

# Installing FTC Software Tools





#### Github Access

- Need your own github account / e-mail to go with it
- Sign up at <a href="https://github.com/">https://github.com/</a>
- Once you sign up, send e-mail to <a href="mailto:ieff | scott@yahoo.com">ieff | scott@yahoo.com</a> with your user name or e-mail that you signed up with, and I'll invite you to the project
- StrykeForce FTC github repository is https://github.com/StrykeForceFTC/ftc\_app





# **Download Packages**

- Download both prior to installation
- Git <a href="https://git-scm.com/download/win">https://git-scm.com/download/win</a>
- Android Studio <a href="https://developer.android.com/studio/">https://developer.android.com/studio/</a>





### Install Git

- Run the downloaded executable
- Accept all defaults (don't need to open release notes after installing)
- Note installation location (typically C:\Program Files\Git)





#### Install Android Studio

- Run the downloaded executable
- In the "Choose Components" window, uncheck "Android Virtual Device"
  - Not useful for FTC and saves space
- All other options can be left at defaults
- After installation complete, start Android
  Studio







### Configure Android Studio

Once Android Studio starts:

- 1. Choose Configure  $\rightarrow$  Settings (Configure icon is in lower right of window)
- 2. Go to Build, Execution, Deployment  $\rightarrow$  Instant Run (pane on left)
  - A. Disable Instant Run (uncheck "Enable Instant Run to...") (may have to do this after project is imported)





### Configure Android Studio - Git

- Stay in Configure → Settings
  - 1. Go to Version Control  $\rightarrow$  Git (pane on left)
  - 2. Enter "Path to Git executable", typically C:\Program Files\Git\bin\git.exe
  - 3. Hit "Test" button on right next to path; window should pop-up indicating successful



# Configure Android Studio – Github

#### Stay in Configure → Settings:

- 1. Go to Version Control  $\rightarrow$  Github (pane on left)
- 2. On host line, enter https://github.com/
- 3. Change "Auth Type" to "Password"
- 4. Type in your Login (github user ID or e-mail) and Password
  - a) NOTE: if you hit "enter" after entering your login or password, you'll have to navigate back to the settings and test
- 5. Test using button; you must get a "Success" message
- 6. "OK" out of settings





- 1. From Android Studio startup window, choose "Check out project from Version Control" and choose Github
- 2. Enter https://github.com/StrykeForceFTC/ftc\_app.git as the "Git Repository URL" & test
- 3. Choose a parent directory create an FTC directory near the C root (I use C:\FTC")
- 4. Set the directory name as ftc\_app
- 5. Hit "Clone" button





- 6. After downloading the project, Android Studio will ask if you want to open it, answer No and restart Android Studio
- 7. From the Android Studio Startup window "Import project (Gradle, Eclipse ADT, etc.)"
  - A. In window that opens, navigate to the ftc\_app directory and select "build.gradle" and hit OK
  - B. If ftc\_app is listed in the pane on the left, select it from there







#### Initial Build of Project

1. Build  $\rightarrow$  Make Project or hammer icon



- 2. If build fails and it indicates items must be updated, update them (usually a hyperlink in the build log) and re-build until it builds correctly
- 3. It can take quite a few updates before it will build correctly





- 1. At bottom right of Android Studio window you should see "Git:master"
- 2. Click that and select "+ New Branch" at the top of the list
- 3. In the pop-up window, put in a name (user name is preferred) for your branch and hit "OK". Leave "Checkout branch" checked
- 4. Bottom right of window should now indicate your new branch
- 5. Branch won't exist in Git hub until you do a commit & push

