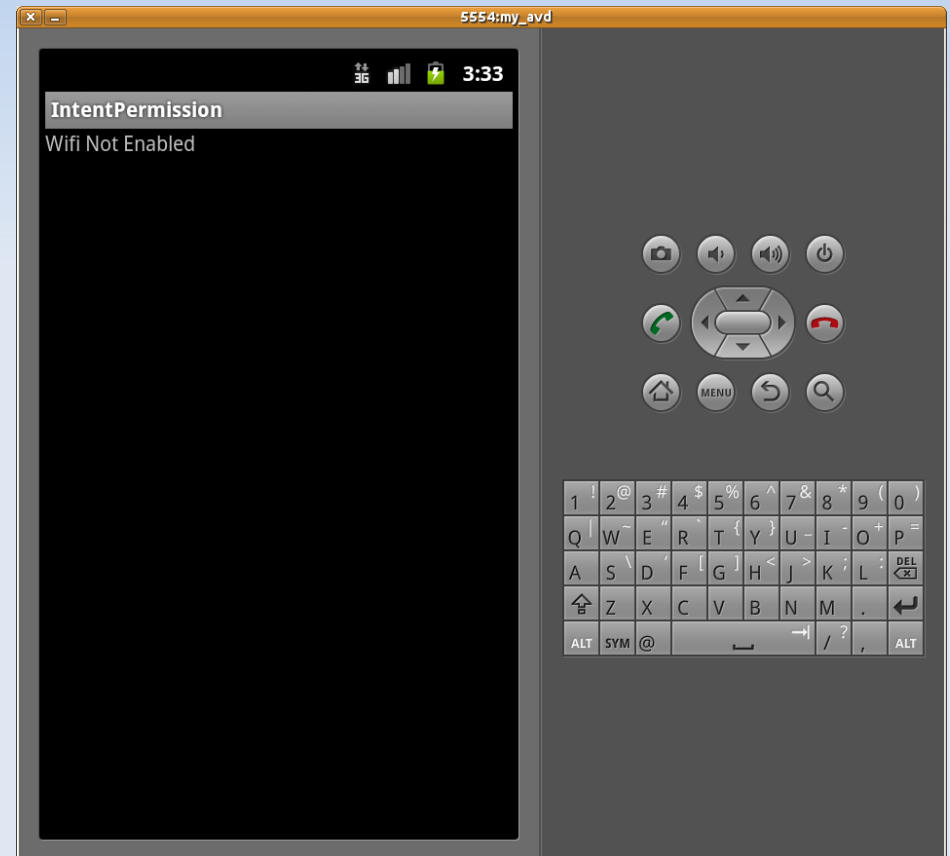# Intents and Permissions

CMSC 436 Lab 4
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# Permissions

- Task 1- Detect whether wifi is enabled or disabled and report the state in a text message

# Permissions

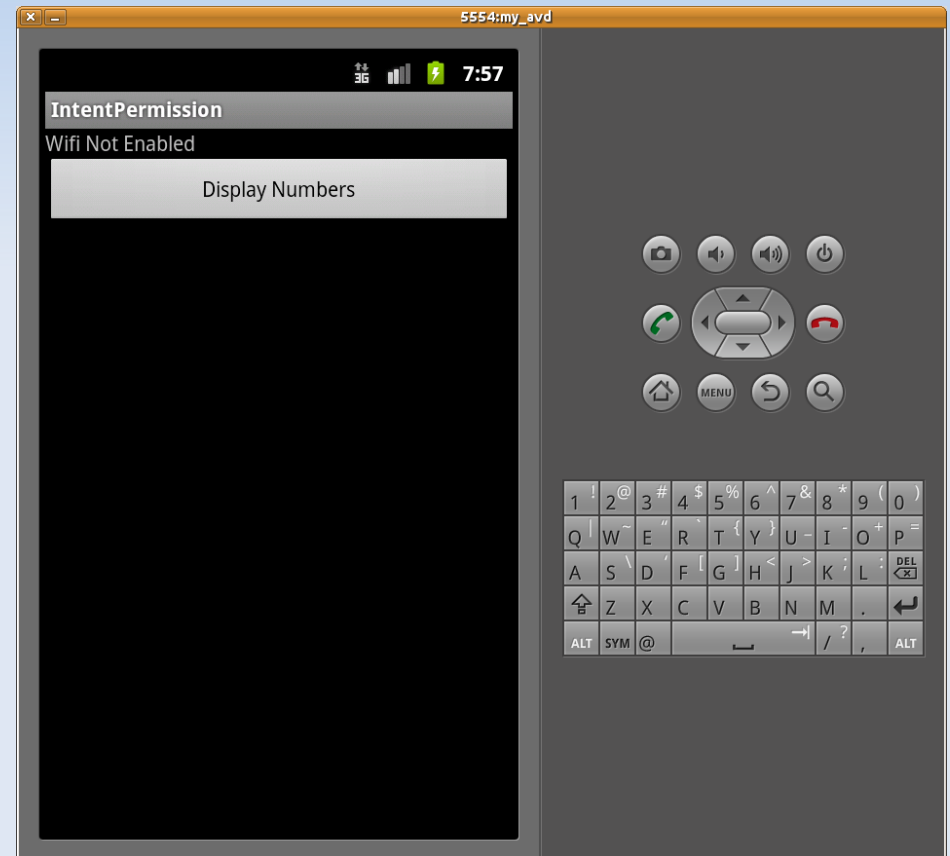- First, try getting the wifi state and setting a text view based on it

```
WifiManager wifiManager =
(WifiManager)getSystemService(Context.WIFI_SERVICE);

    if (wifiManager.isWifiEnabled()) {
        wifiText.setText("Wifi Enabled");
    }
    else {
        wifiText.setText("Wifi Not Enabled");
    }
```

# Permissions

- Note that running this generates an error message

  - The reason is that you need to give the app permission to access the wifi state

- Add a uses-permission tag in AndroidManifest.xml

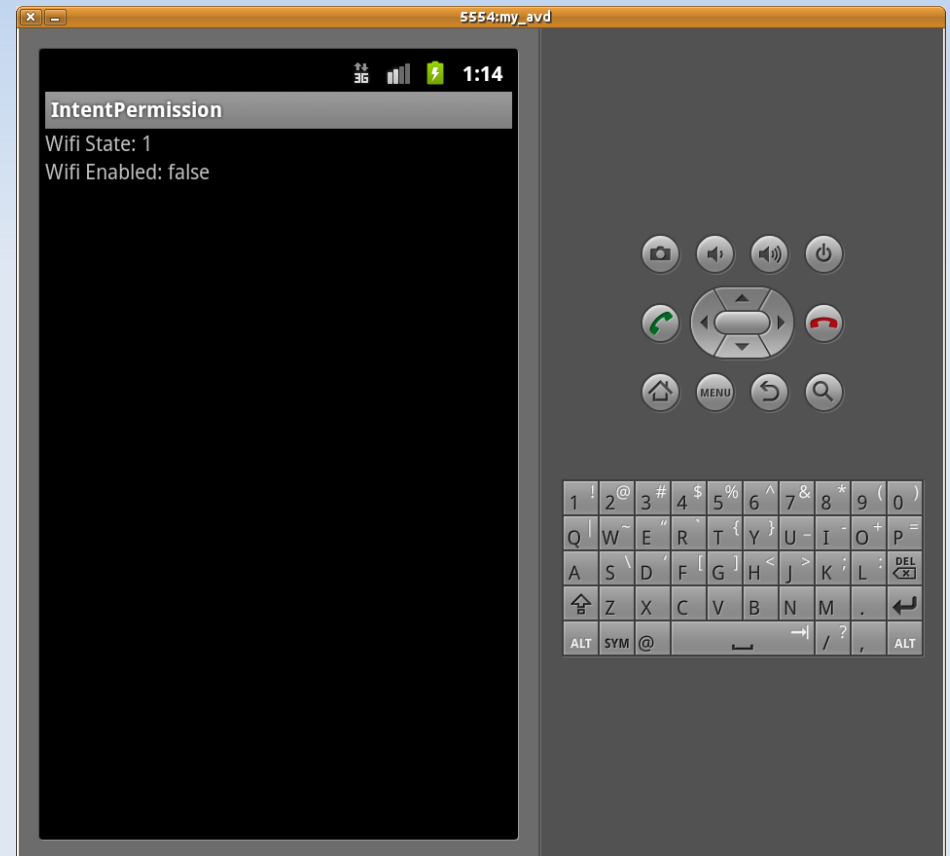- The permission you will need to set is "android.permission.ACCESS_WIFI_STATE"

# Intents

- Task 2- Use an Intent to transfer some data from one activity to another

- First, add a button to start a new activity

# Intents

- Pressing the button should start a new activity which should display some values sent to it from the original activity

# Intents

- There are two types of Intents- Explicit and Implicit

- First try using an Explicit Intent

    - You saw this in last week's lab

- An Explicit Intent explicitly lists the Activity class that it will activate

- (Don't forget to add the new class to the Manifest!)

# Intents

- Arbitrary data can be stored in the Extras section of an Intent

- Use this to store the results of boolean isWifiEnabled() and int getWifiState()

- The new Activity can then read this data from the Intent, accessed with getIntent()

# Intents

- Task 3- Now launch the new Activity using an Implicit Intent

- With an Implicit Intent, the Activity to be launched is not specified

- Instead, the Intent specifies an Action, Category, etc. which are used to find a compatible Activity

# Intents

- First you will need to create an Intent with an Action string specified

- There are predefined Actions you can use, or you can make up your own

- For this example use the Action string "edu.umd.cs.cmsc436.SHOW_WIFI"

# Intents

- You will also need to set up an Intent Filter in AndroidManifest.xml that allows your Activity to be activated by the Intent

- Your filter should accept the new Action you made and the Category "android.intent.category.DEFAULT"

# Intents

- Try launching the wifi information display Activity using the new Implicit Intent