**BrowserStack**

* BrowserStack is a testing platform to test the websites & mobile Application.
* We can test a web application in multiple browser & mobile application in all the mobile devices without any real devices.
* BrowserStack is one of the cloud based tool used to do the cross-browser testing with the most accurate results.

**Configuring BrowserStack**

* Search BrowserStack on Google & open it.
* Login using valid credentials.
* Go to DashBoard & copy the username & access Key & save it for future use.
* We can explore various device like Windows, Android & iOS in Live & AppLive module of BrowserStack.
* We can inspect a particular element in virtual device.

**Automating Selenium Script in BrowserStack**

**public** **class** SeleniumBrowserStack {

**public** **static** **final** String ***UserName***="soumyasantasahoo\_0EBiCu";

**public** **static** **final** String ***AutomateKey***="2fRdT5HFxg3SqsAtH79q";

**public** **static** **final** String ***URL***= "https://"+***UserName***+":"+***AutomateKey***+"@hub-cloud.browserstack.com/wd/hub";

@Test

**public** **void** seleniumBrowserStack() **throws** Throwable

{

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

dc.setCapability("os", "Windows");

dc.setCapability("os\_version", "11");

dc.setCapability("browser", "chrome");

dc.setCapability("browser\_version", "114");

dc.setCapability("name", "Soumya-BrowserStack");

WebDriver driver=**new** RemoteWebDriver(**new** URL(***URL***),dc);

driver.manage().window().maximize();

driver.get("https://google.com");

driver.findElement(By.*name*("q")).sendKeys("Appium"+Keys.***ENTER***);

System.***out***.println(driver.getTitle());

Thread.*sleep*(3000);

driver.quit();

}

}

**Automating Mobile Browser Using BrowserStack**

**public** **class** AppiumBrowserStack {

WebDriver driver;

**public** **static** **final** String ***UserName***="soumyasantasahoo\_0EBiCu";

**public** **static** **final** String ***AutomateKey***="2fRdT5HFxg3SqsAtH79q";

**public** **static** **final** String ***URL***= "https://"+***UserName***+":"+***AutomateKey***+"@hub-cloud.browserstack.com/wd/hub";

@BeforeTest

**public** **void** setUp() **throws** Throwable

{

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

dc.setCapability(MobileCapabilityType.***DEVICE\_NAME***, "Google Pixel 7");

dc.setCapability(MobileCapabilityType.***BROWSER\_NAME***, MobileBrowserType.***CHROME***);

dc.setCapability("build", "chrome Browser Script");

dc.setCapability("name", "Soumya-Appium-BrowserStack");

driver=**new** RemoteWebDriver(**new** URL(***URL***),dc);

}

@Test

**public** **void** launchChromeinDevice()

{

driver.manage().window().maximize();

driver.manage().timeouts().implicitlyWait(Duration.*ofSeconds*(30));

driver.get("https://google.com");

driver.findElement(By.*name*("q")).sendKeys("Appium"+Keys.***ENTER***);

System.***out***.println(driver.getTitle());

}

@AfterTest

**public** **void** tearDown()

{

driver.quit();

}

}

**Automating Mobile Applications using BrowserStack**

* For Automating Mobile application through browserstack we need to upload the Mobile app in BrowserStack using below command

curl -u “UserName:AccessKey” -X POST <https://api-cloud.browserstack.com/app-automate/upload> -F “file=@path to url .apk file”

* After using the command we will get app url for BrowserStack and we have to use that particular url in our code.

**public** **class** AppiumBrowserStack2 {

**public** **static** **final** String ***UserName***="soumyasantasahoo\_0EBiCu";

**public** **static** **final** String ***AutomateKey***="2fRdT5HFxg3SqsAtH79q";

**public** **static** **final** String ***URL***= "https://"+***UserName***+":"+***AutomateKey***+"@hub-cloud.browserstack.com/wd/hub";

@Test

**public** **void** setUp() **throws** Throwable

{

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

dc.setCapability(MobileCapabilityType.***DEVICE\_NAME***, "Samsung Galaxy S21");

dc.setCapability("os\_version", "11.0");

dc.setCapability("Project", "API Demo app Automation");

dc.setCapability("build", "Real Device Script");

dc.setCapability("name", "Appium-BrowserStack");

dc.setCapability("app", "bs://2b956d6d1a6351aa69de8c0effa0d92b683e2fc7");

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

Thread.*sleep*(3000);

driver.quit();

}

}

* We can inspect any particular mobile element using Appium inspector but we have to configure BrowserStack in Appium Inspector.

**public** **class** AppiumBrowserStack3 {

**public** **static** **final** String ***UserName***="soumyasantasahoo\_0EBiCu";

**public** **static** **final** String ***AutomateKey***="2fRdT5HFxg3SqsAtH79q";

**public** **static** **final** String ***URL***= "https://"+***UserName***+":"+***AutomateKey***+"@hub-cloud.browserstack.com/wd/hub";

AndroidDriver driver;

@BeforeTest

**public** **void** setUp() **throws** Throwable

{

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

dc.setCapability(MobileCapabilityType.***DEVICE\_NAME***, "Samsung Galaxy S21");

dc.setCapability("os\_version", "11.0");

dc.setCapability("Project", "API Demo app Automation");

dc.setCapability("build", "Real Device Script");

dc.setCapability("name", "Appium-BrowserStack");

dc.setCapability("app", "bs://2b956d6d1a6351aa69de8c0effa0d92b683e2fc7");

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

}

@Test

**public** **void** apiDemoAutomate()

{

driver.findElement(AppiumBy.*accessibilityId*("Views")).click();

}

@AfterTest

**public** **void** tearDown() **throws** Throwable

{

Thread.*sleep*(3000);

driver.quit();

}

}