**Step 1. Clearly define what the application will do.**

**Purpose**: A program that allows users to enter information about employees into a list view while limiting what kind of characters they can enter per value.

**Output:** User input displaying into a table list view.

**Input:** Inputting text into 3 different textbox’s.

**Process**: When a user enters text into a textbox, the textbox will limit what characters they can enter. When a button is clicked, that information will then be displayed in the list view.

**Step 2. Design the GUI**

dataEntryLabel

dataEntryListView

enterNumberLabel

enterNumberTextBox

enterFirstNameLabel

enterFirstNameTextBox

enterLastNameLabel

exitButton

clearButton

showDataButton

enterLastNameTextBox

**Step 3 Make a list of the controls needed.**

**Define the values of each controls relevant properties**

|  |  |  |
| --- | --- | --- |
| **Name** | **Description** | **Text** |
| enterNumberLabel | Tells user to enter the employees id number. | “Enter employee number” |
| enterNumberTextBox | Allows user to enter id number. |  |
| enterFirstNameLabel | Tells user to enter the employees first name with only lower case characters. | “Enter first name (All lower case)” |
| enterFirstNameTextBox | Allows user to enter first name. |  |
| enterLastNameLabel | Tells user to enter the employees with only upper case characters. | “Enter last name (All upper case)” |
| enterLastNameTextBox | Allows user to enter the last name. |  |
| dataValidationForm | A form that holds all objects. | “Data Entry” |
| dataEntryListView | Displays all the users input from the textbox after a button is clicked. |  |
| showDataButton | Adds textbox entries to the list view. | “Show Data” |
| clearButton | Clears text boxes, list view, makes list view invisible. | “Clear” |
| dataEntryLabel | Displays title. | “Data Validation” |
| exitButton | Exits the program | “Exit” |
| dataErrorProvider | An icon that will appear when user makes an error. |  |
| empFirstNameColumn | Column for employees first name. | Emp 1st Name |
| empLastNameColumn | Column for employees last name | Emp Last Name |
| empNumberColumn | Column for inputs for the employees numbers | Emp # |
|  |  |  |
|  |  |  |
|  |  |  |

**Step 4 Make a list of the methods needed for each control**

|  |  |
| --- | --- |
| **Method** | **Description** |
| enterNumberTextBox\_KeyPress | When a char is entered, it will only accept numbers otherwise an error will show up. |
| enterFirstNameTextBox\_KeyPress | When a char is entered, it will only accept lower case otherwise an error will show up. |
| enterLastNameTextBox\_KeyPress | When a char is entered, it will only accept upper case otherwise an error provider will show up. |
| exitButton\_Click | Exits the program when clicked. |
| clearButton\_Click | Clears all entries in the list view and text box’s, and make list view invisible when clicked. |
| showDataButton\_Click | When clicked, takes inputs from text box and adds them to the list view. |