

Basic Game Graphics: GUI #01



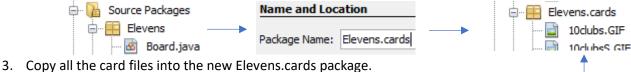
(designed to accompany the AP® Computer Science A Elevens Lab)

- Consider and address the following questions:

- 1. What code knowledge do you currently have that might help you code the Graphics version of Elevens?
- 2. What code knowledge do you feel you need (but don't have) to complete the GUI version of the game?

- Getting the graphics for the game (card graphics):

- 1. Download the game card graphics (keep track of where you save these files)
- 2. Right-click package where game files are stored (Elevens), create a new package named cards (Elevens.cards).



J. Copy all the card files into the flew Elevens.cards package.

- Below is the framework for the basic beginnings of an Elevens GUI class. Complete the GUI Class:

```
/** Find the correct imports needed for: Color, URL, Imagelcon, JButton, JFrames, JLabel, and JPanel **/
public class GUI {
  public static URL card1, card2, card3;
                                                                             //Store location of the card graphics to use
  public GUI(){
                                                                             //GUI is an object ... this is the constructor
    JFrame elevensGame =
                                                                             //Complete this line
    elevensGame.
                                                                             //Game should be 800 wide and 302 tall
    elevensGame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
                                                                             //Standard procedure
    elevensGame.
                                                                             //Make it so game window can't be resized
    JPanel gameWindow = new JPanel();
                                                                             //Create the JPanel() to put game items on
    gameWindow.
                                                                             //Set the background color for the game
    card1 = getClass().getResource("cards\\10clubs.GIF");
                                                                             //Create a URL to find card graphic
    ImageIcon card1Image = new ImageIcon(card1);
                                                                             //Create the imageIcon graphic for card #1
    JLabel card1Label = new JLabel();
                                                                             //Create the JLabel for the card
    card1Label.setIcon(card1Image);
                                                                             //Place graphic into the new JLabel
/** Repeat the above four lines of code so that the Ace of Diamonds and the Queen of Hearts are displayed next.**/
    JButton replace = new JButton("Replace");
                                                                             //Create the JButton to replace cards
    JButton restart = new JButton("Restart");
                                                                             //Create the JButton to restart the game
/** Add code that places card #1, card #2, card #3, and the two JButtons on the game window. **/
                                                                             //Add the game window to the GUI
    elevensGame.
                                                                             //Make the GUI show to the screen
  public static void main(String[] args) {
                                                                             //Encapsulation ... make the main class
    GUI game = new GUI();
                                                                             //Create new GUI = run the game
                     Elevens
```