Kraig Massee

Lab 4

CIS 133N

**Step 1.**

**Purpose:** To allow the user to view different State information for Oregon, California, and Washington. The user can check a box to enter a phone number. Also check a box to change the background color of the “Choose Color” area. Clicking on the button labeled “input box” will prompt the user if they plan on visiting one of these States. Clear button will clear the State information and uncheck the check boxes, clearing and removing them from the form. The user can select the “input box” and clear button from the “Utilities” section on the menu bar. They can select the States information from the “States” menu bar. Going to the “File” portion of the menu bar will allow the user to exit the program and be prompted whether they would like to exit.

**Output:**

Oregon, Washington, and California Radio Buttons will show the State information on the right side of the form.

Input Box will prompt the user if they plan to visit the State and display a message box

Phone? Check box will allow the user to enter a phone number

Change color of screen check box will allow the user to enter 5 colors into the text box or reset the color to the original by clicking the background color button.

The menu bar has the Radio buttons listed causing the same function of clicking the radio buttons. It has the Utilities area to function as the input box button. The menu bar has a File area where the user can exit the program.

**Input:**

Click on menu bar to select State, or use the function of the Input box button or clear the form and exit

Click on Clear all to clear the form of outputted data

Input box enter yes or no.

Phone? Enter 10 digit phone number

Background color enter red, green, or blue, purple, pink, or reset in text box.

**Process:**

Menu bar user can choose to exit using mouse click. A message box will prompt them if they want to exit or cancel exit.

A drop-down menu on States will call the functions to show State information.

Utilities calls the button press function for input box or the clear button function for clear

Radio buttons will load a picture box and labels for State information.

Input box will prompt the user through an input form.

Clear all will clears the outputted information by using the Clear, checked, and visible function.

Phone check box will display a MaskedTextBox.

Choose color will set backcolor values to the color options the user types in.

**Step 2.**

My GUI design is in “Kraig Massee Lab 4 Design.vsdx” included in the Kraig Massee Lab 4 folder.

**Step 3.**

|  |  |  |
| --- | --- | --- |
| **Name** | **Description** | **Text** |
| stateForm | A form that serves as a window to hold the other controls | "Favorite States" |
| menuStrip | Contains the File, States, and Utilities drop down menus | “File” “States” “Utilities” |  |  | "" |
| groupBoxRadioButtons | Contains the Radio Buttons | “States” |  |  |  |
| radioButtonOregon | Displays Oregon State information when clicked | “Oregon” |  |  |  |
| radioButtonWashington | Displays Washington State information when clicked | “Washington” |  |  |  |
| radioButtonCalifornia | Displays California State information when clicked | “California” |  |  |  |
| groupBoxThreeButtons | Contains “Input Box” “Clear” and “eXit” | “Your Options” |  |  |  |
| inputBoxButton | Displays message box asking if the user wants to visit any of these States. | “Input Box” |  |  |  |
| clearButton | Clears the forms outputted information | “Clear” |  |  |  |
| exitButton | Displays message box to exit the program | “eXit” |  |  |  |
| phoneCheckBox | Check box to display the masked text box | “Phone?” |  |  |  |
| changeColorCheckBox | Check box to display the background color change group box | “Click to change the color of the screen” |  |  |  |
| changeColorGroupBox | Contains the background color change options | “Choose Color” |  |  |  |
| colorDescriptionLabel | Contains information for which colors are able to be changed | “Green, Blue, Red, Purple, Pink, or Reset” |  |  |  |
| backgroundColorButton | Performs the background color change function of the group box | “Background” |  |  |  |
| backgroundColorTextBox | Area where the user enters which color they want to change the background to | “” |  |  |  |
| stateLabel | State information label | “State” |  |  |  |
| statePictureBox | Contains the picture box pertaining to the specific State | “” |  |  |  |
| stateInformationGroupBox | Contains the information about the State the user has selected with the radio buttons | “State Information” |  |  |  |
| mainStateLabel | Set to the specific State based on which radio button is pressed. | “” |  |  |  |
| populationNoChangeLabel | Population heading | “Population |  |  |  |
| populationInformationLabel | Set to the specific State’s population information based on which radio button is pressed | “” |  |  |  |
| climateNoChangeLabel | Climate heading | “Climate” |  |  |  |
| climateInformationLabel | Set to the specific State’s climate information based on which radio button is pressed | “” |  |  |  |
| nicknameNoChangeLabel | Nickname heading | “Nickname |  |  |  |
| nickNameInformationLabel | Set to the specific State’s nickname information based on which radio button is pressed |  |  |  |  |
| toolTipControl | Contains ToolTip Control | “” |  |  |  |

**Step 4.**

|  |  |
| --- | --- |
| **Method** | **Description** |
|  |  |
| stateForm() | Sets phoneNumberMaskTextBox and changeColorGroupBox visibility to false. Initialize the form |
|  |  |
| phoneCheckBox\_CheckedChanged | If the check box is clicked on or off changes phoneNumberMaskTextBox to visible or not visible |
| changeColorCheckBox\_CheckedChanged | If the check box is clicked on or off changes changeColorCheckBox to visible or not visible |
| backgroundColorButton\_Click | Changes the changeColorGroupBox background color based on what color the user puts in the backgroundColorTextBox after clicking on the backgroundColorButton |
|  |  |
| inputBoxButton\_Click | Declares inputResponse and sets it to null. Prompts user if they want to visit any of these states through input box. Handles exception based on “Yes”, “No” valid options |
| ToolTip GetControlToolTip | Creates a variable to store tool tip information and allows the programmer to assign tool tips throughout the code |
| radioButtonOregon\_CheckedChanged | Sets statePictureBox and stateInformationGroupBox visibility to true. Loads respective .jpg into statePictureBox. Sets tt tool tip to respective State. Sets all labels to respective state |
| radioButtonWashington\_CheckedChanged | Sets statePictureBox and stateInformationGroupBox visibility to true. Loads respective .jpg into statePictureBox. Sets tt tool tip to respective State. Sets all labels to respective state |
| radioButtonCalifornia\_CheckedChanged | Sets statePictureBox and stateInformationGroupBox visibility to true. Loads respective .jpg into statePictureBox. Sets tt tool tip to respective State. Sets all labels to respective state |
| clearButton\_Click | Unchecks radio buttons. Sets the group boxes and masked text box to not visible. Clears the form data entered by the user. Sets changeColorGroupBox background to default |
| exitButton\_Click | Displays message box prompting the user if they want to exit the program. Gives option to cancel the exit. Message box displays their choice. If OK is chosen program is exited |
| eXitToolStripMenuItem\_Click | Menu bar option performs exit button click |
|  |  |
| oregonToolStripMenuItem\_Click | Menu bar option performs Oregon radio button click |
|  |  |
| washingtonToolStripMenuItem\_Click | Menu bar option performs Washington radio button click |
|  |  |
| californiaToolStripMenuItem\_Click | Menu bar option performs California radio button click |
|  |  |
| inputBoxToolStripMenuItem\_Click | Menu bar option performs input box button click |
|  |  |
| clearToolStripMenuItem\_Click | Menu bar option performs clear button click |
|  |  |