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CIS133N

Lab 1 Design

**Challenge:**

Program needs to have 5 picture boxes, each of them having a label. When the label is clicked on, it will show the corresponding PictureBox. Label for program title at top is also needed. 2 buttons, one makes all picture boxes invisible, one will exit after displaying a dialogue box. Said dialogue box will notify user that program will terminate.

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

**Purpose**:

* Show each picture box (one at a time) when corresponding label is clicked.
* Make pictureboxes picture invisible boxes when clearButton pressed.

**Output:**

* Pictures based on what user clicked.
* Tooltips when user hovers over labels, buttons, or visible picture boxes.

**Input:**

* Mouse clicks from user.
* Hotkey for Clear <Alt+C>
* Hotkey for eXit <Alt+X>

**Process**:

On numXLabel\_Click:

set all PictureBox.Visible = false;

set numXPictureBox.Visible = true;

On clearButton\_Click:

set all PictureBox.Visible = false;

**Step 2. Design the GUI**

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

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

|  |  |  |
| --- | --- | --- |
| **Name** | **Description** | **Text** |
| lab1KevinRose | Form holding all the other controls | “Picture Box Program” |
| firstPictureBox | PictureBox with a picture of number 1 | “” |
| secondPictureBox | PictureBox with a picture of number 2 | “” |
| thirdPictureBox | PictureBox with a picture of number 3 | “” |
| fourthPictureBox | PictureBox with a picture of number 4 | “” |
| fifthPictureBox | PictureBox with a picture of number 5 | “” |
| titleLabel | Large red title | “Picture Boxes!” |
| firstPictureLabel | Dsiplays firstPictureBox after firstPictureLabel is clicked | "Press Me!" |
| secondPictureLabel | Dsiplays secondPictureBox after secondPictureLabel is clicked | "Press Me!" |
| thirdPictureLabel | Dsiplays thirdPictureBox after thirdPictureLabel is clicked | "Press Me!" |
| fourthPictureLabel | Dsiplays fourthPictureBox after fourthPictureLabel is clicked | "Press Me!" |
| fifthPictureLabel | Dsiplays fifthPictureBox after fifthPictureLabel is clicked | "Press Me!" |
| clearButton | On click, clears screen | "Clear" |
| exitButton | On click, displays a dialoge box telling user program will exit, form then closes. | “eXit” |
| globalToolTip | Displays a small description for each control. | “” |

**Note:** I give the form a name (the book doesn’t). **I require that you name forms.**

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

|  |  |
| --- | --- |
| **Method** | **Description** |
| clearPictureBoxes | Sets each PictureBox.visible = false for pictureboxes 1-5 |
| clearButton\_Click | Calls clearPictureBoxes |
| exitButton\_Click | Shows dialogue box saying “This will terminate the program”;  Close() |
| firstPictureLabel\_Click | Call clearPictureBoxes;  Sets firstPictureBox.Visible = true; |
| secondPictureLabel\_Click | Call clearPictureBoxes;  Set secondPictureBox.Visible = true; |
| thirdPictureLabel\_Click | Call clearPictureBoxes;  Set thirdPictureBox.Visible = true; |
| fourthPictureLabel\_Click | Call clearPictureBoxes;  Set fourthPictureBox.Visible = true; |
| fifthPictureLabel\_Click | Call clearPictureBoxes;  Set fifthPictureBox.Visible = true; |