

One Page Android Studio Installation and Verification

This training guide contains a very high level overview on how to install and verify that Android Studio is installed and ready for use with FTC robots for the 2015-2016 competition season. For more detailed instructions, please see the FTC Tech Guide (beta), and the Android developer website.

Installation Steps:

- 1) Verify system requirements: http://developer.android.com/sdk/index.html#Requirements
- 2) Download and install the <u>Java Development Kit (JDK) version 7</u> (note: Version 8 is not yet supported for Android Studio, download the most recent version of v7, currently 7u79. You need only the Java SE Development Kit, not the Demos and Samples. If you are using the 64 bit version of Windows, then get the x64 download file. If you are using the 32 bit version, get the X86 download file. If you are using something else, get the appropriate file for your system. When installing, you can just accept all of the default values.
- 3) Download and install the latest version of the <u>Android Studio Software</u>. (visit the page and click the green "Download Android Studio" button. Note that the download is almost 900MB, and the installation can easily take an hour or more. You might want to grab a snack:) When installing, you can just accept all of the default values. When the install finishes, make sure the checkbox is checked to Start Android Studio, and click Finish. Android Studio will now start.
- 4) When the Android Studio software is launched, it might prompt you to import Android Studio settings from a previous installation of the software. Unless you are an advanced user who has previous Android Studio settings that you would like to preserve, select "I do not have a previous version of Android Studio or I do not want to import my settings" and click OK to continue.
- 5) Android Studio may download some additional components, when it is done, click "Finish" and you should be at the main Welcome Screen of Android Studio. Choose "Configure", and then select the "SDK Manager" to launch the Android SDK Manager.
- 6) You do not need to install any of the packages that might be selected by default when you first launch SDK Manager, instead clear the checkmarks and then go through and select the following packages: (note: this can take some time)
 - a) Google USB Driver
 - b) Find "Android 5.0.1 (API21) and from it, select:
 - i) SDK Platform
 - ii) Google APIs
- 7) Go back to your web browser and download and extract the <u>QualComm FTC Robot SDK</u>. Save the file (ftc_app-master.zip) to your download directory, and then extract it (right-click -> Extract All). You can extract it anywhere you like, but your download directory is probably a fine choice.
- 8) Once you have everything downloaded, go back to the Android Studio main Welcome Screen, and choose "Import Project (Eclipse ADT, Gradle, etc.)".
- 9) Browse to the ftc_app-master directory that you previously extracted, select it, and click on the OK button to import the project into Android Studio.
- 10) Android Studio will display a progress bar and begin to import the QualComm SDK project folder.

If it finishes without any errors, then Hooray! - you have all of the necessary files and are ready to compile. If you get an error then you may need to download additional libraries, or have some other problem that needs to be resolved. Retrace your steps to see if you might have missed anything, or contact ftc.iowa@gmail.com if you get stuck.

