15 Step by Step Instructions to Configure and run Mobile Automation Testcases using Appium

1. Download Java and set Java\_Home in Environment Variables
   1. Google JDK and download JDK for specified machine from link below:
      1. https://www.oracle.com/technetwork/java/javase/downloads/index.html
   2. Set JDK path
      1. Find location of JDK in machine. Example below:
         1. C:\Program Files\Java\jdk1.8.0\_192
      2. Right click this PC and select Properties
      3. Selected Advanced system settings
      4. Selected Environment Variables
      5. Click 2nd OK to create new path. Example below:
         1. Variable name = JAVA\_HOME
         2. Variable value = C:\Program Files\Java\jdk1.8.0\_192Sdfsd
      6. Click OK
   3. Set JDK bin path
      1. Find location of JDK bin in machine. Example below:
         1. C:\Program Files\Java\jdk1.8.0\_192\bin
      2. Right click this PC and select Properties
      3. Selected Advanced system settings
      4. Selected Environment Variables
      5. Find Path variable from second scroll list and double click
      6. Click new to add new variable to list
      7. Add JDK path to blue highlighted
      8. Click OK
2. Download Android STUDIO from link below:
   1. Google Android SDK install and download starting from link below:
      1. https://developer.android.com/studio/
   2. Run android-studio-ide to run installer. File location example below:
      1. C:\Users\zzmar\_000\Downloads
   3. Run studio.exe to install SDK. File location example below:
      1. C:\Program Files\Android\Android Studio\bin
3. Set Android SDK path
   1. Find location of SDK in machine. Example below:
      1. C:\Users\zzmar\_000\AppData\Local\Android\Sdk
   2. Right click this PC and select Properties
   3. Select Advanced system settings
   4. Selected Environment Variables
   5. Click 2nd OK to create new path. Example below:
      1. Variable name = ANDROID\_HOME
      2. Variable value = C:\Users\zzmar\_000\AppData\Local\Android\Sdk
   6. Click OK
4. Set Android SDK tools path
   1. Find location of SDK tools in machine. Example below:
      * 1. C:\Users\zzmar\_000\AppData\Local\Android\Sdk\tools
   2. Right click this PC and select Properties
   3. Select Advance system settings
   4. Select Environment Variables
   5. Find “Path” variable from second scroll list and double click
   6. Click new to add new variable to list
   7. Add SDK tools path to blue highlighted
   8. Click OK
5. Set Android SDK tools bin path
   1. Find location of SDK tools bin in machine. Example below:
      1. C:\Users\zzmar\_000\AppData\Local\Android\Sdk\tools\bin
   2. Right click this PC and select Properties
   3. Select Advanced system settings
   4. Select Environment Variables
   5. Find “Path” variable from second scroll list and double click
   6. Click new to add new variable to list
   7. Add SDK tools bin path to blue highlighted
   8. Click OK
6. Set Android SDK platform-tools path
   1. Find location of SDK platform-tools in machine. Example below:
      1. C:\Users\zzmar\_000\AppData\Local\Android\Sdk\platform-tools
   2. Right click this PC and select Properties
   3. Select Advanced system settings
   4. Select Environment Variables
   5. Find “Path” variable from second scroll list and double click
   6. Click new to add new variable to list
   7. Add SDK platform-tools path to blue highlighted
   8. Click OK
7. Open Android Studio and configure virtual device/emulator
   1. Open Android Studio. File path example below:
      1. C:\Program Files\Android\Android Studio\bin\studio64.exe
   2. Click Start a new Android Studio project
   3. Click Next
   4. Click Next
   5. Click Next
   6. Click Next
   7. Click Finish
   8. Once Android Studio is open, on the top navigation, click Tools
   9. Click AVD Manager from dropdown
   10. Click + Create Virtual Device
   11. Select preferred device to test on, then click Next
   12. Download any Android version which has not been downloaded
   13. Click Next
   14. Click Finish
8. Open emulator and check if it is working
   1. Get file path of Android SDK platform-tools. Example below:
      1. C:\Users\zzmar\_000\AppData\Local\Android\Sdk\platform-tools
   2. In terminal, direct to Android SDK platform-tools
   3. Open specific emulator through terminal. Enter the following:
      1. emulator –avd NAME\_OF\_EMULATOR
9. Download Node.js and Set Node\_Home Environment Variable path
   1. Google download Node.js. Use below link
      1. <https://nodejs.org/en/download/>
   2. Click install based on machine and bits used
   3. Set nodejs path
      1. Find location of nodejs directory on machine. Example below:
         1. C:\Program Files\nodejs
      2. Right click This PC
      3. Select Advanced system settings
      4. Select Environment variables
      5. Click 2nd OK to create a new path. Example below:
         1. Variable name = NODE\_HOME
         2. Variable value = C:\Program Files\nodejs
      6. Click OK
10. Set npm environment variable path
    1. Set nodejs node\_modules npm bin path
       1. Find location of nodejs node\_modules npm bin in machine. Example below:
          1. C:\Program Files\nodejs\node\_modules\npm\bin
       2. Right click this PC and select Properties
       3. Select Advanced system settings
       4. Select Environment Variables
       5. Find “Path” variable from second scroll list and double click
       6. Click new to add new variable to list
       7. Add nodejs node\_modules npm bin path to blue highlighted
       8. Click OK
    2. Set nodejs path
       1. Find location of nodejs bin in machine. Example below:
          1. C:\Program Files\nodejs
       2. Right click this PC and select Properties
       3. Select Advanced system settings
       4. Select Environment Variables
       5. Find “Path” variable from second scroll list and double click
       6. Click new to add new variable to list
       7. Add nodejs path to blue highlighted
       8. Click OK
11. Download Appium server from Node via npm
    1. In terminal, enter the following
       1. npm install –g appium
    2. To start server, run the following in terminal
       1. appium
12. Download Appium Java client library
    1. Google download appium. Use below link:
       1. <http://appium.io/downloads.html>
    2. Select java option from website which will redirect to searc.maven.org
    3. Under Download dropdown, select jar to download
13. Install Selenium Java client
    1. Google seleniumhq. Use below link:
       1. <https://www.seleniumhq.org/download/>
    2. Under Selenium Client & WebDriver Language Bindings, click Download for Java
    3. Unzip selenium-java-VERSION.zip
14. Eclipse:
    1. Install Eclipse
       1. Google install eclipse. Use below link to install IDE:
          1. https://www.eclipse.org/downloads/packages/
    2. Create a project in Eclipse
       1. Open Eclipse
       2. Click Workbench
       3. Right click with in Project Explorer tab body
       4. Hover over New
       5. Click Project
       6. Select Java
       7. Select Java Project
       8. Enter Project name
       9. Open project with in Package Explorer tab body
       10. Right click src
       11. Hover new
       12. Select class
       13. Name class
       14. Select public static void main(String[] args) checkbox
       15. Click Finish
    3. Configure Appium libraries
       1. Add Appium jar file to Eclipse project(test suite)
          1. Right click project name
          2. Select Properties
          3. Select Java Build Path
          4. Click Add External JARs
          5. Select the java-cliet-VERSION.jar
          6. Click Apply and Close
    4. Configure Selenium jar files
       1. Right click project name
       2. Select Properties
       3. Select Java Build Path
       4. Click Add External JARs
       5. Select selenium-java-VERSION
       6. Select all jar files within this directory
       7. Click Apply and Close
       8. Make sure to get the jar files within the libs directory as well
15. Start Appium server
    1. To start server, run the following in terminal
       1. appium