**MODULE\_9(APPIUM Testing)**

1) Write an Appium Program to connect with emulator and open APIdemo.app application on your emulator

import io.appium.java\_client.AppiumDriver;

import io.appium.java\_client.MobileElement;

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

import org.openqa.selenium.remote.DesiredCapabilities;

import java.net.URL;

public class AppiumEmulatorTest {

public static void main(String[] args) {

try {

// Set the Desired Capabilities

DesiredCapabilities caps = new DesiredCapabilities();

caps.setCapability("deviceName", "Android Emulator");

caps.setCapability("platformName", "Android");

caps.setCapability("platformVersion", "9.0"); // Android version on the emulator

caps.setCapability("appPackage", "com.example.android.apis");

caps.setCapability("appActivity", "com.example.android.apis.ApiDemos");

// Initialize the Appium Driver

URL appiumServerUrl = new URL("http://127.0.0.1:4723/wd/hub");

AppiumDriver<MobileElement> driver = new AndroidDriver<>(appiumServerUrl, caps);

// Perform actions with the driver

// E.g., check if the app opened successfully

// Close the driver

driver.quit();

} catch (Exception e) {

e.printStackTrace();

}

}

}

2) Write an Appium Program to connect with Realdevice and open APIdemo.app application on your realdevice.

import io.appium.java\_client.AppiumDriver;

import io.appium.java\_client.MobileElement;

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

import org.openqa.selenium.remote.DesiredCapabilities;

import java.net.URL;

public class AppiumRealDeviceTest {

public static void main(String[] args) {

try {

// Set the Desired Capabilities

DesiredCapabilities caps = new DesiredCapabilities();

caps.setCapability("deviceName", "MyAndroidDevice");

caps.setCapability("udid", "your\_device\_udid"); // Get the UDID using adb devices command

caps.setCapability("platformName", "Android");

caps.setCapability("platformVersion", "9.0"); // Android version on the real device

caps.setCapability("appPackage", "com.example.android.apis");

caps.setCapability("appActivity", "com.example.android.apis.ApiDemos");

// Initialize the Appium Driver

URL appiumServerUrl = new URL("http://127.0.0.1:4723/wd/hub");

AppiumDriver<MobileElement> driver = new AndroidDriver<>(appiumServerUrl, caps);

// Perform actions with the driver

// E.g., check if the app opened successfully

// Close the driver

driver.quit();

} catch (Exception e) {

e.printStackTrace();

}

}

}

3) Write an Appium Program to connect with emulator wit ecommerce based application using Generalstore.app to perform locators like name, dropdown etc.

import io.appium.java\_client.AppiumDriver;

import io.appium.java\_client.MobileElement;

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

import org.openqa.selenium.By;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.remote.DesiredCapabilities;

import java.net.URL;

public class GeneralStoreLocatorsTest {

public static void main(String[] args) {

try {

// Set the Desired Capabilities

DesiredCapabilities caps = new DesiredCapabilities();

caps.setCapability("deviceName", "Android Emulator");

caps.setCapability("platformName", "Android");

caps.setCapability("platformVersion", "9.0"); // Android version on the emulator

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

caps.setCapability("appActivity", "com.androidsample.generalstore.MainActivity");

// Initialize the Appium Driver

URL appiumServerUrl = new URL("http://127.0.0.1:4723/wd/hub");

AppiumDriver<MobileElement> driver = new AndroidDriver<>(appiumServerUrl, caps);

// Perform actions with locators

WebElement nameField = driver.findElement(By.id("com.androidsample.generalstore:id/nameField"));

nameField.sendKeys("John Doe");

WebElement genderDropdown = driver.findElement(By.id("com.androidsample.generalstore:id/radioFemale"));

genderDropdown.click();

WebElement countryDropdown = driver.findElement(By.id("com.androidsample.generalstore:id/spinnerCountry"));

countryDropdown.click();

driver.findElement(By.xpath("//android.widget.TextView[@text='Argentina']")).click();

// Close the driver

driver.quit();

} catch (Exception e) {

e.printStackTrace();

}

}

}

4) Write an Appium Program to connect with emulator wit ecommerce based application using Generalstore.app to perform swipe demo to swipe the menu.

import io.appium.java\_client.AppiumDriver;

import io.appium.java\_client.MobileElement;

import io.appium.java\_client.TouchAction;

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

import io.appium.java\_client.touch.WaitOptions;

import io.appium.java\_client.touch.offset.PointOption;

import org.openqa.selenium.remote.DesiredCapabilities;

import java.net.URL;

import java.time.Duration;

public class GeneralStoreSwipeTest {

public static void main(String[] args) {

try {

// Set the Desired Capabilities

DesiredCapabilities caps = new DesiredCapabilities();

caps.setCapability("deviceName", "Android Emulator");

caps.setCapability("platformName", "Android");

caps.setCapability("platformVersion", "9.0"); // Android version on the emulator

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

caps.setCapability("appActivity", "com.androidsample.generalstore.MainActivity");

// Initialize the Appium Driver

URL appiumServerUrl = new URL("http://127.0.0.1:4723/wd/hub");

AppiumDriver<MobileElement> driver = new AndroidDriver<>(appiumServerUrl, caps);

// Perform swipe action

TouchAction swipe = new TouchAction(driver)

.press(PointOption.point(500, 1500))

.waitAction(WaitOptions.waitOptions(Duration.ofSeconds(1)))

.moveTo(PointOption.point(500, 500))

.release();

swipe.perform();

// Close the driver

driver.quit();

} catch (Exception e) {

e.printStackTrace();

}

}

}

5) Write an Appium Program to connect with realdevice using APIDemo.app to perform longpress to open to side menu.

import io.appium.java\_client.AppiumDriver;

import io.appium.java\_client.MobileElement;

import io.appium.java\_client.TouchAction;

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

import io.appium.java\_client.touch.LongPressOptions;

import org.openqa.selenium.By;

import org.openqa.selenium.remote.DesiredCapabilities;

import java.net.URL;

import java.time.Duration;

public class ApiDemoLongPressTest {

public static void main(String[] args) {

try {

// Set the Desired Capabilities

DesiredCapabilities caps = new DesiredCapabilities();

caps.setCapability("deviceName", "MyAndroidDevice");

caps.setCapability("udid", "your\_device\_udid"); // Get the UDID using adb devices command

caps.setCapability("platformName", "Android");

caps.setCapability("platformVersion", "9.0"); // Android version on the real device

caps.setCapability("appPackage", "com.example.android.apis");

caps.setCapability("appActivity", "com.example.android.apis.ApiDemos");

// Initialize the Appium Driver

URL appiumServerUrl = new URL("http://127.0.0.1:4723/wd/hub");

AppiumDriver<MobileElement> driver = new AndroidDriver<>(appiumServerUrl, caps);

// Perform long press action

MobileElement element = driver.findElement(By.id("com.example.android.apis:id/someElementID"));

TouchAction longPress = new TouchAction(driver)

.longPress(LongPressOptions.longPressOptions()

.withElement(PointOption.element(element))

.withDuration(Duration.ofSeconds(2)))

.release();

longPress.perform();

// Close the driver

driver.quit();

} catch (Exception e) {

e.printStackTrace();

}

}

}

6) Write an Appium Program to connect with realdevice using APIDemo.app to perform scrolling the all option.

import io.appium.java\_client.AppiumDriver;

import io.appium.java\_client.MobileElement;

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

import io.appium.java\_client.touch.WaitOptions;

import io.appium.java\_client.touch.offset.PointOption;

import org.openqa.selenium.remote.DesiredCapabilities;

import io.appium.java\_client.TouchAction;

import java.net.URL;

import java.time.Duration;

public class ApiDemoScrollTest {

public static void main(String[] args) {

try {

// Set the Desired Capabilities

DesiredCapabilities caps = new DesiredCapabilities();

caps.setCapability("deviceName", "MyAndroidDevice");

caps.setCapability("udid", "your\_device\_udid"); // Get the UDID using adb devices command

caps.setCapability("platformName", "Android");

caps.setCapability("platformVersion", "9.0"); // Android version on the real device

caps.setCapability("appPackage", "com.example.android.apis");

caps.setCapability("appActivity", "com.example.android.apis.ApiDemos");

// Initialize the Appium Driver

URL appiumServerUrl = new URL("http://127.0.0.1:4723/wd/hub");

AppiumDriver<MobileElement> driver = new AndroidDriver<>(appiumServerUrl, caps);

// Perform scroll action

TouchAction scroll = new TouchAction(driver)

.press(PointOption.point(500, 1500))

.waitAction(WaitOptions.waitOptions(Duration.ofSeconds(1)))

.moveTo(PointOption.point(500, 500))

.release();

scroll.perform();

// Close the driver

driver.quit();

} catch (Exception e) {

e.printStackTrace();

}

}

}

7) Write an Appium Program to connect with realdevice using APIDemo.app to open the calculator and calculate all the operation like (addition, substraction, multiplication, division).

import io.appium.java\_client.AppiumDriver;

import io.appium.java\_client.MobileElement;

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

import org.openqa.selenium.By;

import org.openqa.selenium.remote.DesiredCapabilities;

import java.net.URL;

public class ApiDemoCalculatorTest {

public static void main(String[] args) {

try {

// Set the Desired Capabilities

DesiredCapabilities caps = new DesiredCapabilities();

caps.setCapability("deviceName", "MyAndroidDevice");

caps.setCapability("udid", "your\_device\_udid"); // Get the UDID using adb devices command

caps.setCapability("platformName", "Android");

caps.setCapability("platformVersion", "9.0"); // Android version on the real device

caps.setCapability("appPackage", "com.android.calculator2");

caps.setCapability("appActivity", "com.android.calculator2.Calculator");

// Initialize the Appium Driver

URL appiumServerUrl = new URL("http://127.0.0.1:4723/wd/hub");

AppiumDriver<MobileElement> driver = new AndroidDriver<>(appiumServerUrl, caps);

// Perform calculator operations

driver.findElement(By.id("digit\_7")).click();

driver.findElement(By.id("op\_add")).click();

driver.findElement(By.id("digit\_3")).click();

driver.findElement(By.id("eq")).click();

// Addition result: 10

driver.findElement(By.id("digit\_9")).click();

driver.findElement(By.id("op\_sub")).click();

driver.findElement(By.id("digit\_2")).click();

driver.findElement(By.id("eq")).click();

// Subtraction result: 7

driver.findElement(By.id("digit\_5")).click();

driver.findElement(By.id("op\_mul")).click();

driver.findElement(By.id("digit\_6")).click();

driver.findElement(By.id("eq")).click();

// Multiplication result: 30

driver.findElement(By.id("digit\_8")).click();

driver.findElement(By.id("op\_div")).click();

driver.findElement(By.id("digit\_4")).click();

driver.findElement(By.id("eq")).click();

// Division result: