

Instructions for Lab 2

CIS 133N
Mike Mostafavi

This is an individual program.

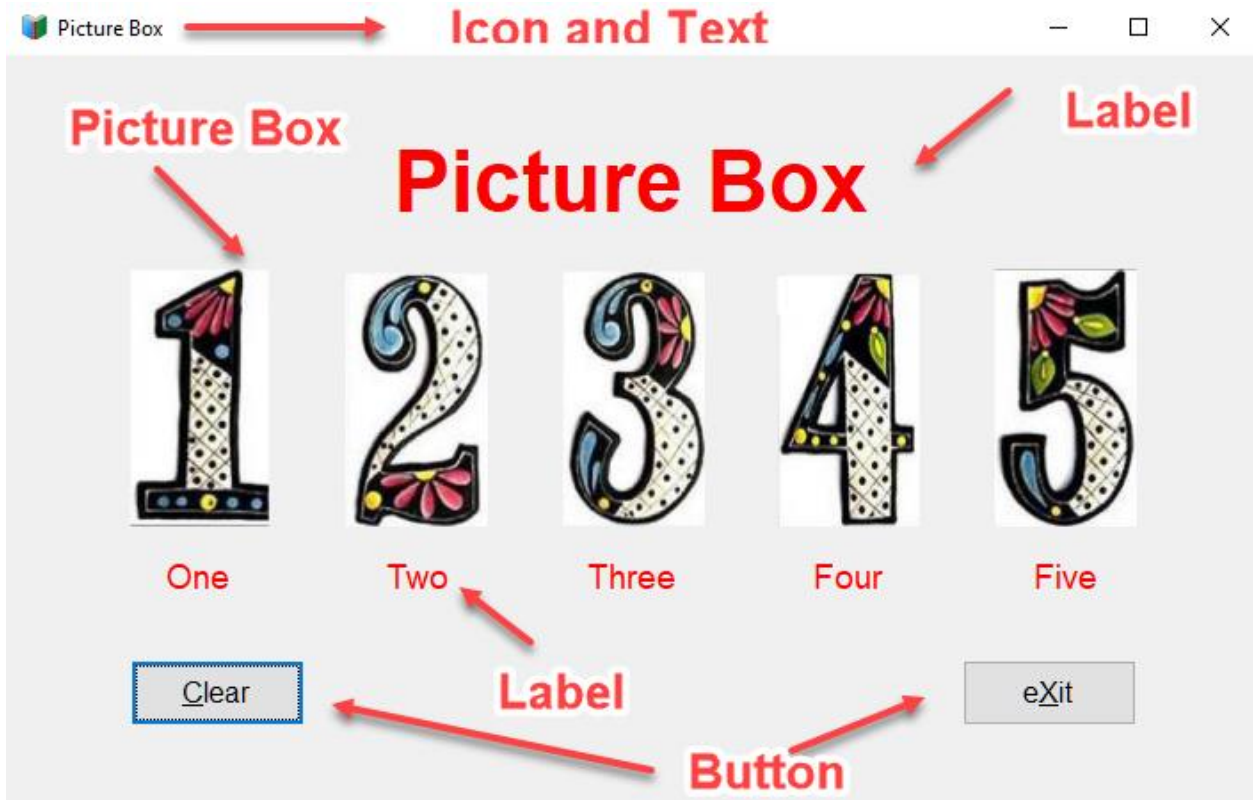
Create a Folder called **Your Name Lab 2**

For example; Mike would create a folder called **Mike Mostafavi Lab 2**.

As explained in the materials, you need to create a program design, very similar to what you did for project one. It will describe input, output, processing, and screen layout (GUI Design). You are encouraged to use VISIO but you can also use MS Word. You **CANNOT** use screenshot as a replacement for GUI design. In reality, GUI design must be done prior to the design of the actual C# application. The lab will have six labels, 5 picture boxes, and two buttons. As the user moves the mouse over each number, the tooltip related to that number will popup. Tooltip is referenced in Chapter One (page 36-37) but has more details on page 721-and on. Once the user clicks on a picture, the text related to that number will be displayed in the label under that picture box. Note that there is an icon on the left top corner of the form's title bar, which reads Picture Box. The clear button would clear **everything** and the exit button will display a warning message and closes the form.

You should also note that the buttons have access keys/shortcuts (underlined characters).

Now, you will be using Visual Studio C# IDE to create your first C# program. The GUI output will look like the following:



Remember that you need to have comments for each sub procedure of your program. You need to find the images for the numbers. Use Google to find the images that you like.

Needed Features for the project:

- Five Picture Boxes
- One tooltip Control, which will be used to add tooltips to picture boxes and buttons
- Six Labels
- Two Buttons
- Image and text for the form
- Message box
- Comments

This is an individual program. Do not share your codes with any other students. Read the syllabus about code sharing consequences.

Once you are done creating and coding the program, Save All and quit the program. Visual Studio has created a folder for you. Add the Program Design into the folder and zip it (zip the entire folder as demonstrated in the video). Submit the zip folder to the assignment folder for lab 2. Remember the Visual Studio folder and Program design must be combined to create one zip file. Watch the video of running program to be familiar with its features.

Keep in mind our discussion of **good user interface design**

Be sure to use the **Format menu** to properly align and center controls
Use our **naming** and **comment standards** (described in **Standards for Week 2**)

Lab 2 – Coding Standards

Naming standards for controls:

Control names consist of a root and a suffix
The suffix identifies the control type
The root is always mixed-case, starting with a small letter
Never use underscores in control names

Control type	Example
Button	changeFormNameButton
Form	demo1Form
Label	helpMessageLabel
Textbox	customerLastNameTextBox
PictureBox	numberPictureBox

Comment standards:

Every form's code begins with a block comment section
that defines Project, Programmer, Date and what the form does

```
/*  
    Project      Picture Box  
    Date         April 2018  
                Mike Mostafavi  
  
                Display name of selected musician  
*/
```

Every method should have a comment at the start explaining what the method does.
These should be short so use line comments
It's OK to use block comments if you must

```
private void radAniDiFranco_Click(object sender, EventArgs e)  
{  
    // Displays "ani diFranco" when this picture is selected
```

Code should be properly indented

```
private void aniDiFrancoPicture_Click(object sender, EventArgs e)  
{  
    // Displays "ani diFranco" when this picture is selected
```

```
    musicianNameLabel.Text = "ani diFranco";  
}
```