Intents and Permissions

CMSC 436 Lab 4
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Task 1- Detect whether wifi is enabled or disabled and report the state in a text message
First, try getting the wifi state and setting a text view based on it

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

First, add a button to start a new activity
Pressing the button should start a new activity which should display some values sent to it from the original activity.
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!)
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()
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
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"
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