# Intro to Swing

**Using Java Swing** 

### Today's Overview

Git Exercise
Swing basics
Swing Exercise
More Downloads!!

#### Get the latest material

```
shabbir@shabbir-Aspire-S3-391: ~/ecse321/ecse321tutW16
shabbir@shabbir-Aspire-S3-391:~$ cd
shabbir@shabbir-Aspire-S3-391:~$ cd ecse321/
shabbir@shabbir-Aspire-S3-391:~/ecse321$ cd ecse321tutW16/
shabbir@shabbir-Aspire-S3-391:~/ecse321/ecse321tutW16$ ls -la
total 2076
drwxrwxr-x 3 shabbir shabbir
                                 4096 Jan 12 15:53 .
drwxrwxr-x 4 shabbir shabbir
                                 4096 Jan 12 15:58 ...
-rw-rw-r-- 1 shabbir shabbir 893368 Jan 12 15:53 01-Installing Software.pdf
-rw-rw-r-- 1 shabbir shabbir 1211184 Jan 12 15:53 02-gitandgithub.pdf
drwxrwxr-x 8 shabbir shabbir
                                 4096 Jan 12 15:53 .git
-rw-rw-r-- 1 shabbir shabbir
                                   16 Jan 12 15:53 README.md
shabbir@shabbir-Aspire-S3-391:~/ecse321/ecse321tutW16$                        qit pull
```

Travel to tutorial folder

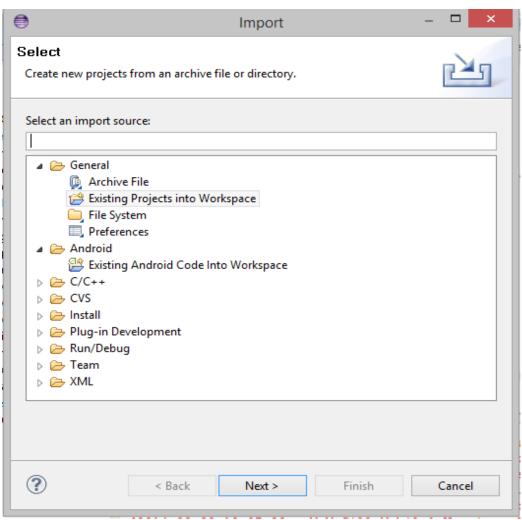
Check that you are in the Repo

Get latest files

Importing a project

File -> Import -> Existing project into Workspace -> Browse for project

Go ahead and import today's example code



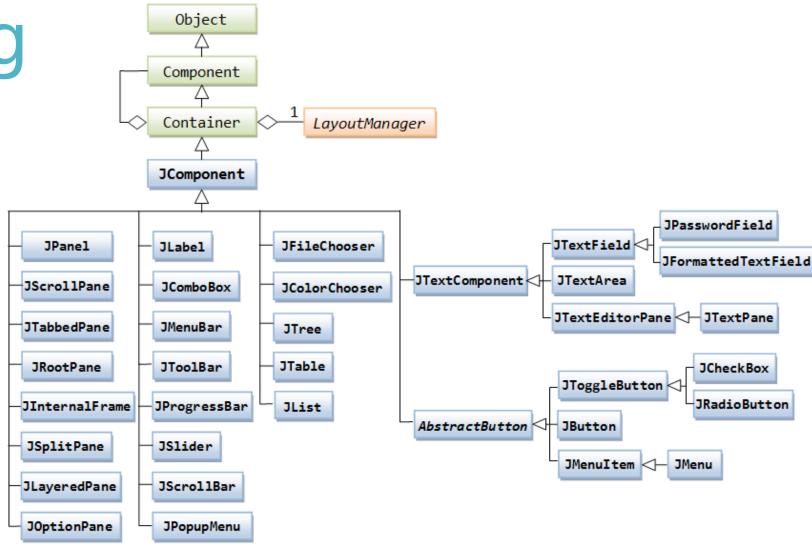


### Java Swing

The very basics

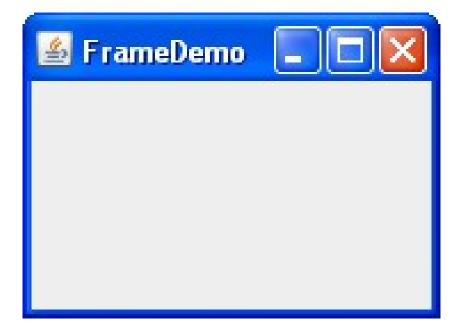
# Java Swing

Java Swing is the library used to make Graphical user interfaces in Java



## Swing Basics - JFrame

A JFame object is your window

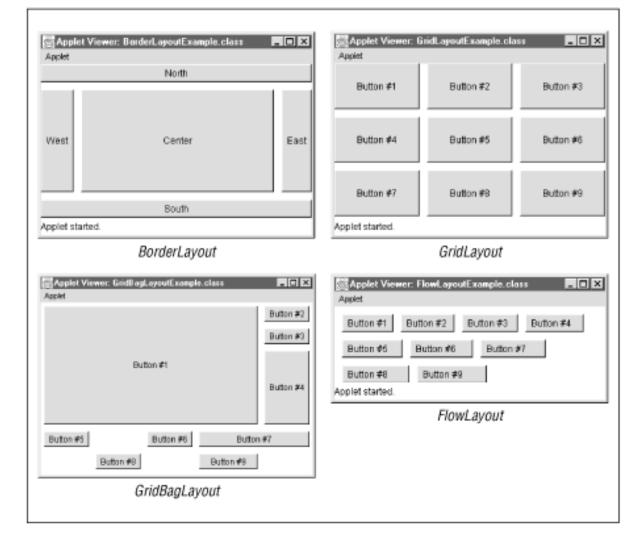


### Swing Basics - JFrame

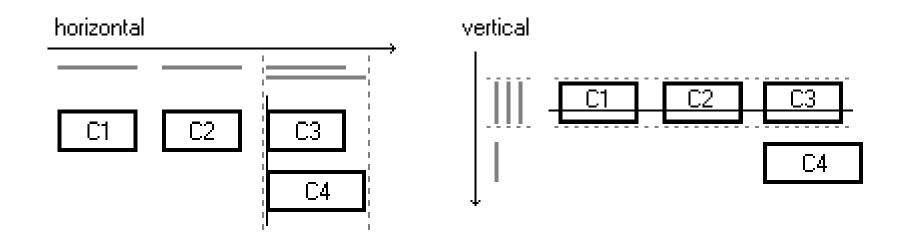
```
public class Application extends JFrame {
    // constants
    public static final int SCREEN_WIDTH = 400;
    public static final int SCREEN_HEIGHT = 400;
    public static final String APP_NAME = "Snake Game 2014";
    public static final int TIMEOUT = 50;
```

## Swing Basics - Layouts

A layout is how components are placed



### Swing Basics - Layouts



horizontal layout = sequential group { c1, c2, parallel group (LEFT) { c3, c4 } } vertical layout = sequential group { parallel group (BASELINE) { c1, c2, c3 }, c4 }

### Swing Basics – Action Listener

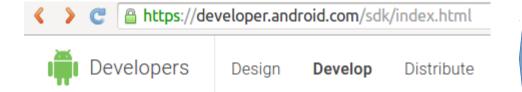
```
this.addParticipantButton.addActionListener(new ActionListener(){
    @Override
    public void actionPerformed(ActionEvent e) {
        addParticipantButtonActionPerformed(e);
    }
});
```

Action Listener calls a method when a particular action takes place

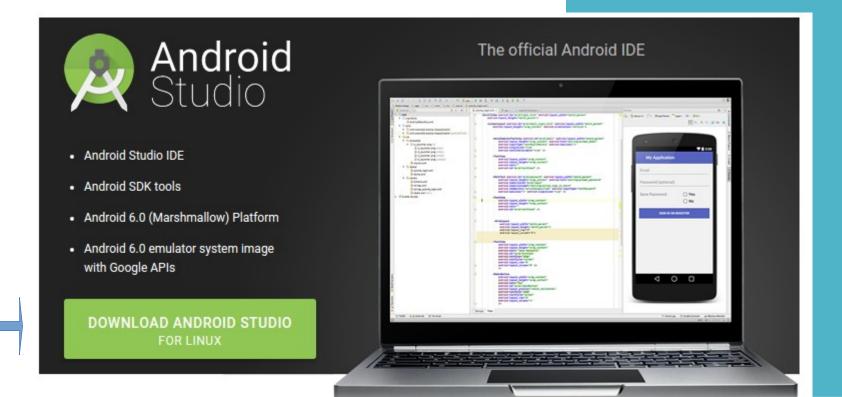
### Pair Programming exercise



#### **Android Studio**



Follow Link



**Download Tool** 

#### Get HAMX



#### Installation Instructions for Intel® Hardware Accelerated Execution Manager - Microsoft Windows\*



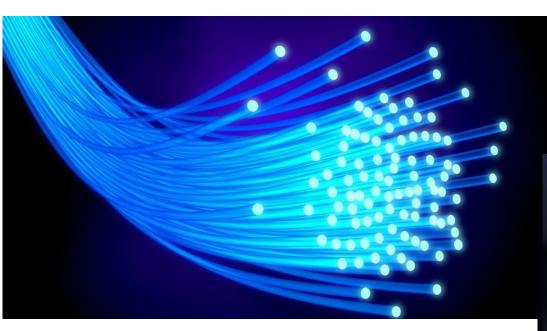
https://software.intel.com/en-us/android/articles/installation-instructions-for-intel-hardware-accelerated-execution-manager-windows

### Get XAMPP



Go to www.apachefriends.org

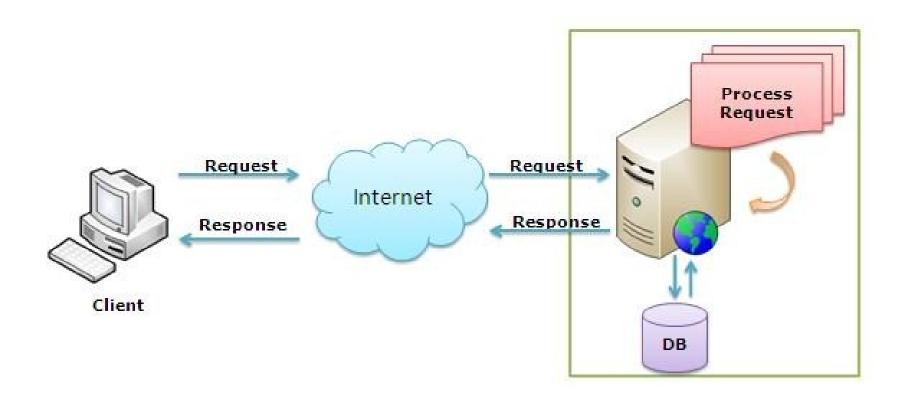
### The World Wide Web



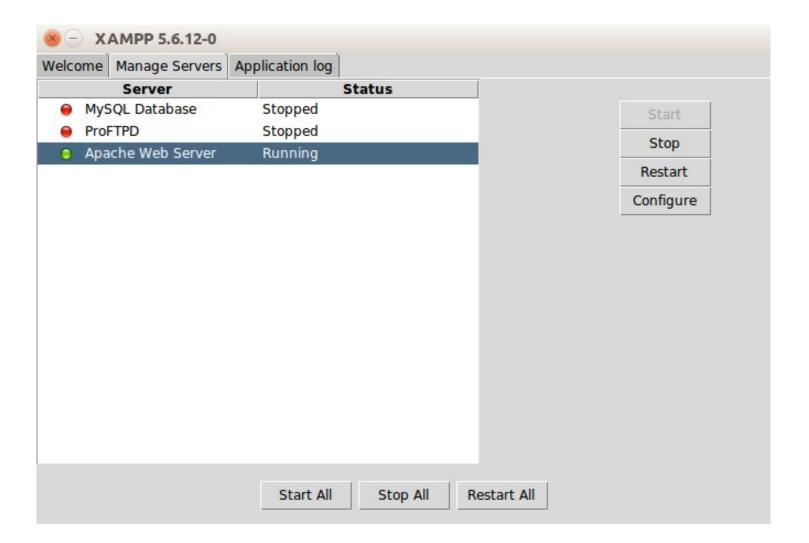




#### The World Wide Web

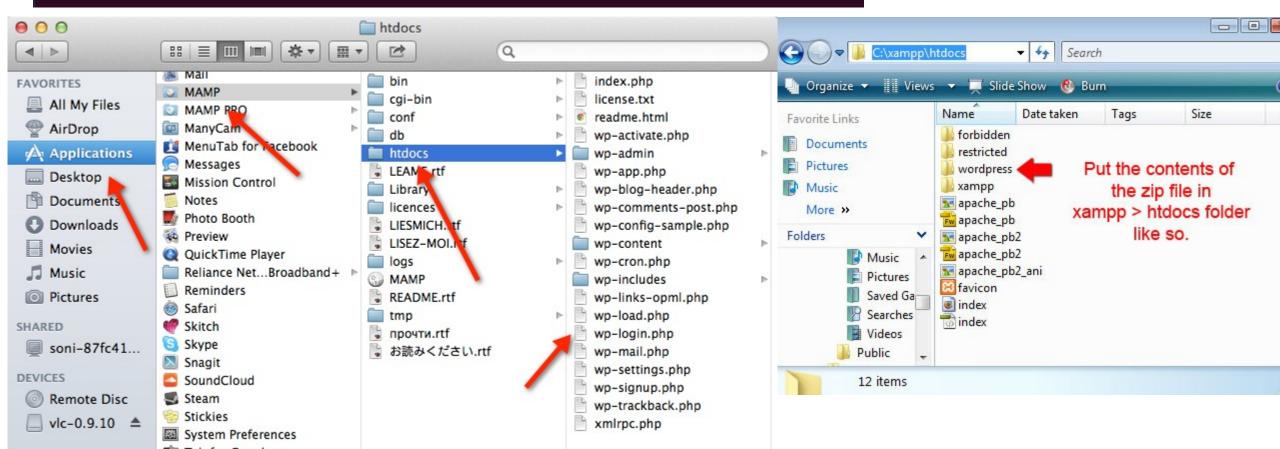


### Start XAMPP



#### Go to htdocs

```
root@shabbir-Aspire-S3-391:/opt/lampp/htdocs# pwd
/opt/lampp/htdocs
root@shabbir-Aspire-S3-391:/opt/lampp/htdocs# ls
applications.html bitnami.css dashboard favicon.ico img index.php test.php webalizer
root@shabbir-Aspire-S3-391:/opt/lampp/htdocs#
```



#### References

Java Game Tutorial: <a href="http://zetcode.com/tutorials/javagamestutorial/">http://zetcode.com/tutorials/javagamestutorial/</a>
Java Group

layout:https://docs.oracle.com/javase/tutorial/uiswing/layout/group.html