**Driver Methods**

1. **Unlock Phone**

This driver method will help us to unlock our Mobile phone

We have to use two extra capabilities

dc.setCapability("unlockType", "pin");

dc.setCapability("unlockKey", "15489666");

1. **Activate App**
2. **Install App**
3. **Open App in Background**
4. **Orientation**
5. **Open Notification**
6. **Hide Keyboard**
7. **Context Handle**

Ex –

@Test

**public** **void** appInstalled() **throws** Throwable

{

//Starting server Programatically

File f=**new** File("C://Users//SOUMYASANTA SAHOO//AppData//Roaming//npm//node\_modules//appium//build//lib//main.js");

AppiumDriverLocalService sb=**new** AppiumServiceBuilder()

.withAppiumJS(f)

.withIPAddress("127.0.0.1").usingPort(4723).withTimeout(Duration.*ofSeconds*(300)).build();

sb.start();

DesiredCapabilities dc=**new** DesiredCapabilities();

dc.setCapability(MobileCapabilityType.***PLATFORM\_NAME***, "Android");

dc.setCapability(MobileCapabilityType.***DEVICE\_NAME***, "Galaxy M30s");

dc.setCapability(MobileCapabilityType.***AUTOMATION\_NAME***, "UiAutomator2");

dc.setCapability(MobileCapabilityType.***UDID***, "RZ8M83ZJH2W");

dc.setCapability("appPackage", "com.androidsample.generalstore");

dc.setCapability("appActivity", ".SplashActivity");

dc.setCapability("noReset", **true**);

dc.setCapability("autoGrantPermission", **false**);

URL u=**new** URL("http://localhost:4723");

AndroidDriver driver = **new** AndroidDriver(u,dc);

driver.manage().timeouts().~~implicitlyWait~~(20, TimeUnit.***SECONDS***);

//To check app is installed or not

//System.out.println(driver.isAppInstalled("com.androidsample.generalstore"));

//Launches required app

//driver.activateApp("io.appium.android.apis");

//install application

//driver.installApp(null);

//To run app in Background

//driver.runAppInBackground(Duration.ofSeconds(15));

//To verify application is running in background or not

//System.out.println(driver.queryAppState("com.androidsample.generalstore"));

//To rotate screen orientation

//ScreenOrientation s=driver.getOrientation();

//driver.rotate(s.LANDSCAPE);

//Open Notification Bar

driver.openNotifications();

//context

//driver.context(null);

//driver.getContextHandles();

//driver.isDeviceLocked();

//driver.hideKeyboard();

}

**Context Handle**

Ex-

@Test

**public** **void** swithTest() **throws** Throwable

{

//Starting server Programatically

File f=**new** File("C://Users//SOUMYASANTA SAHOO//AppData//Roaming//npm//node\_modules//appium//build//lib//main.js");

AppiumDriverLocalService sb=**new** AppiumServiceBuilder()

.withAppiumJS(f)

.withIPAddress("127.0.0.1").usingPort(4723).withTimeout(Duration.*ofSeconds*(300)).build();

sb.start();

DesiredCapabilities dc=**new** DesiredCapabilities();

dc.setCapability(MobileCapabilityType.***PLATFORM\_NAME***, "Android");

dc.setCapability(MobileCapabilityType.***DEVICE\_NAME***, "Galaxy M30s");

dc.setCapability(MobileCapabilityType.***AUTOMATION\_NAME***, "UiAutomator2");

dc.setCapability(MobileCapabilityType.***UDID***, "RZ8M83ZJH2W");

dc.setCapability("appPackage", "com.androidsample.generalstore");

dc.setCapability("appActivity", ".SplashActivity");

URL u=**new** URL("http://localhost:4723");

AndroidDriver driver = **new** AndroidDriver(u,dc);

driver.manage().timeouts().~~implicitlyWait~~(20, TimeUnit.***SECONDS***);

driver.findElement(AppiumBy.*id*("com.androidsample.generalstore:id/spinnerCountry")).click();

Thread.*sleep*(4000);

driver.findElement(AppiumBy.*androidUIAutomator*("new UiScrollable(new UiSelector()).scrollIntoView(text(\"India\"));"));

driver.findElement(AppiumBy.*xpath*("//android.widget.TextView[@text='India']")).click();

driver.findElement(AppiumBy.*id*("com.androidsample.generalstore:id/nameField")).sendKeys("Soumya");

driver.findElement(AppiumBy.*id*("com.androidsample.generalstore:id/radioMale")).click();

driver.findElement(AppiumBy.*id*("com.androidsample.generalstore:id/btnLetsShop")).click();

driver.findElement(AppiumBy.*xpath*("(//android.widget.TextView[@text='ADD TO CART'])[1]")).click();

driver.findElement(AppiumBy.*id*("com.androidsample.generalstore:id/appbar\_btn\_cart")).click();

driver.findElement(AppiumBy.*id*("com.androidsample.generalstore:id/btnProceed")).click();

Set<String> contextHandles = driver.getContextHandles();

System.***out***.println(contextHandles.size());

**for**(String ch: contextHandles)

{

System.***out***.println(ch);

}

Thread.*sleep*(5000);

driver.context("WEBVIEW\_com.androidsample.generalstore");

// We have to use "appium --allow-insecure chromedriver\_autodownload" command if getting chrome driver not supported

driver.findElement(AppiumBy.*xpath*("//input[@name='q']")).senddKeys("selenium"+Keys.***ENTER***);

}

**Automating Web App**

For Automating web Apps we need two extra capabilities those are

dc.setCapability(MobileCapabilityType.***BROWSER\_NAME***, "chrome");

dc.setCapability("chromedriverExecutables", "C:\\Users\\SOUMYASANTA SAHOO\\Downloads\\Compressed\\chromedriver\_win32\\chromedriver.exe");

We need the second capabilities if we don’t have the latest chrome driver

Ex-

package MobileBrowser;

import java.io.File;

import java.net.MalformedURLException;

import java.net.URL;

import java.time.Duration;

import org.openqa.selenium.remote.DesiredCapabilities;

import org.testng.annotations.Test;

import io.appium.java\_client.android.AndroidDriver;

import io.appium.java\_client.remote.MobileCapabilityType;

import io.appium.java\_client.service.local.AppiumDriverLocalService;

import io.appium.java\_client.service.local.AppiumServiceBuilder;

public class mobileBrowserTest {

@Test

public void fbTest() throws Throwable

{

//Starting server Programatically

File f=new File("C://Users//SOUMYASANTA SAHOO//AppData//Roaming//npm//node\_modules//appium//build//lib//main.js");

AppiumDriverLocalService sb=new AppiumServiceBuilder()

.withAppiumJS(f)

.withIPAddress("127.0.0.1").usingPort(4723).withTimeout(Duration.ofSeconds(300)).build();

sb.start();

//// We have to use "appium --allow-insecure chromedriver\_autodownload" command if getting chrome driver not supported

DesiredCapabilities dc=new DesiredCapabilities();

dc.setCapability(MobileCapabilityType.PLATFORM\_NAME, "Android");

dc.setCapability(MobileCapabilityType.DEVICE\_NAME, "Galaxy M30s");

dc.setCapability(MobileCapabilityType.AUTOMATION\_NAME, "UiAutomator2");

dc.setCapability(MobileCapabilityType.UDID, "RZ8M83ZJH2W");

dc.setCapability(MobileCapabilityType.BROWSER\_NAME, "chrome");

dc.setCapability("chromedriverExecutables", "C:\\Users\\SOUMYASANTA SAHOO\\Downloads\\Compressed\\chromedriver\_win32\\chromedriver.exe");

URL u=new URL("http://localhost:4723");

AndroidDriver driver = new AndroidDriver(u,dc);

driver.get("https://www.facebook.com");

driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(20));

}

}

To inspect Web App we have to open chrome browser and we have to hit chrome://inspect