G54MDP Lab Session 05 - Broadcasts

The aim of this exercise is for you to implement a simple application that demonstrates the use of Android Broadcasts, both sending and receiving.

Necessarily this will be similar to the example application shown in lecture 13, so spend some time reviewing the code provided, however it is important to try and implement a similar application yourself rather than cutting and pasting code, so that you get used to the coding style required.

BroadcastReceiver

Create an application that receives a Broadcast from the system

Create a new Activity in the usual way. Also implement a new BroadcastReceiver component in the application by creating a new class that subclasses the BroadcastReceiver class, and implement it's onReceive method:

```
public class MyBroadcastReceiver extends BroadcastReceiver
{
	@Override
	public void onReceive(Context context, Intent intent)
	{
		Log.d("g54mdp", "onReceive");
	    Toast.makeText(context, "broadcast received",
Toast.LENGTH_LONG).show();

	...
```

Edit the manifest file to have this receiver respond to a system event, for example the phone booting up, or a phone call being made. You will also need to use the correct permissions to be able to receive these broadcasts.

Ordered Broadcasts

Create an application makes use of sending and receiving ordered broadcasts

Update your application to demonstrate the use of ordered broadcasts, via the priority system. Modify the Activity to send a custom broadcast message when a button is clicked.

sendOrderedBroadcast(Intent intent, String receiverPermission)

Next, add two BroadcastReceivers to your application, with different priorities, and ensure that they are called sequentially when the broadcast is sent.

Make use of the abortBroadcast() function to squash the broadcast message at the first receiver.