

Java GUI Workshop

For this workshop you must have Java installed: <https://www.java.com/en/download/>

You will also need an IDE to write your code, I recommend JGrasp or VSCode:

https://spider.eng.auburn.edu/user-cgi/grasp/grasp.pl?dl=download_jgrasp.html,

<https://code.visualstudio.com/download>

Finally, you'll need to download the code from this repository for this workshop:

<https://github.com/HackBI/JavaGUIWorkshop>

- First, we'll be going over making a JFrame. For this program we'll extend the JFrame class, but you can also add one as an object.
- Next, we'll add a JPanel to hold some of our components.
- We'll also be using LayoutManagers to organize our components.
- Then, we'll start adding our components: JButtons, JLabels, JTextfields, and a JLayeredPane for our card table.
- Now we'll have to add Action Listeners to our buttons so they actually work.
- Now we'll add a color for our background in the JLayeredPane, and add fonts to some of our JLabels to make the text look better.
- Now we'll add the cards to our JLayeredPane using ImageIcon
 - All the card images will be in the textures folder, but the provided Card class should do that for you
- Once we've added all our components, we'll change the methods in the Blackjack class to work with graphics instead of text
- Finally, we'll add a JDialog to pop up telling the user whether they won or lost.

Helpful Links:

Overall Swing tutorial: [https://www.guru99.com/java-swing-gui.html#:~:text=GUI%20\(Graphical%20User%20Interface\)%20in,easy%20interfaces%20for%20Java%20applications](https://www.guru99.com/java-swing-gui.html#:~:text=GUI%20(Graphical%20User%20Interface)%20in,easy%20interfaces%20for%20Java%20applications).

Layout Managers: <https://docs.oracle.com/javase/tutorial/uiswing/layout/visual.html>

JLayeredPane: <https://docs.oracle.com/javase/tutorial/uiswing/components/layeredpane.html>

Action Listeners: <https://docs.oracle.com/javase/tutorial/uiswing/events/actionlistener.html>

Fonts: <https://docs.oracle.com/javase/7/docs/api/java/awt/Font.html>

ImageIcon: <https://docs.oracle.com/javase/7/docs/api/javax/swing/ImageIcon.html>

JDialog: <https://docs.oracle.com/javase/tutorial/uiswing/components/dialog.html>