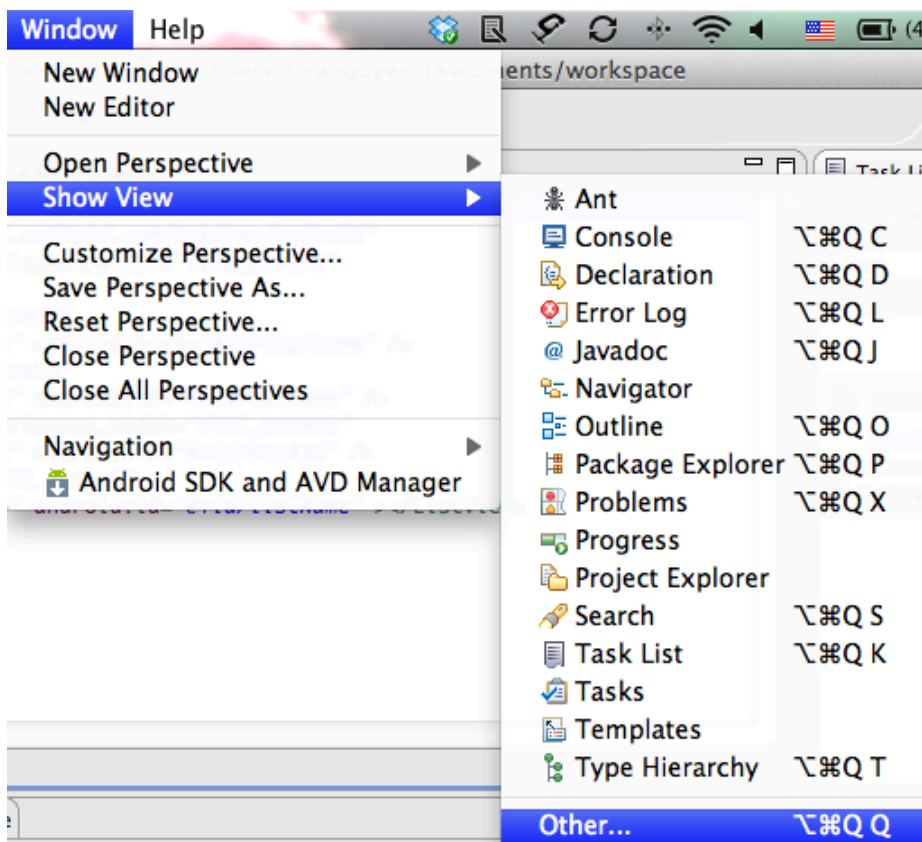

COSC2543 MOBILE APPLICATION PROGRAMMING

EXTRA (S) WEEK 9: DEBUGGING ANDROID USING LOGCAT

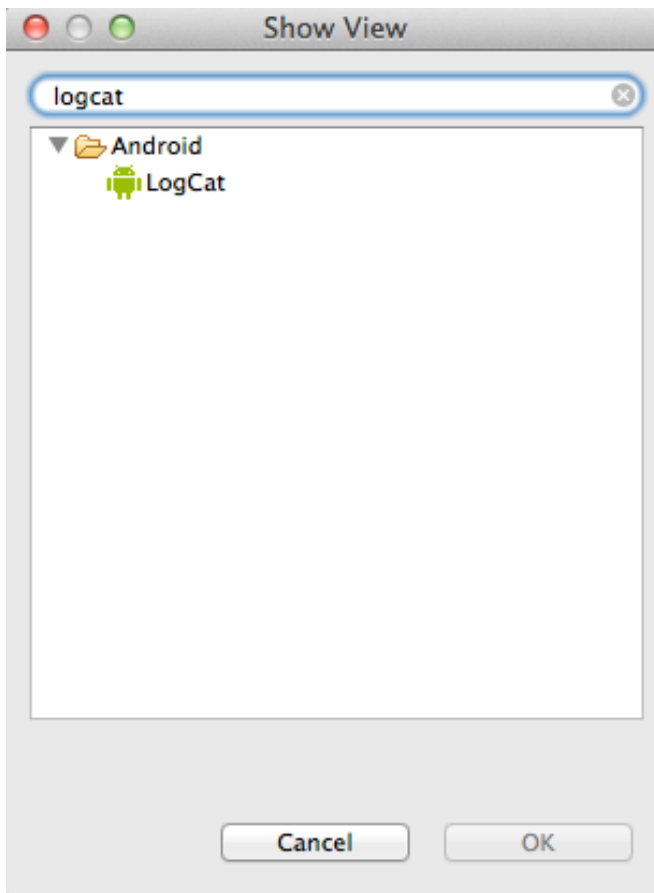
We'll use the Android Debug Bridge (ADB), which basically is a tool that runs on both your android platform (emulator or device), and your development computer. The ADB can be used via the command line interface, or just simply via Eclipse. We will be using Eclipse to debug since it's much easier. If you are debugging on a device, you first have to enable USB debugging. Go to the settings of the machine > software > development > USB-debugging

If you run on the emulator then we use Logcat to exchange information from the application on your device and the development computer.

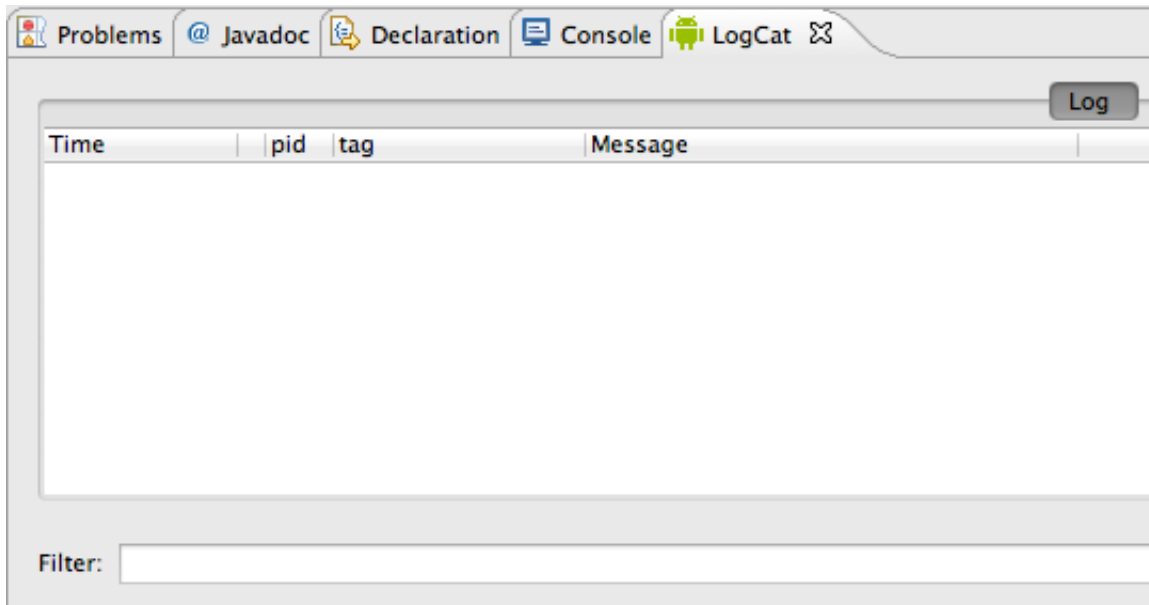
1. To enable Logcat Window, go to Window → Show View → Other



2. Search for Logcat → OK



In the bottom panel you will see Logcat



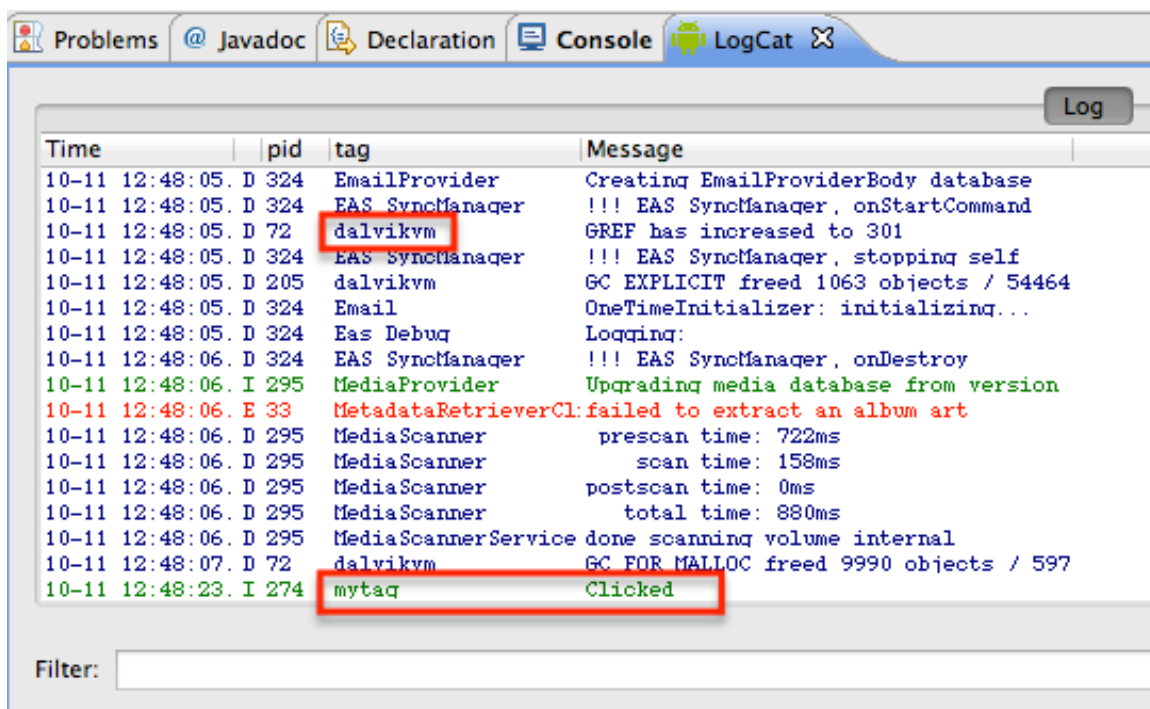
3. Logging your output

```
Button add = (Button) findViewById(R.id.btnAdd);

add.setOnClickListener(new OnClickListener() {

    @Override
    public void onClick(View v) {
        // TODO Auto-generated method stub
        lst.add(txtName.getText().toString());
        txtName.setText("");
        listArr.notifyDataSetChanged();
        Log.i("mytag", "Clicked");
    }
});
```

4. Check Logcat for you logging. You will see your tag along with system tags in Logcat. You can use filter in Logcat Window to narrow the logging that ou want to see only.



The screenshot shows the LogCat window in Android Studio. The window has tabs for Problems, Javadoc, Declaration, Console, and LogCat. The LogCat tab is active, displaying a list of log entries. The entries are organized into columns: Time, pid, tag, and Message. A red box highlights the entry with tag 'mytag' and message 'Clicked'.

Time	pid	tag	Message
10-11 12:48:05. D 324		EmailProvider	Creating EmailProviderBody database
10-11 12:48:05. D 324		EAS_SyncManager	!!! EAS_SyncManager, onStartCommand
10-11 12:48:05. D 72		dalvikvm	REF has increased to 301
10-11 12:48:05. D 324		EAS_SyncManager	!!! EAS_SyncManager, stopping self
10-11 12:48:05. D 205		dalvikvm	GC EXPLICIT freed 1063 objects / 54464
10-11 12:48:05. D 324		Email	OneTimeInitializer: initializing...
10-11 12:48:05. D 324		Eas_Debug	Logging:
10-11 12:48:06. D 324		EAS_SyncManager	!!! EAS_SyncManager, onDestroy
10-11 12:48:06. I 295		MediaProvider	Upgrading media database from version
10-11 12:48:06. E 33		MetadataRetrieverCl	failed to extract an album art
10-11 12:48:06. D 295		MediaScanner	prescan time: 722ms
10-11 12:48:06. D 295		MediaScanner	scan time: 158ms
10-11 12:48:06. D 295		MediaScanner	postscan time: 0ms
10-11 12:48:06. D 295		MediaScanner	total time: 880ms
10-11 12:48:06. D 295		MediaScannerService	done scanning volume internal
10-11 12:48:07. D 72		dalvikvm	GC FOR MALLOC freed 9990 objects / 597
10-11 12:48:23. I 274		mytag	Clicked

Filter: