

Programming Assignment 9

Due April 1

1.

Using **BorderLayout** design an ID card with your picture (or any picture you find on the web) in the CENTER region , a name in the NORTH, and an address in the SOUTH. So, you will be using CENTER, SOUTH, and NORTH.

The title on the JFrame should say "Java Programmer." All of this information will be placed on JButtons and then placed in the frame. .

Place the card at position (50,50). You will have to play around with the size so it looks good. Try different sizes.

The frame should be about the size of a normal business card...so your picture cannot be too large. **BTW Java will not resize the picture.** You can of course resize it in Paint or some other program. **Also set resizable to false.**

Here is typical output:



2.a

2a. Write a program that creates a frame using FlowLayout that displays four dice in a row.

- The dice appear on four JButtons.
- Use the dice images 1.jpg, 2.jpg , etc in the content section of eLearn or find your own pictures on the web.
- Each particular die that you display is obtained by generating a random number 1..6 so that each time the program is run a different set of dice is displayed.
- Place the frame at position (50,50). You can decide on the dimensions of the frame so that the dice are displayed nicely. Include a main method that instantiate the frame.

Call the class Dice1.java

2b. This is just a slight variation on 2a.

Write a program that creates a frame using **GridLayout (2 x 3)** and displays six dice (displayed on JButtons) in two rows of three buttons per row, that is a 2 x 3 grid.

The particular dice are obtained by generating a random number 1..6 so each time the program is run a different die is displayed.

Place the frame at position (100,100). You can decide on the dimensions of the frame. Include a main method that instantiate the frame. This is almost identical to the previous program. Call this Dice2.java

2c. Here is another variation of the same program:

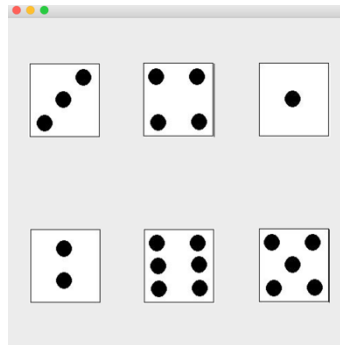
Write a program that creates a frame using GridLayout (2 x 3) and displays six dice in two rows of three **JLabels** per row, that is a 2 x 3 grid. Instead of JButtons, use JLabels

The particular dice are obtained by generating a random number 1..6 so each time the program is run a different die is displayed.

Place the frame at position (100,100). You can decide on the dimensions of the frame. Include a main method that instantiate the frame.

Your frame should look something like this with dice is some random order.

The pictures appear on JLabels this time, not JButtons.



Call the class Dice3.java

3.

Write a program that creates a frame **with no layout manager** and displays three dice (images on buttons) aligned horizontally in a single row with some space between each die.

- The first die should be placed at (50,70).
- You decide where the other two should go but they should all be on the same horizontal line.
- The particular dice are obtained by generating a random number 1..6 so each time the program is run a different die is displayed.

Place the frame at position (30,30). You can decide on the dimensions of the frame. Include a main method that instantiates the frame.