**Mechanical Paradox’s**

**Android Studio/Java Cheat Sheet**

**Setting up Android Studio:**

#  a. Java JDK (Java Development Kit)

# Install the latest Java JDK from here: [www.oracle.com/technetwork/java/javase/downloads/index.html](http://www.oracle.com/technetwork/java/javase/downloads/index.html)

 This will allow your computer to compile the Java code you write with Android Studio. Remember to install this first and make sure to install the latest version available.

#  b. Android Studio IDE (Integrated Development Environment)

 Install Android Studio from here: http://developer.android.com/sdk/index.html

 Scroll down to near the bottom of the page to download Android Studio for Mac.

#  c. FTC SDK (Software Development Kit)

* Download the FTC SDK from GitHub at <https://github.com/ftctechnh/ftc_app>
* Launch Android Studio
* On the Startup screen, select Import Project (Eclipse, ADT, Gradle, etc)
* Select Configure
* Select the SDK Manager
* Check the boxes for API 21 SDK Platform and Google APIs, and Extras Google USB Driver
* Click Install Packages and agree to License Agreements
* Go back to the startup screen and select Import Project (Eclipse, ADT, Gradle, etc)
* Navigate to and select the build.gradle included within the downloaded files
* When the process completes, there may be an error at the bottom of the screen. If this shows up for you, just do what it tells you to.
* If everything was successful, on the top left there should be a folder that says FTCRobotController. If not, refer to the FTCTraining Manual contained within ftc\_app-master\doc\tutorial. This should be located in the FTC SDK file you downloaded from github. You should now be ready to start creating your own programs with Android Studio.

**Useful Links**

FTC Specific Programming. This is great for learning the basics of programming for FTC robots.

<http://first.intelitek.com/>

Introductory Programming in Java. Useful if you want to learn more about Java and understand how the code you write in Android Studio works.

<http://chortle.ccsu.edu/CS151/cs151java.html>

Oracle’s Java tutorial. Another great place to learn to learn more about the Java language.

<http://docs.oracle.com/javase/tutorial/>

In addition, the FTC app-master file you downloaded from github has many sample programs to help you understand the logistics of FTC programming.

**Contact Info**

If you have any additional questions, please feel free to email us at: mechanicalparadox7182@gmail.com.

You can also contact our lead student programmers, Kieran Barvenik (kbarvenik@gmail.com) and Luke Basom (luketheduke323@gmail.com) with any question you may have.