P82 Mobile Application Development - Android

Debug / Manifest / Gradle

LogCat : Debug tool

♦ The Class is used with static Log methods

Ex: Log.v ("a_tag", "a message");
• v is the priority level (detail on next page)
• a_tag is the label
• a message message displayed in LogCat

♦Before the sys.out() does not work. Currently it works with the tag "I/System.out"

LogCat : Debug tool

- **LogCat**: Log in which entries of several priority levels are logged
  - v: Verbose (less priority)
  - d: Debug
  - i: Info
  - w: Warning
  - e: Error (Highest priority)
- Be careful that LogCat has focus on the project you want to debug

Manifest / Gradle

- Since Android Studio, Ant (build engine) has been replaced by Gradle.

- Manifest: A project configuration file to tell the system how to run your application.

- Build.gradle: second part for project configuration. Specifies the versions and dependencies.

AndroidManifest.xml

- The **name of the application and the package**
- The **necessary permissions to use this application**
- The identification of the main activity (the **MAIN**)
- The list of other **activities of the application**
- The list of **services**
- The list of receivers of intent (**broadcast receiver**)

AndroidManifest.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
package="fr.jfl.myapplication" >

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:theme="@style/AppTheme" >
        <activity
            android:name=".MainActivity"
            android:label="@string/app_name" >
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>
```

Build.gradle

- The version of the **sdk** used (target), as well as the minimum supported version
- The compilation version
- External libraries required by our application (or dependencies)

Link: http://tools.android.com/tech-docs/new-build-system/user-guide
we could do a course that the topic alone...

Build.gradle

□ apply plugin: **'com.android.application'**

```
android {
    compileSdkVersion 22
    buildToolsVersion "21.1.2"
    defaultConfig {
        applicationId "fr.jfl.myapplication"
        minSdkVersion 10
        targetSdkVersion 22
        versionCode 1
        versionName "1.0"
    }
    buildTypes {
        release {
            minifyEnabled false
            proguardFiles getDefaultProguardFile('proguard-android.txt'), 'proguard-rules.pro'
        }
  dependencies {
}     compile fileTree(dir: 'libs', include: ['*.jar'])
        compile 'com.android.support:appcompat-v7:22.1.1'
```