**Preconditions (Set up Step) – One Time Activity**

1) Java Installed with Path variable set

a. In the machine search for Edit environment variables and Search for Path variable

b. In Path variable define the Java path (C:\Program Files\Java\jdk-11\bin)

c. Update the location of java in path variable

2) Android Studio installed with 3 Path variables

a. Make sure SDK is installed in the android either (8.1 or 9)

3) Eclipse Editor

4) Setting up path variable

a. JAVA\_HOME - C:\Program Files\Java\jdk-11\

**b.** ANDROID\_HOME - **C:\Users\harish.pandalangatt\AppData\Local\Android\Sdk**

c. Set the location for SDK, platform tools

i. C:\Users\harish.pandalangatt\AppData\Local\Android\Sdk

ii. C:\Users\harish.pandalangatt\AppData\Local\Android\Sdk\platform-tools

iii. C:\Users\harish.pandalangatt\AppData\Local\Android\Sdk\tools\bin

5) Install Node js in the machine - https://nodejs.org/en/download/package-manager

6) Install Appium (npm install -g appium)

7) Create a new device in Android studio to execute the Appium scripts

a. In Android studio – Click on Device Manager

b. Click on Create Device

c. Select any device Ex: Pixel XL

d. Select the Android version

e. Click on Finish

8) Install the driver for Appium, for Android uiautomator2, and for iOS xcuitest

Command: appium driver install uiautomator2

9) Two ways we can start the appium server

1) appium -> Enter

2) appium –allow-cors

Cors (Cross origin resource sharing)

\*\*Need to give ctrl +c to stop the server\*\*\*

10) Install Appium inspector -<https://github.com/appium/appium-inspector/releases>

[Appium-Inspector-windows-2024.3.1-x64.exe](https://github.com/appium/appium-inspector/releases/download/v2024.3.1/Appium-Inspector-windows-2024.3.1-x64.exe)

**Verification Steps**

1) To check appium version – appium –version

2) To check if the devices are connected and running – adb devices in cmd

3) appium driver list (To check if the appropriate driver is installed)

**Steps for creating a project and dependency:**

Step 1) Create a new Java Project (Provide project Name, uncheck the module-info file)

Step 2) Convert the java project into a Maven Project

Right click on the project ->Configure ->Convert to Maven Project

Step 3) Add the appium dependency

<!-- https://mvnrepository.com/artifact/io.appium/java-client -->

<dependency>

<groupId>io.appium</groupId>

<artifactId>java-client</artifactId>

<version>9.2.3</version>

</dependency>

Types of Mobile Applications

1) Native App –

a. Android Amazon App (Play store)

b. Amazon App iOS (App Store)

2) Web Apps

a. Apps or applications which can be opened in a browser( Chrome – Android, Safari – iOS)

3) Hybrid Apps – It has the UI of the native apps but the platform is developed based on the web technology (cordova or ionic)

\*\*Use API Demo App for testing\*\*\*

<https://github.com/appium/appium/blob/master/packages/appium/sample-code/apps/ApiDemos-debug.apk>

**Steps to establish the connection between the inspector and device (emulator)**

**The following attributes has to be given before starting the connection**

**1)** **Remote host (127.0.0.1)**

**2)** **Remote port (4723)**

**3)** **Remote path (/)**

**Define the capabilities in the caps builder**

**{**

**"appium:automationName": "UiAutomator2",**

**"appium:platformName": "Android",**

**"appium:platformVersion": "14",**

**"appium:deviceName": "emulator-5554"**

**}**

**Universal Relattive xpath**

**//Tagname[@attribute = ‘value’]**

Program 1:

**package** com.appiumtestcases;

**import** io.appium.java\_client.AppiumDriver;

**import** io.appium.java\_client.remote.options.BaseOptions;

**import** java.net.MalformedURLException;

**import** java.net.URL;

**public** **class** BasicInteractions {

**public** **static** AppiumDriver *driver*;

**public** **static** **void** main(String args[]) **throws** MalformedURLException

{

BaseOptions options = **new** BaseOptions();

options.setPlatformName("Android");

options.setAutomationName("UiAutomator2");

options.amend("deviceName", "emulator-5554");

options.amend("platformVersion", "14");

*driver* = **new** AppiumDriver(**new** URL("http://127.0.0.1:4723"),options);

}

}