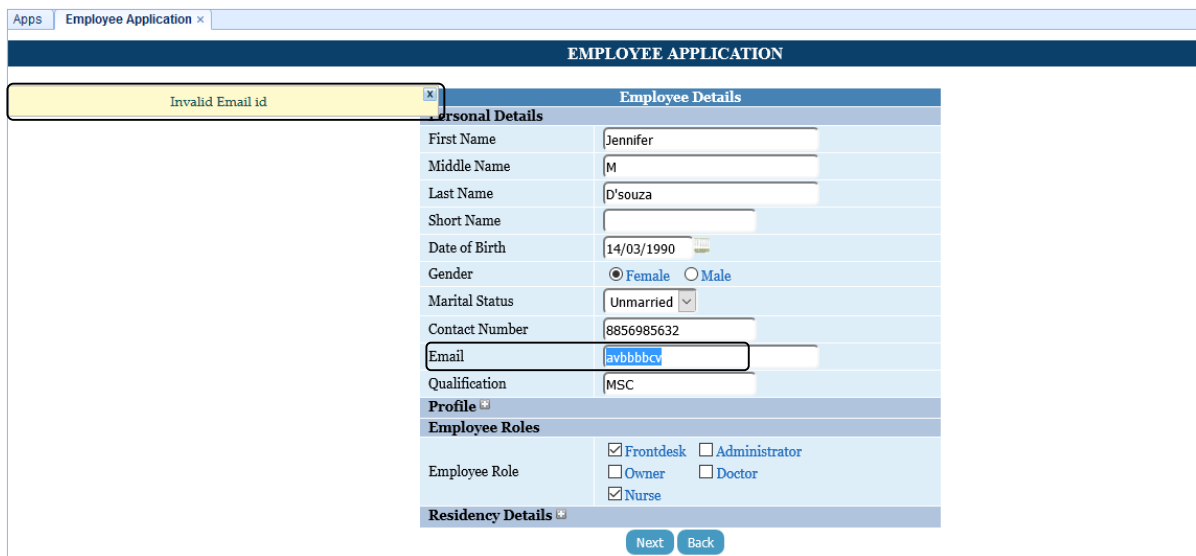


Figure 256: Validation Options

The screenshot shows an 'Employee Application' form. The 'Email' field is highlighted with a red border and contains the text 'jennifer@gmail.com'. Other fields include First Name (Jennifer), Middle Name (M), Last Name (D'souza), Date of Birth (14/03/1990), Gender (Female), Marital Status (Unmarried), Contact Number (8856985632), and Qualification (MSC). There are 'Next' and 'Back' buttons at the bottom.

Figure 257: Correct Email Format

7.4.2 Minimum and Maximum Length Option

Minimum and Maximum Length option is used to set the length of input text within the control. It is applicable for textbox and textarea controls.

- To set the min and max value for any input option, select the variable and enter the min and max length in *Min:Max Length* option. (e.g. Min value=5: Max Value=50)

The screenshot shows the 'Global Variables' editor. The 'Email' variable is selected in the left-hand tree. The right-hand pane shows the 'HTML Web Page Options 1' configuration for the 'Email' variable. The 'Min:Max Length' option is set to '5 : 50'. Other options include 'Control' (TextBox), 'Max Options' (1), 'Include navigation icons?' (unchecked), 'Display only image?' (unchecked), 'Is search page?' (unchecked), 'Disable buttons?' (Click for options), 'Options/Line' (1), 'Is input mandatory?' (unchecked), 'Next Button Caption' (Submit), 'Is oninput event?' (unchecked), and 'Validation Options' (Click for options). There is an 'Update' button at the bottom.

Figure 258: Set Min:Max Length Option

7.4.3 Is Disable? Option

It is used to display the control in disabled mode. It is not applicable for *Radiobox*, *Checkbox* and *ComboList* controls. Default value should ideally be set when control is disabled unless it is provided by other means such as from report, dynamic menu etc.

- To set the option, select the variable and set the default value, click the HTML Web Page Option 1 option from the list then check the *Is Disable?* Option from the *UI Control Option*.

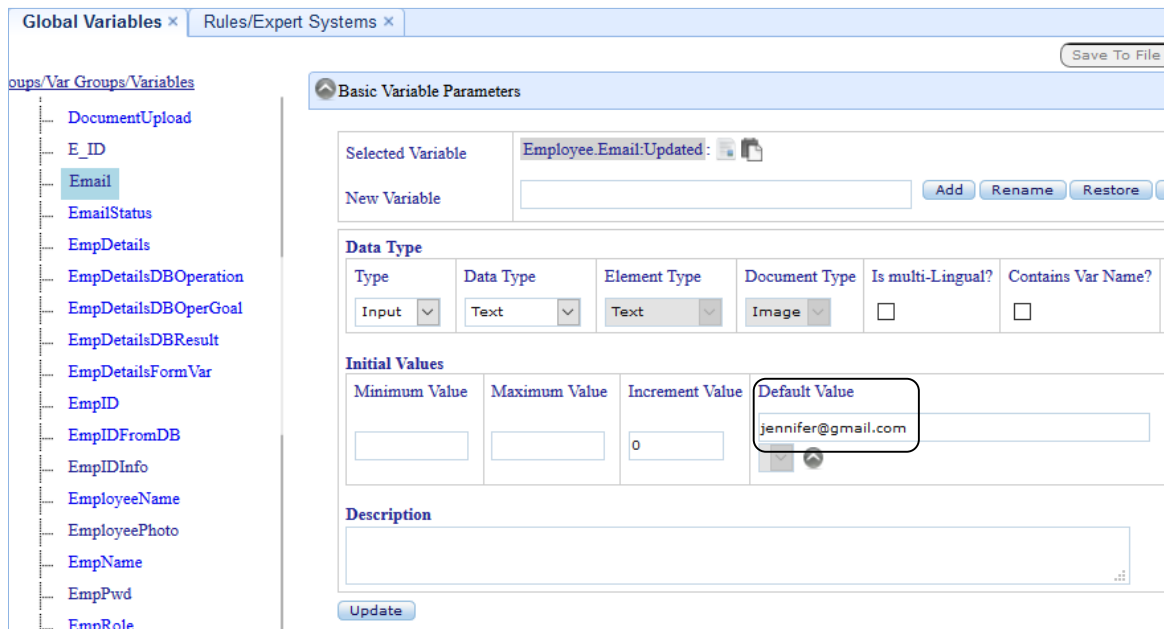


Figure 259: Set Default value

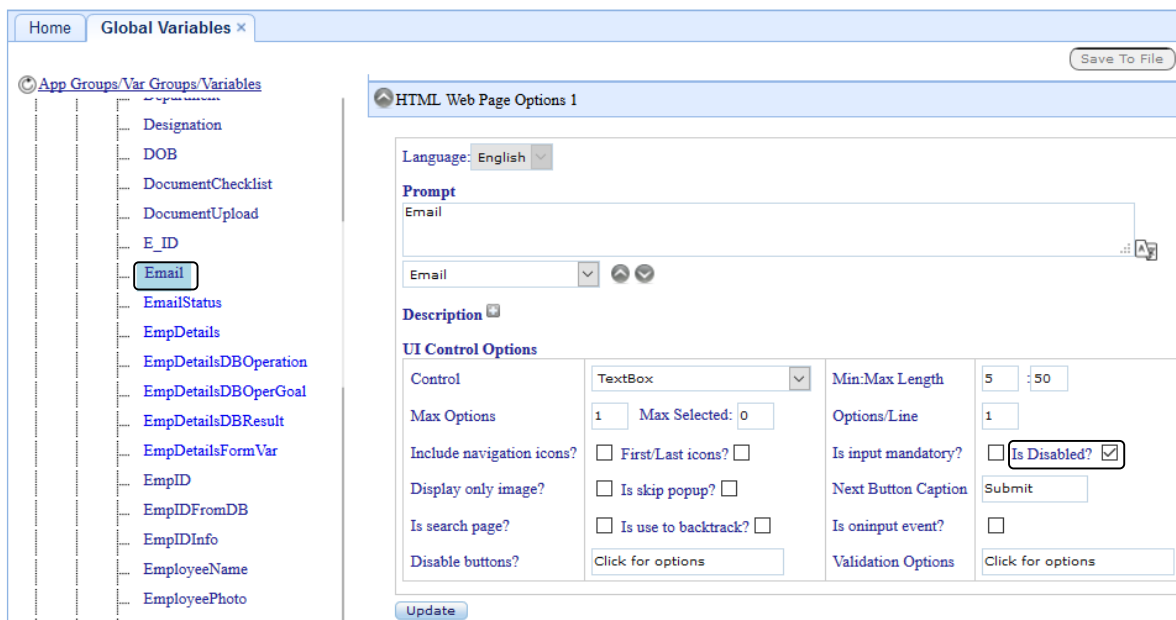


Figure 260: Set 'Is Disable' Option

2. If the variable is not asked in rules, then that variable first needs to be asked in rules in *Rules/Expert Systems* interface as shown in screen shot below. To update the rule, click *Update* and create the web page.
3. To view the changes on web page, run the application.

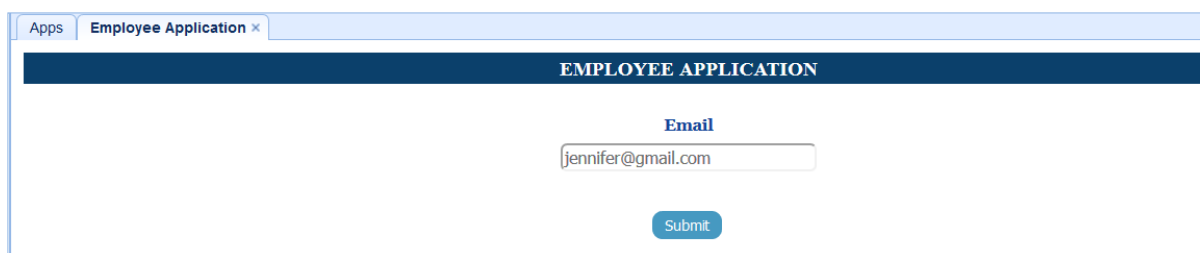


Figure 261: Disabling Control