



Faculty of Science

Course:	CSCI 4100U: Mobile Devices
Lab Assignment:	#4
Topic:	Broadcast Receivers

Basic Outline

- Create a new Android project
- Create a broadcast receiver class, which listens to battery intents
- In your activity, create a new instance of your receiver class, and register it to listen to events programmatically
- In your broadcast receiver class, when a broadcast intent is received, display an appropriate message using a Notification. The notification should display:

Detailed Instructions

- Create a new Android project
- Create a broadcast receiver class, which listens to battery intents
 - i.e. Intent.ACTION_BATTERY_CHANGED
- In your activity, create a new instance of your receiver class, and register it to listen to events programmatically
- In your broadcast receiver class, when a broadcast intent is received, display an appropriate message using a Notification. The notification should display:
 - Whether the battery is charging, discharging, or full
 - This is stored in the intent with the name `BatteryManager.EXTRA_STATUS`
 - For possible values, check out the `BatteryManager` class
 - Whether or not the battery is healthy (`BATTERY_HEALTH_GOOD`)
 - Otherwise, display a message about what is wrong with the battery
 - Whether or not the battery is plugged in
 - If so, display whether it is plugged into a USB port or an AC outlet
 - The current temperature of the battery
 - For more details about battery broadcast intents, see:
 - <https://developer.android.com/reference/android/os/BatteryManager.html>