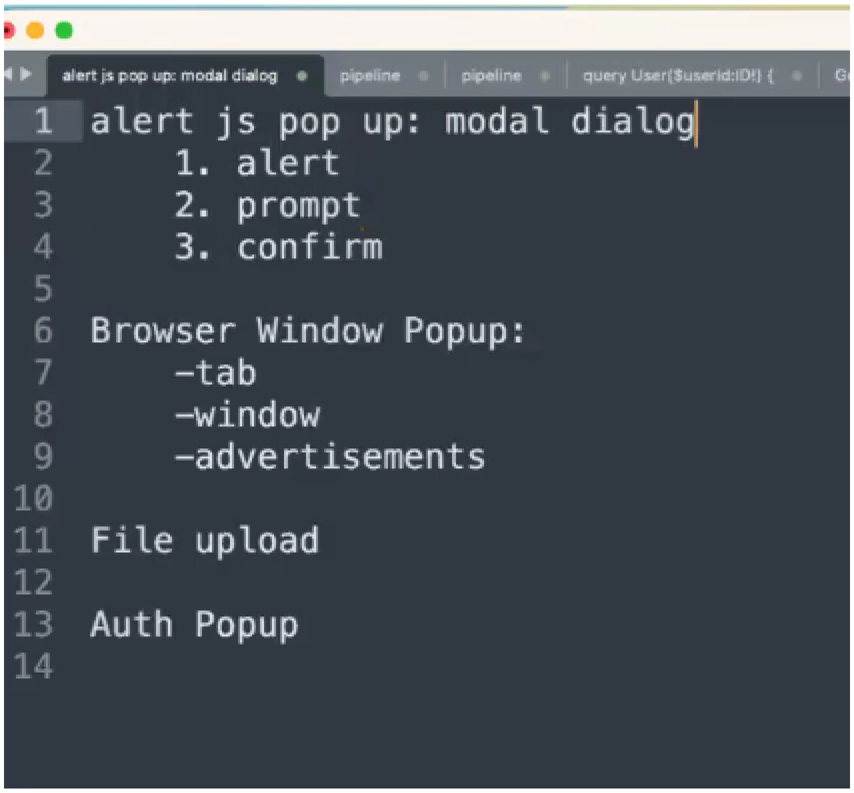
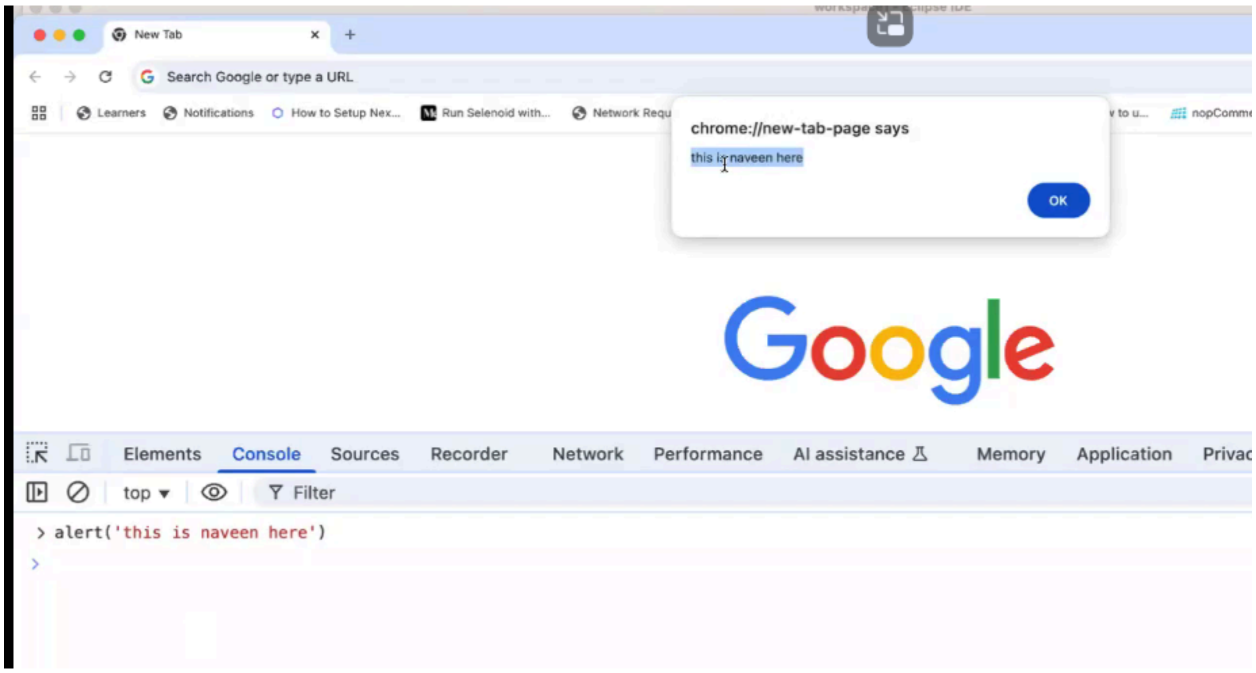


```
alert js pop up: modal dialog
        1. alert
        2. prompt
        3. confirm

Browser Window Popup:
        -tab
        -window
        -advertisements

File upload

Auth Popup

```

Js pop up-



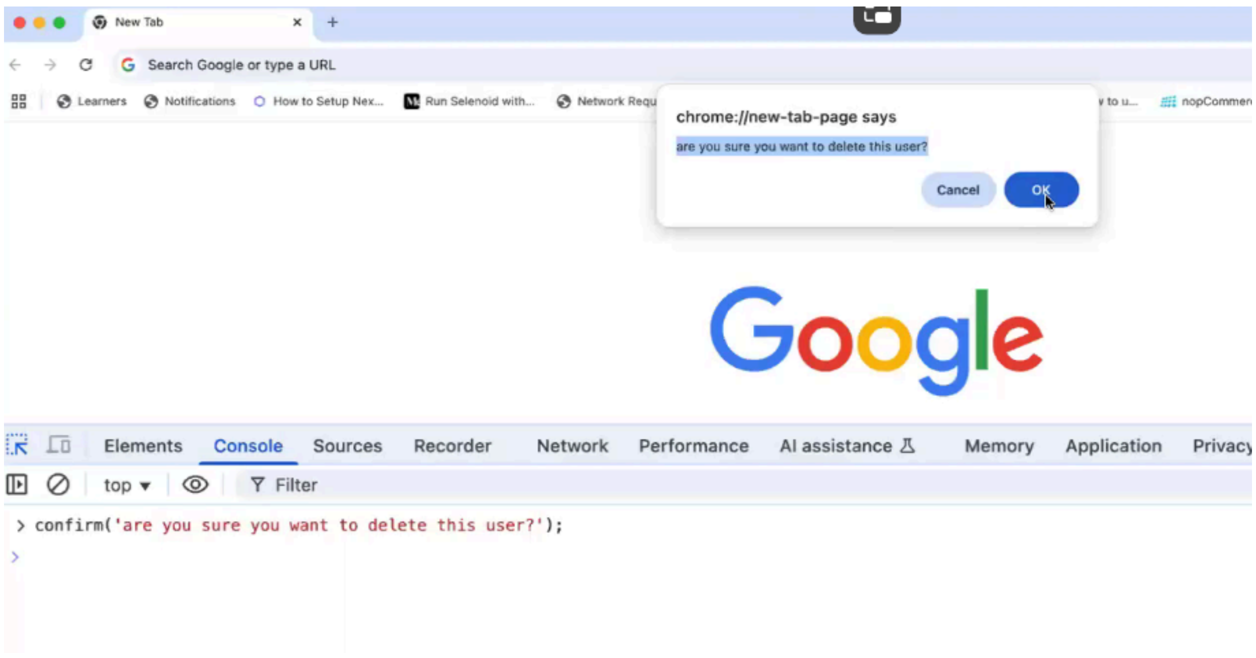
chrome://new-tab-page says

this is naveen here

```
> alert('this is naveen here')
>
```

Js pop up are not web elements, cant inspect the pop up. Cant use selenium with this.

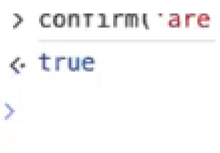
Confirm pop up-



are you sure you want to delete this user?

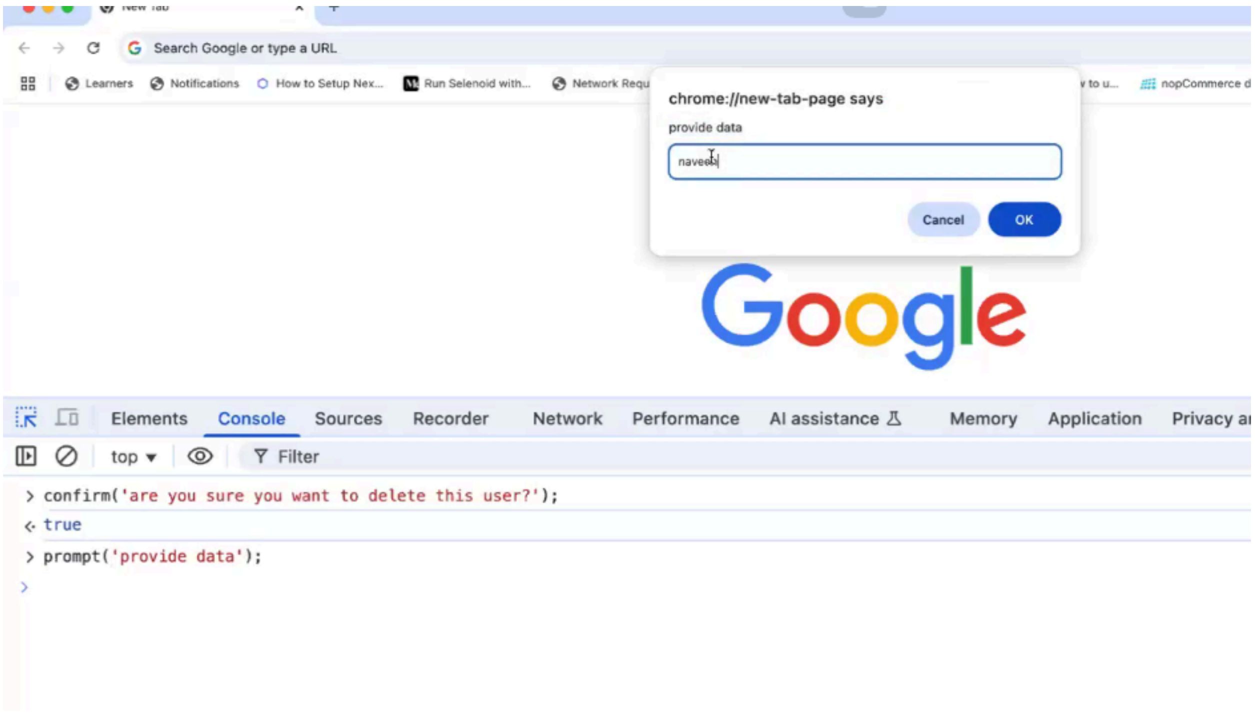
```
> confirm('are you sure you want to delete this user?');
>
```

Click ok and we get true in console.
Cancel will give false in console.



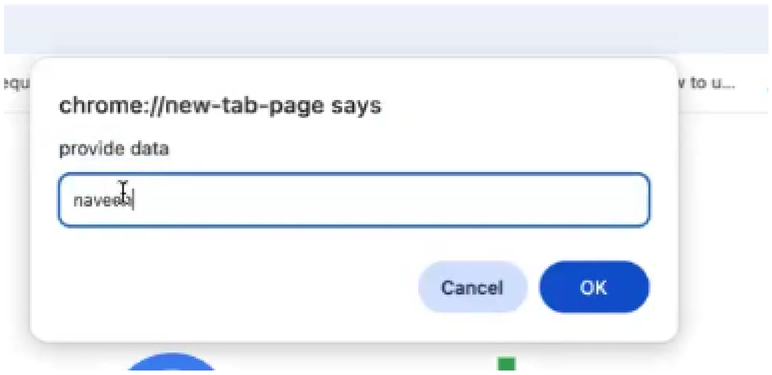
```
> confirm('are
<· true
>
```

Prompt-

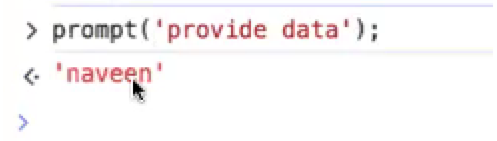


```
> confirm('are you sure you want to delete this user?');
<· true
> prompt('provide data');
>
```

write something

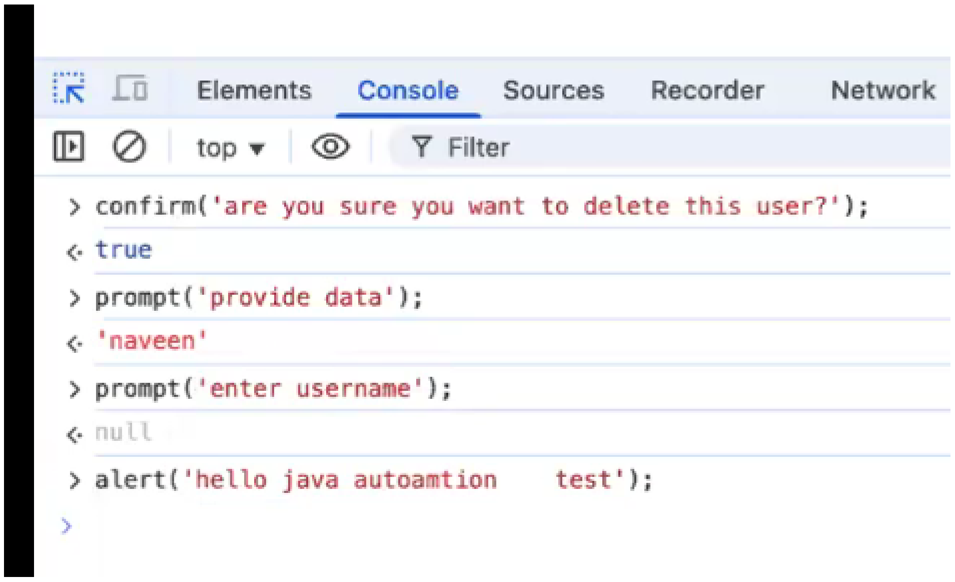


Click ok

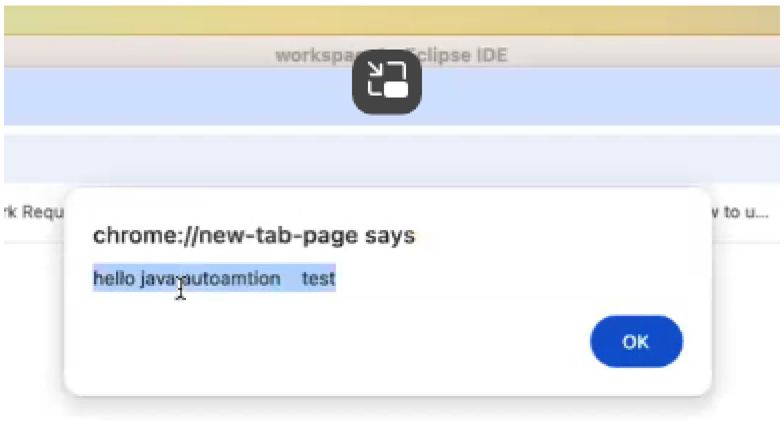


```
> prompt('provide data');
<· 'naveen'
>
```

Alert pop up-



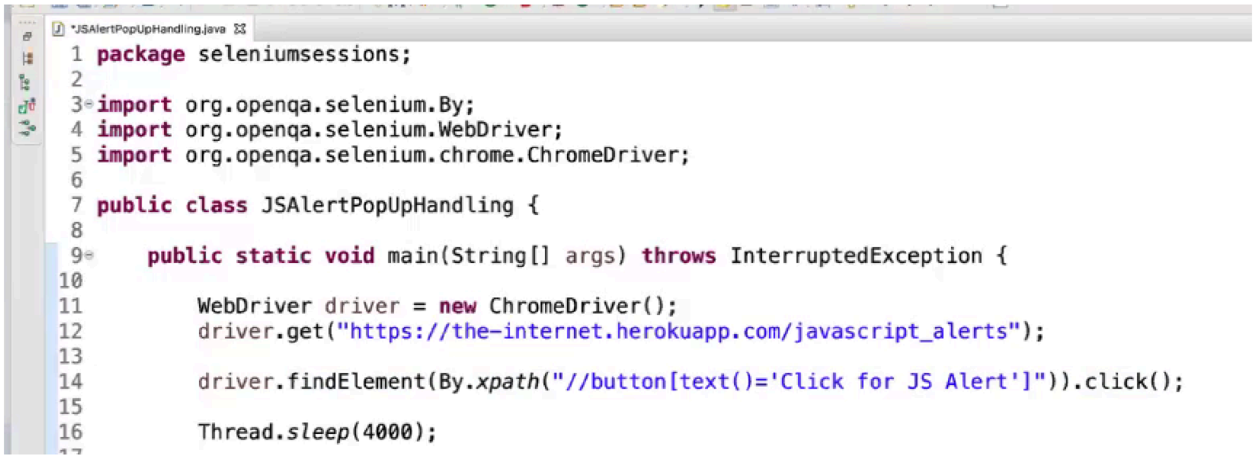
```
> confirm('are you sure you want to delete this user?');
<· true
> prompt('provide data');
<· 'naveen'
> prompt('enter username');
<· null
> alert('hello java autoamtion    test');
>
```



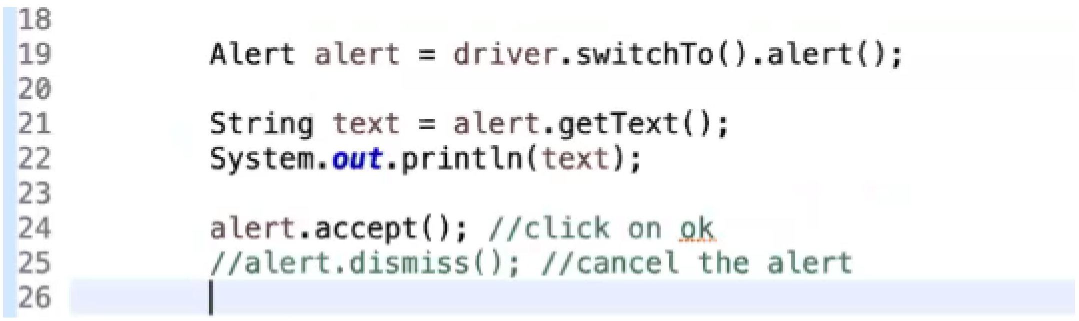
chrome://new-tab-page says

hello java autoamtion   test

Click js alert-
Alert method - switch to the current alert which is opened in the browser. Returns alert interface.
Modal dialog and js pop up is same thing.
Switch to returns target locator.
Accept returns void. Dismiss returns void.
Get the text of pop up and print it.

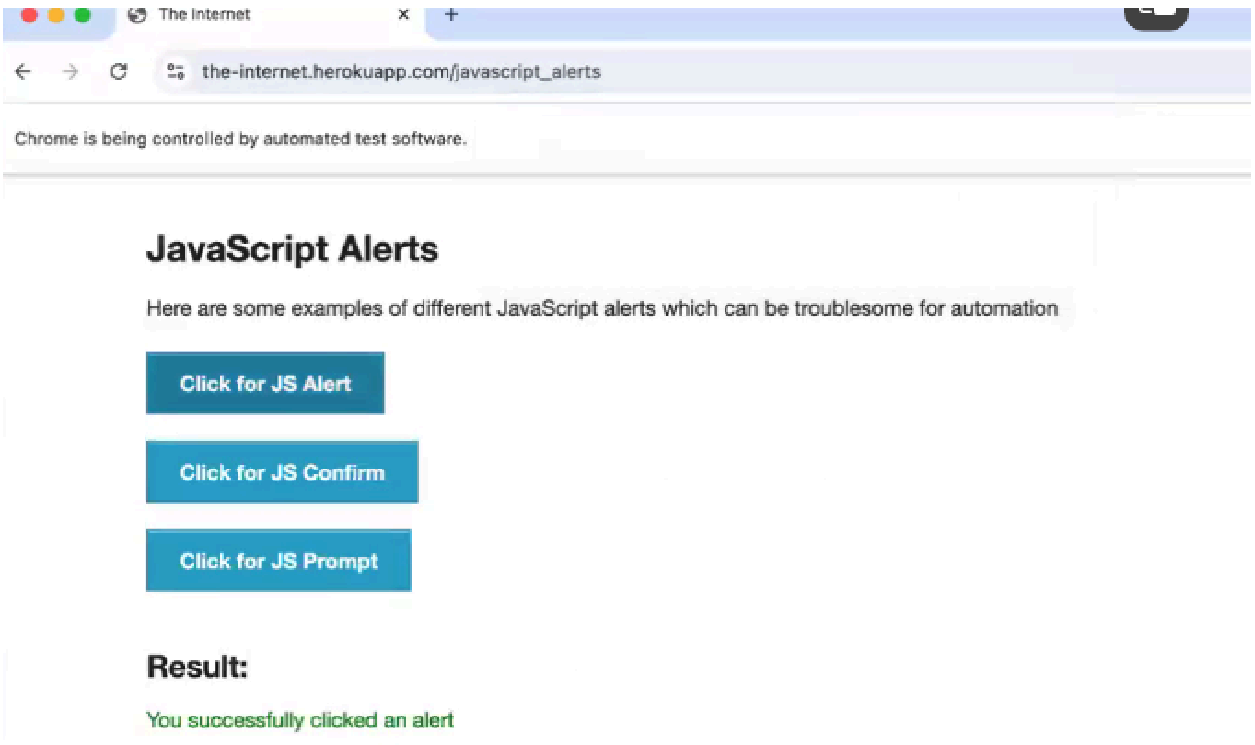


```
package seleniumsessions;

import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;

public class JSAlertPopUpHandling {

    public static void main(String[] args) throws InterruptedException {

        WebDriver driver = new ChromeDriver();
        driver.get("https://the-internet.herokuapp.com/javascript_alerts");

        driver.findElement(By.xpath("//button[text()='Click for JS Alert']")).click();

        Thread.sleep(4000);
```



```
        Alert alert = driver.switchTo().alert();

        String text = alert.getText();
        System.out.println(text);

        alert.accept(); //click on ok
        //alert.dismiss(); //cancel the alert
```

Clicked ok on alert.



The Internet
the-internet.herokuapp.com/javascript_alerts
Chrome is being controlled by automated test software.

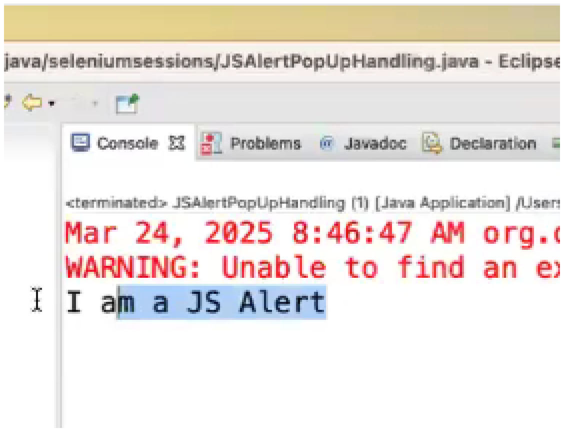
JavaScript Alerts

Here are some examples of different JavaScript alerts which can be troublesome for automation

Click for JS Alert
Click for JS Confirm
Click for JS Prompt

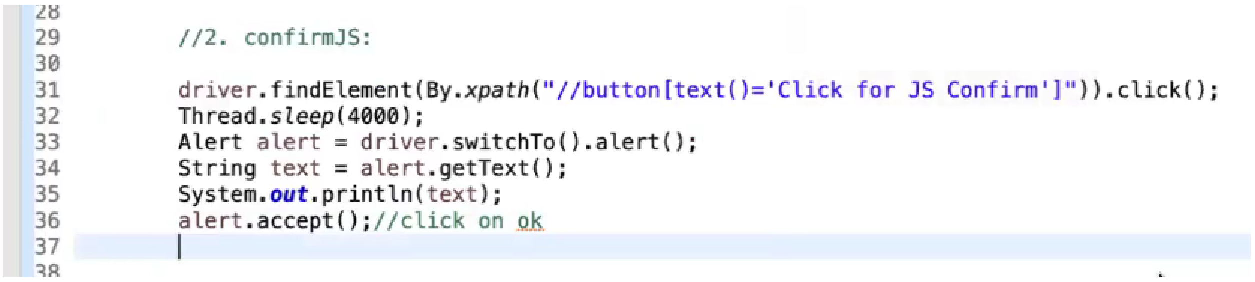
Result:

You successfully clicked an alert

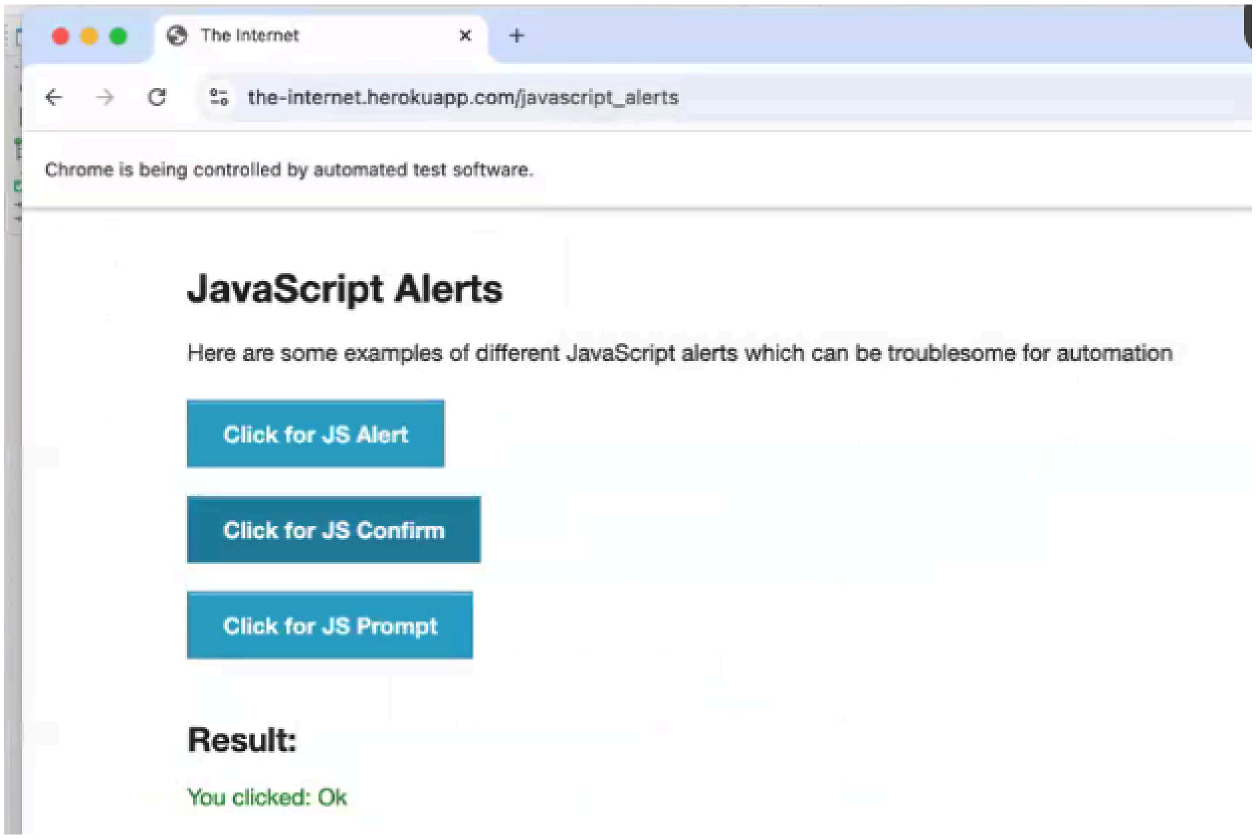


```
<terminated> JSAlertPopUpHandling (1) [Java Application] /Users
Mar 24, 2025 8:46:47 AM org.
WARNING: Unable to find an e
I am a JS Alert
```

Confirm pop up-



```
        //2. confirmJS:

        driver.findElement(By.xpath("//button[text()='Click for JS Confirm']")).click();
        Thread.sleep(4000);
        Alert alert = driver.switchTo().alert();
        String text = alert.getText();
        System.out.println(text);
        alert.accept();//click on ok

```


The Internet
the-internet.herokuapp.com/javascript_alerts
Chrome is being controlled by automated test software.

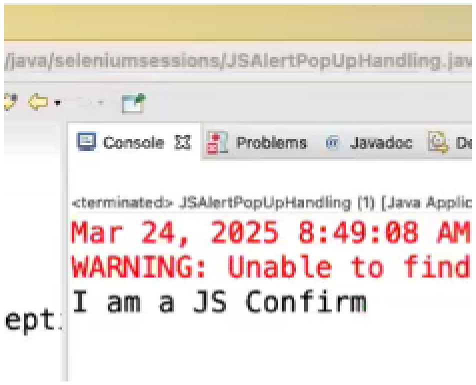
JavaScript Alerts

Here are some examples of different JavaScript alerts which can be troublesome for automation

Click for JS Alert
Click for JS Confirm
Click for JS Prompt

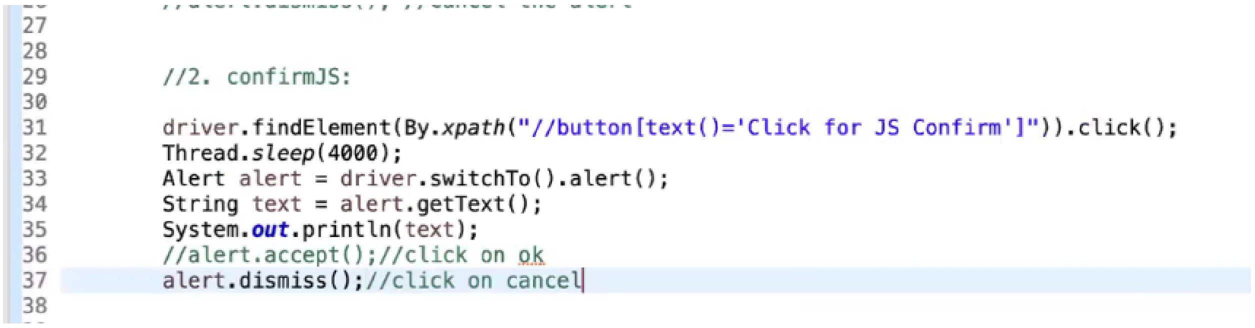
Result:

You clicked: Ok

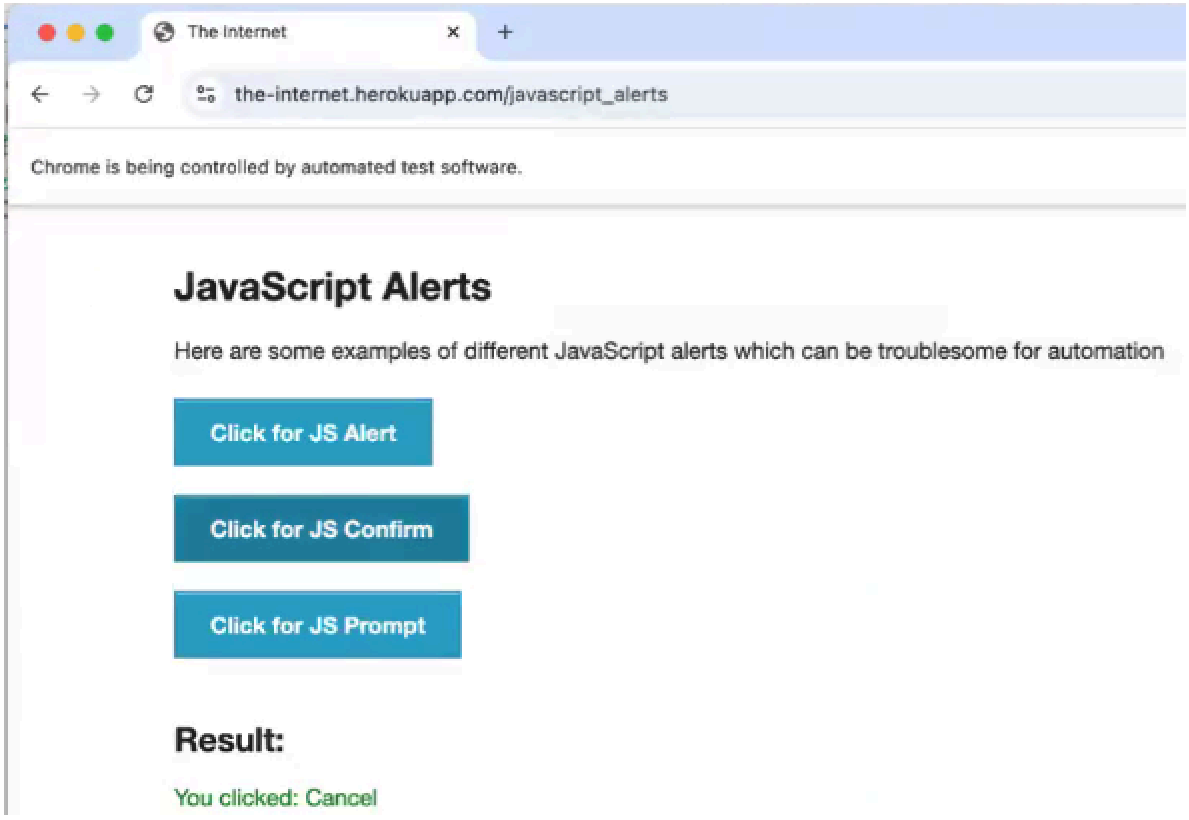


```
<terminated> JSAlertPopUpHandling (1) [Java Applic
Mar 24, 2025 8:49:08 AM
WARNING: Unable to find
I am a JS Confirm
```

Click cancel on confirm-



```
        //2. confirmJS:

        driver.findElement(By.xpath("//button[text()='Click for JS Confirm']")).click();
        Thread.sleep(4000);
        Alert alert = driver.switchTo().alert();
        String text = alert.getText();
        System.out.println(text);
        //alert.accept();//click on ok
        alert.dismiss();//click on cancel
```


The Internet
the-internet.herokuapp.com/javascript_alerts
Chrome is being controlled by automated test software.

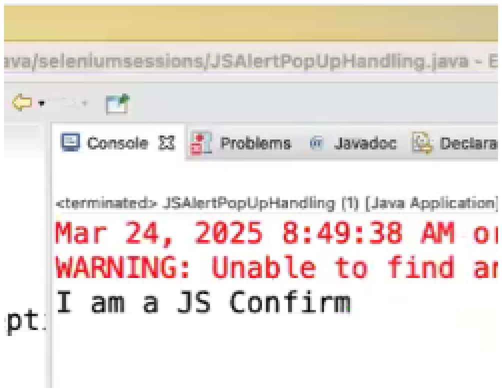
JavaScript Alerts

Here are some examples of different JavaScript alerts which can be troublesome for automation

Click for JS Alert
Click for JS Confirm
Click for JS Prompt

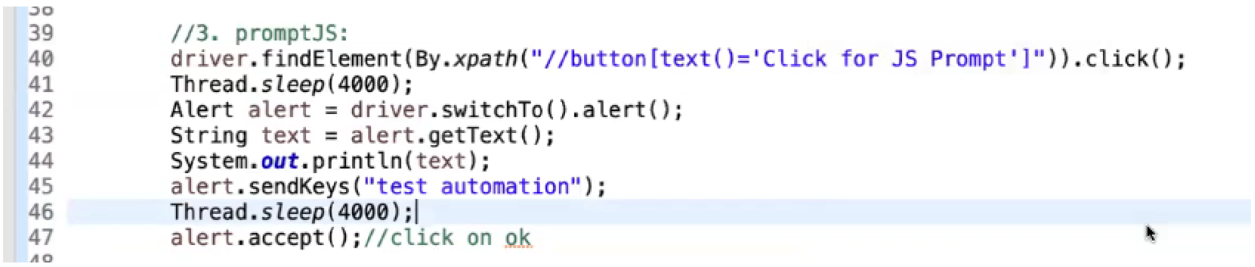
Result:

You clicked: Cancel

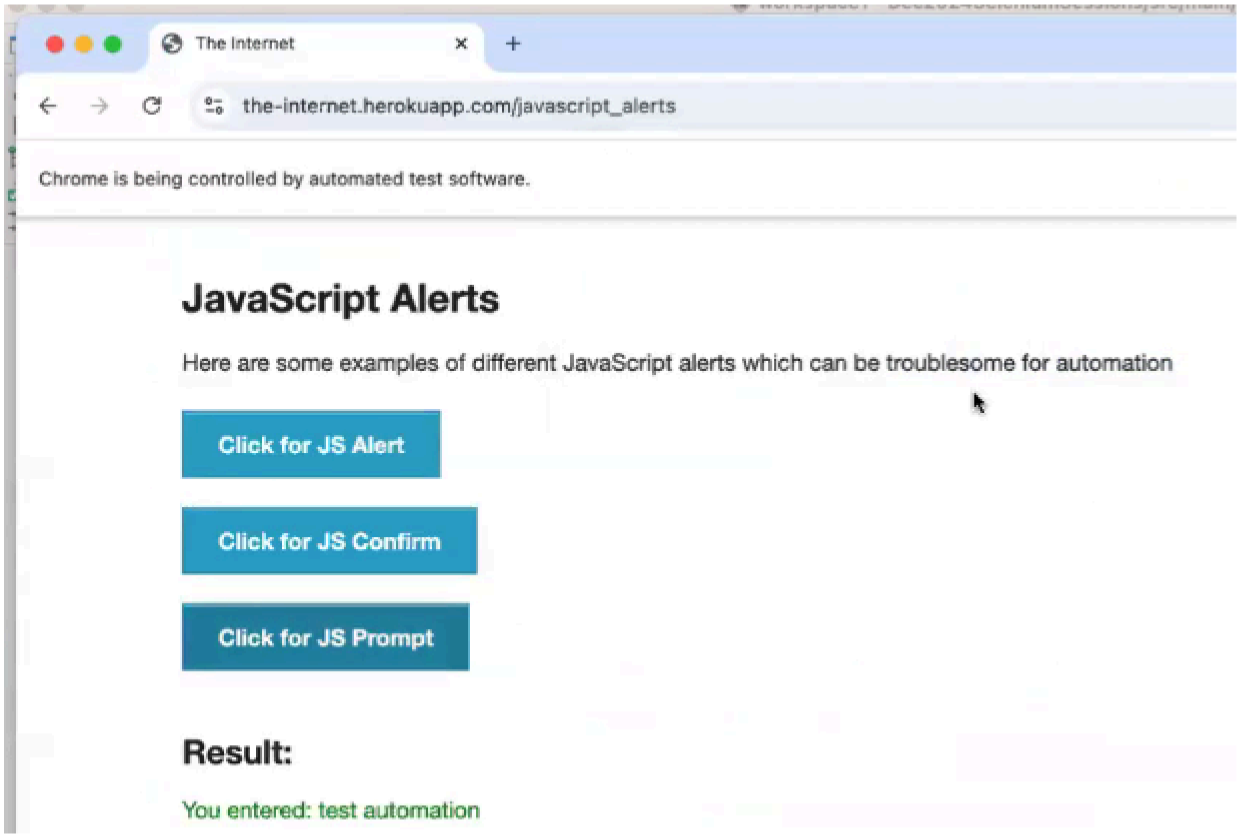


```
<terminated> JSAlertPopUpHandling (1) [Java Application]
Mar 24, 2025 8:49:38 AM o
WARNING: Unable to find a
I am a JS Confirm
```

Prompt-



```
        //3. promptJS:
        driver.findElement(By.xpath("//button[text()='Click for JS Prompt']")).click();
        Thread.sleep(4000);
        Alert alert = driver.switchTo().alert();
        String text = alert.getText();
        System.out.println(text);
        alert.sendKeys("test automation");
        Thread.sleep(4000);
        alert.accept();//click on ok
```



The Internet
the-internet.herokuapp.com/javascript_alerts
Chrome is being controlled by automated test software.

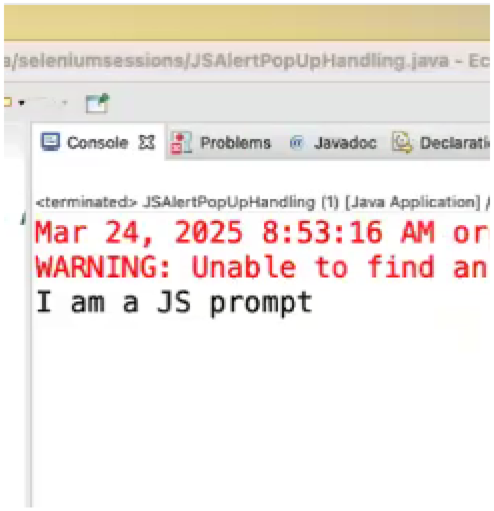
JavaScript Alerts

Here are some examples of different JavaScript alerts which can be troublesome for automation

Click for JS Alert
Click for JS Confirm
Click for JS Prompt

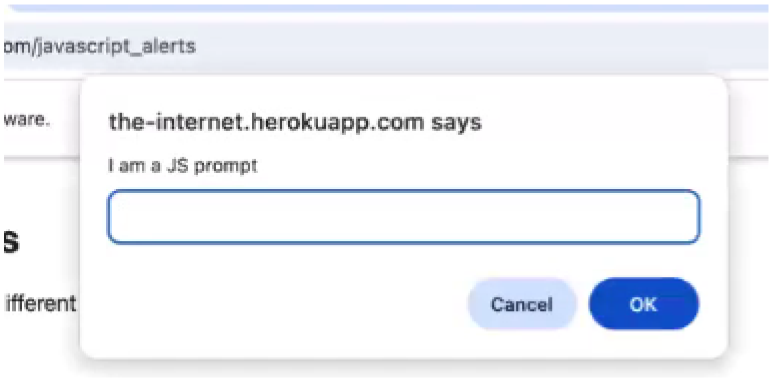
Result:

You entered: test automation



```
<terminated> JSAlertPopUpHandling (1) [Java Application] /
Mar 24, 2025 8:53:16 AM or
WARNING: Unable to find an
I am a JS prompt
```

Selenium wont enter values here, we cant see it but it does in background.



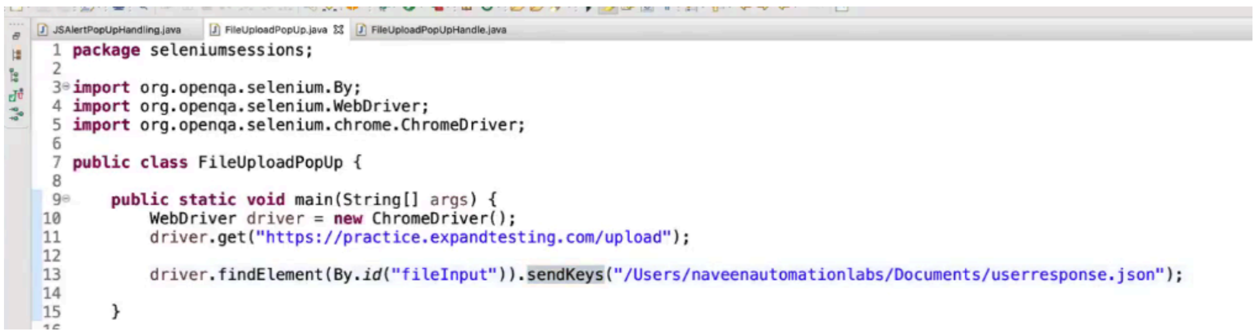
the-internet.herokuapp.com says

I am a JS prompt

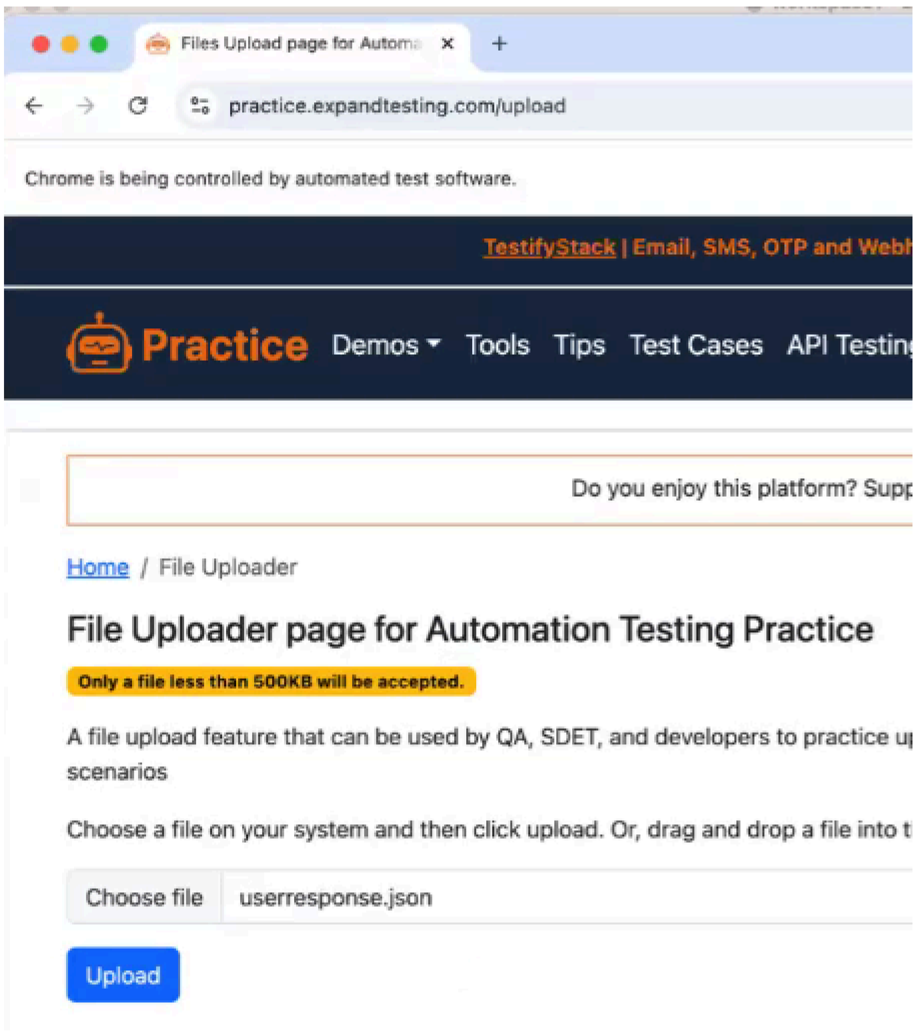
At a time only one type of js pop up can come on a webpage.

Driver automatically comes out of the alert. (15.00)
21.00 informed anil again that we dont have to come back.

File upload-
We cannot use click and open windows pop up.
Selenium cant handle.
Use send keys and pass path of file.



```java
package seleniumsessions;

import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;

public class FileUploadPopUp {

    public static void main(String[] args) {
        WebDriver driver = new ChromeDriver();
        driver.get("https://practice.expandtesting.com/upload");

        driver.findElement(By.id("fileInput")).sendKeys("/Users/naveenautomationlabs/Documents/userresponse.json");

    }
```


Files Upload page for Automa

practice.expandtesting.com/upload

Chrome is being controlled by automated test software.

TestifyStack | Email, SMS, OTP and Webh

Do you enjoy this platform? Supp

Home / File Uploader

File Uploader page for Automation Testing Practice

Only a file less than 500KB will be accepted.

A file upload feature that can be used by QA, SDET, and developers to practice u scenarios

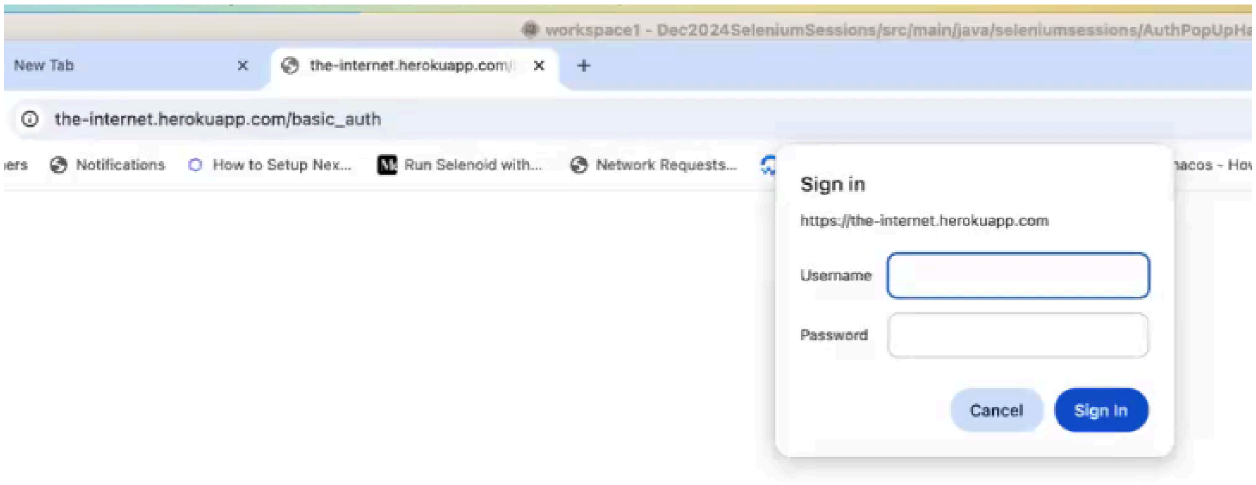
Choose a file on your system and then click upload. Or, drag and drop a file into t

Choose file userresponse.json

Upload

Html tag can be anything.
Type attribute should be file then only this formula will work, else we can't automate this scenario.

Authentication pop up-


workspace1 - Dec2024SeleniumSessions/src/main/java/seleniumsessions/AuthPopUpHa
New Tab
the-internet.herokuapp.com/
the-internet.herokuapp.com/basic_auth
Notifications
How to Setup Nex...
Run Selenoid with...
Network Requests...

Sign in

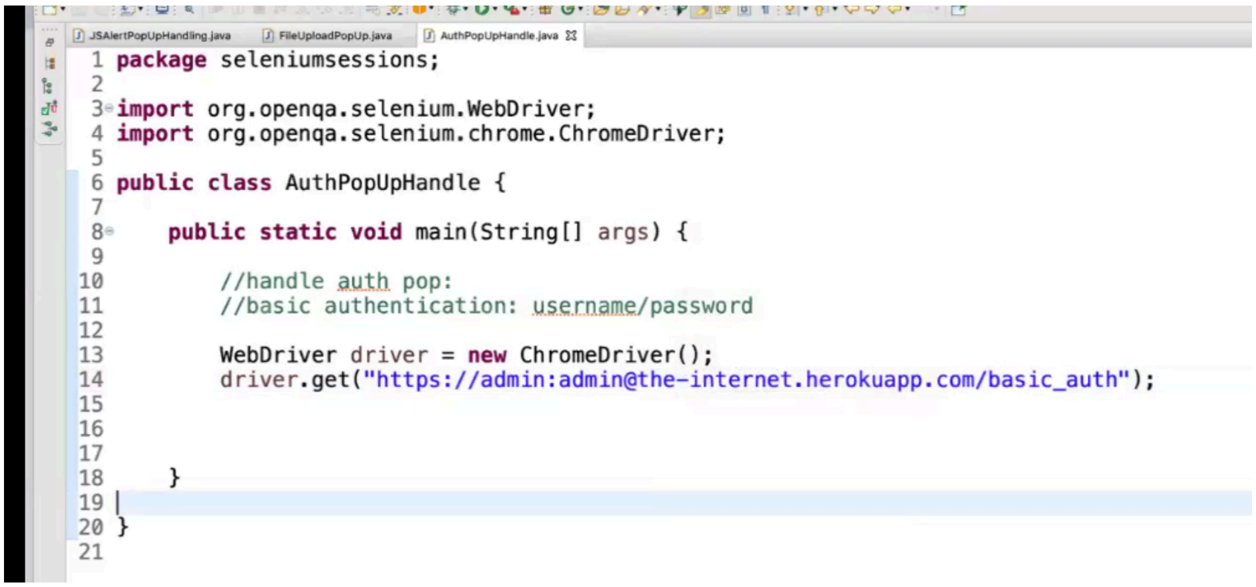
https://the-internet.herokuapp.com

Username

Password

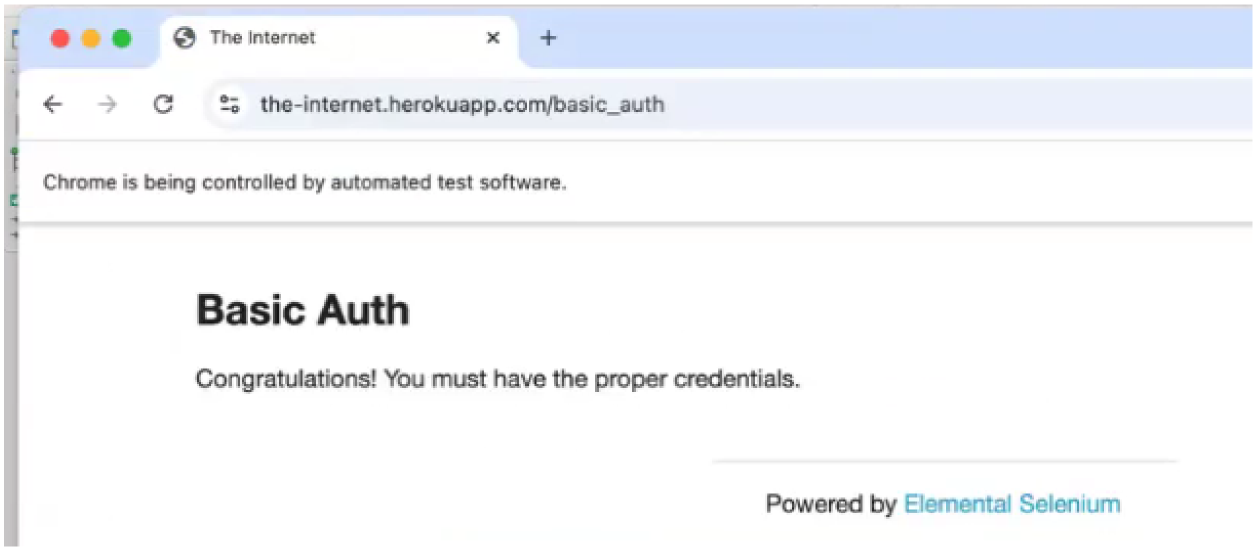
Cancel Sign In

How to know js or auth-
In js we can have only one text field.
For auth pop up also there is no webelement or inspect available.
Give user name and password in url-



```java
package seleniumsessions;

import org.openqa.selenium.WebDriver;
import org.openqa.selenium.chrome.ChromeDriver;

public class AuthPopUpHandle {

    public static void main(String[] args) {

        //handle auth pop:
        //basic authentication: username/password

        WebDriver driver = new ChromeDriver();
        driver.get("https://admin:admin@the-internet.herokuapp.com/basic_auth");



    }

}
```

Auto authenticates and logged in. 42.00


The Internet

the-internet.herokuapp.com/basic_auth

Chrome is being controlled by automated test software.

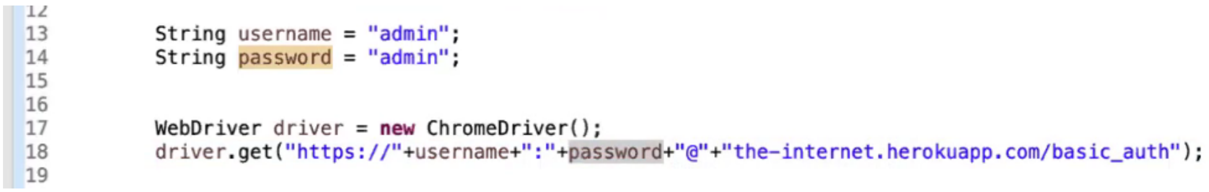
Basic Auth

Congratulations! You must have the proper credentials.

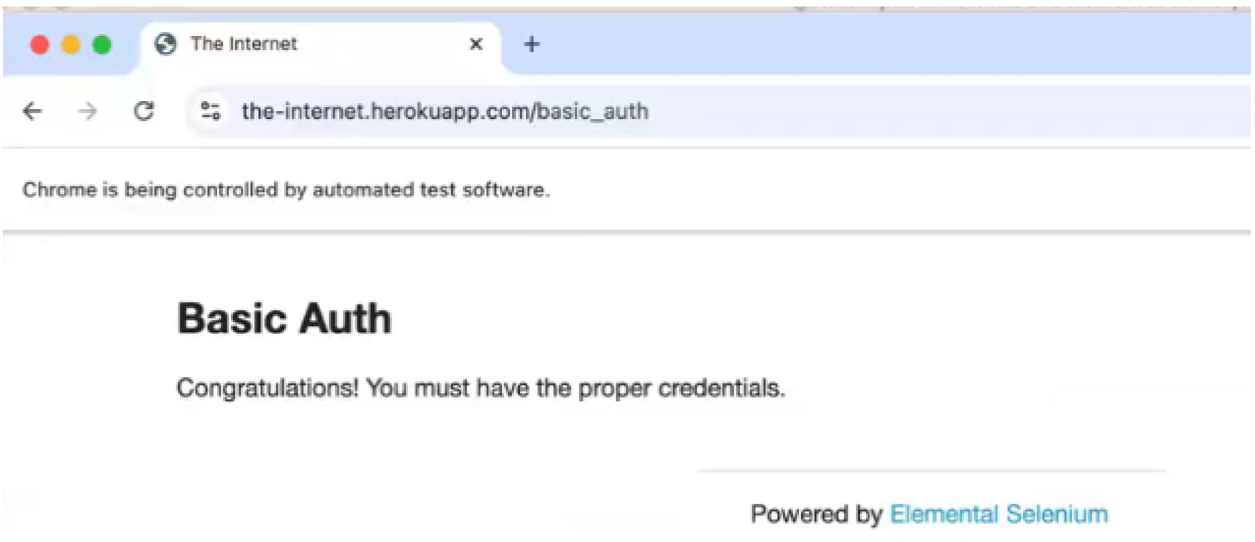
Powered by Elemental Selenium

Problem-
What if user name or password has @ in it. We cannot have two @ at the url.
Security is not an issue here.
One solution is create user name and password without @ in the test environments.

Store user name password in variable and use-



```
        String username = "admin";
        String password = "admin";


        WebDriver driver = new ChromeDriver();
        driver.get("https://"+username+":"+password+"@"+"the-internet.herokuapp.com/basic_auth");

```


The Internet

the-internet.herokuapp.com/basic_auth

Chrome is being controlled by automated test software.

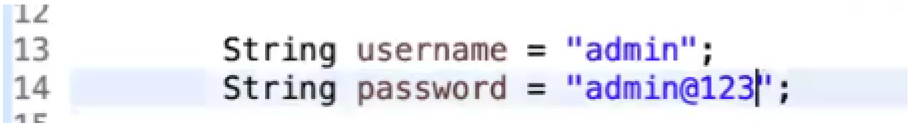
Basic Auth

Congratulations! You must have the proper credentials.

Powered by Elemental Selenium

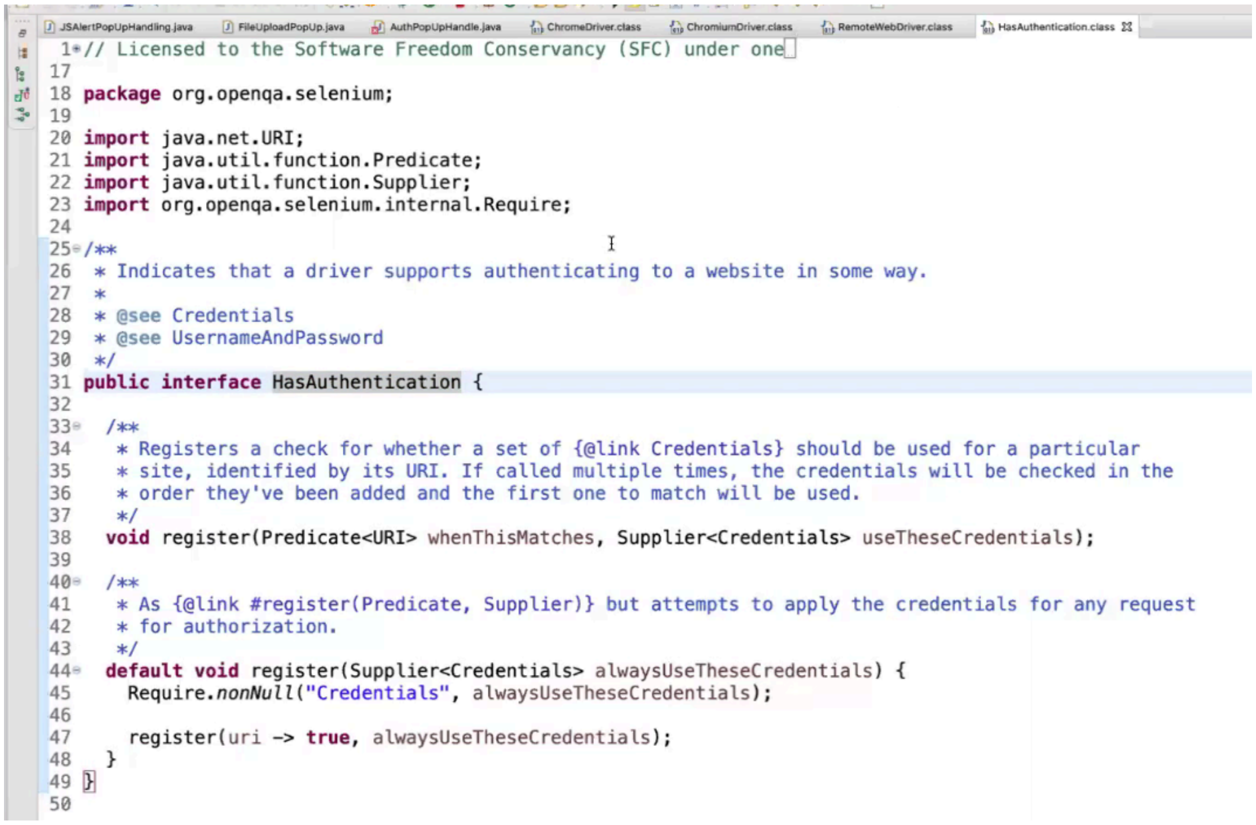
In browser it does not show username and password so no security issue.

This wont work-



```
        String username = "admin";
        String password = "admin@123";
```

Another way to solve this-
Selenium has this interface **has authentication.**

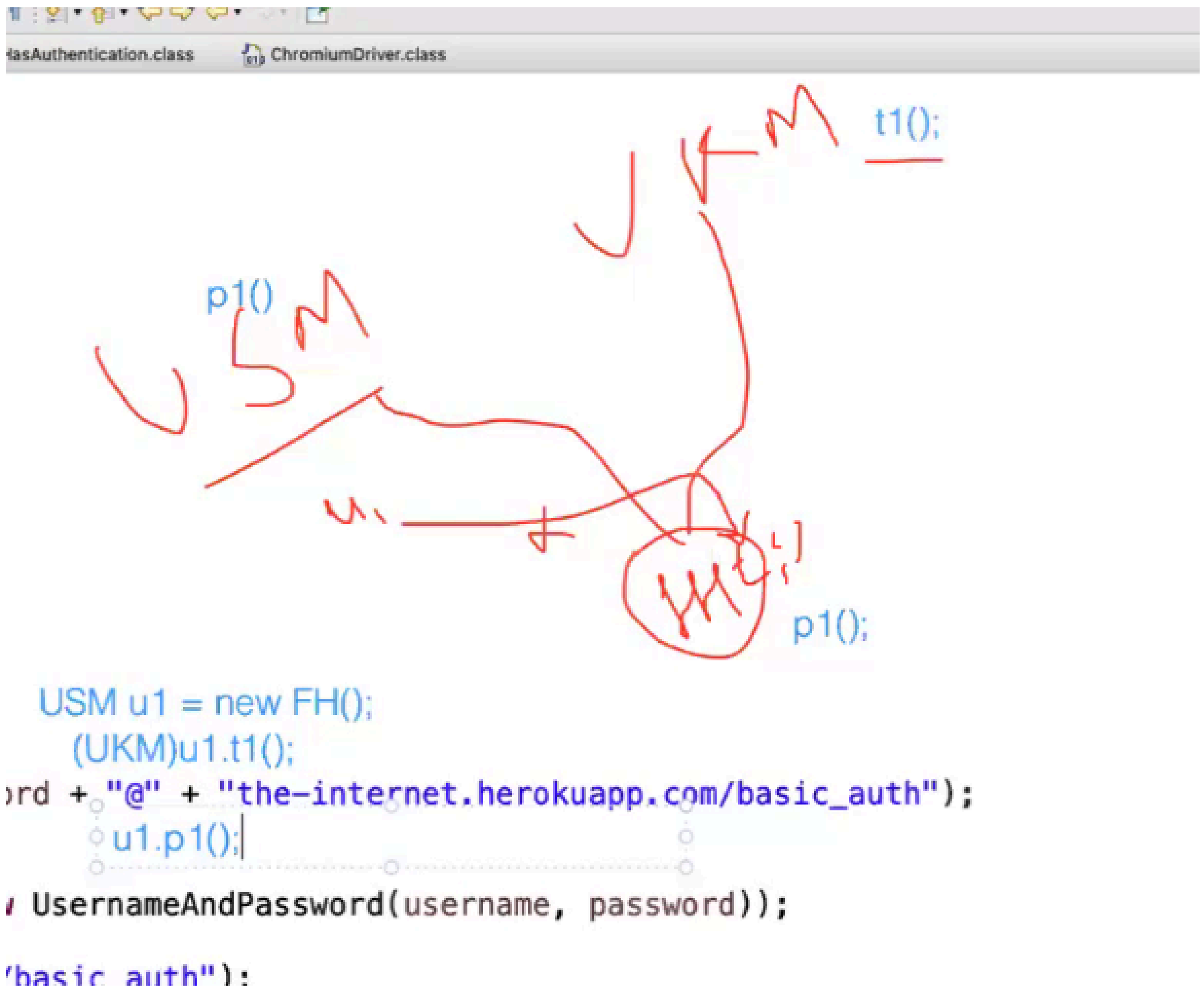


```java
// Licensed to the Software Freedom Conservancy (SFC) under one

package org.openqa.selenium;

import java.net.URI;
import java.util.function.Predicate;
import java.util.function.Supplier;
import org.openqa.selenium.internal.Require;

/**
 * Indicates that a driver supports authenticating to a website in some way.
 *
 * @see Credentials
 * @see UsernameAndPassword
 */
public interface HasAuthentication {

  /**
   * Registers a check for whether a set of {@link Credentials} should be used for a particular
   * site, identified by its URI. If called multiple times, the credentials will be checked in the
   * order they've been added and the first one to match will be used.
   */
  void register(Predicate<URI> whenThisMatches, Supplier<Credentials> useTheseCredentials);

  /**
   * As {@link #register(Predicate, Supplier)} but attempts to apply the credentials for any request
   * for authorization.
   */
  default void register(Supplier<Credentials> alwaysUseTheseCredentials) {
    Require.nonNull("Credentials", alwaysUseTheseCredentials);

    register(uri -> true, alwaysUseTheseCredentials);
  }
}
```

Mainly used for basic authentication. Chromium driver class implements **has authentication** interface.

Convert reference from one interface to another interface without creating object- 52.00
Usmedical interface has one method. Uk medical interface has one method. Top cast with us medical. Fortis hospital is the class implementing both interface. Fortis can easily access usmedical because reference is of us medical. To access uk medical without reference type cast as shown below.

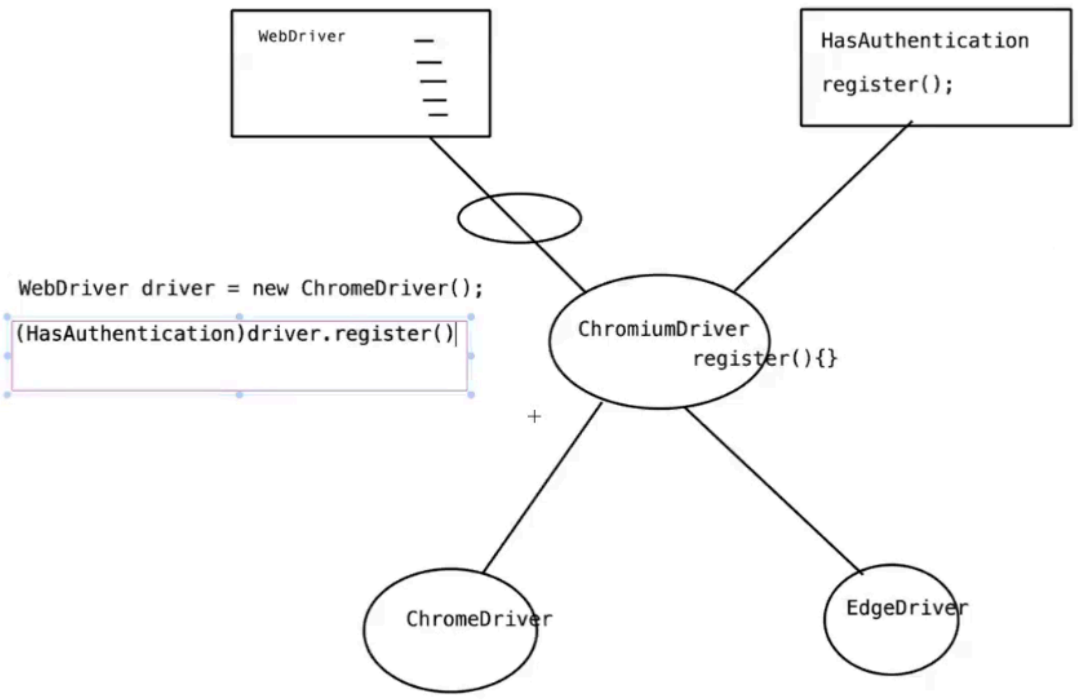
Later on the us medical can still be accessed in regular way.



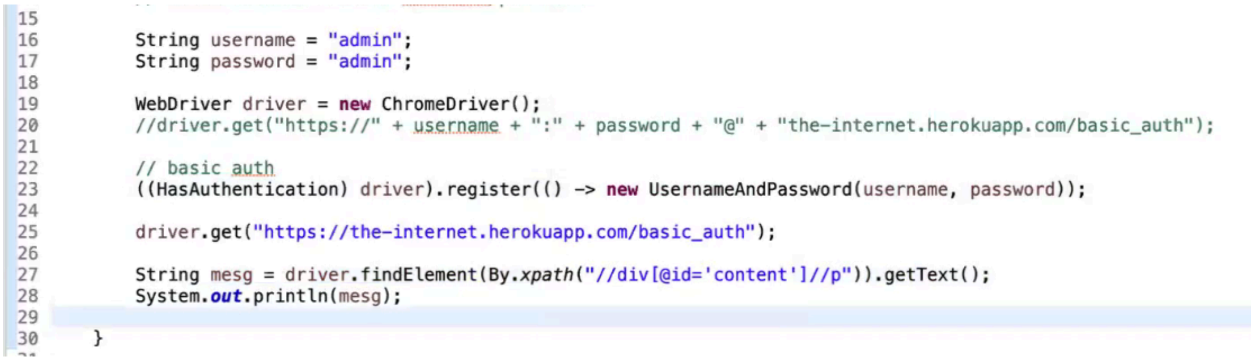
```
   USM u1 = new FH();
     (UKM)u1.t1();
ord + "@" + "the-internet.herokuapp.com/basic_auth");
       u1.p1();
 UsernameAndPassword(username, password));

'basic auth"):
```

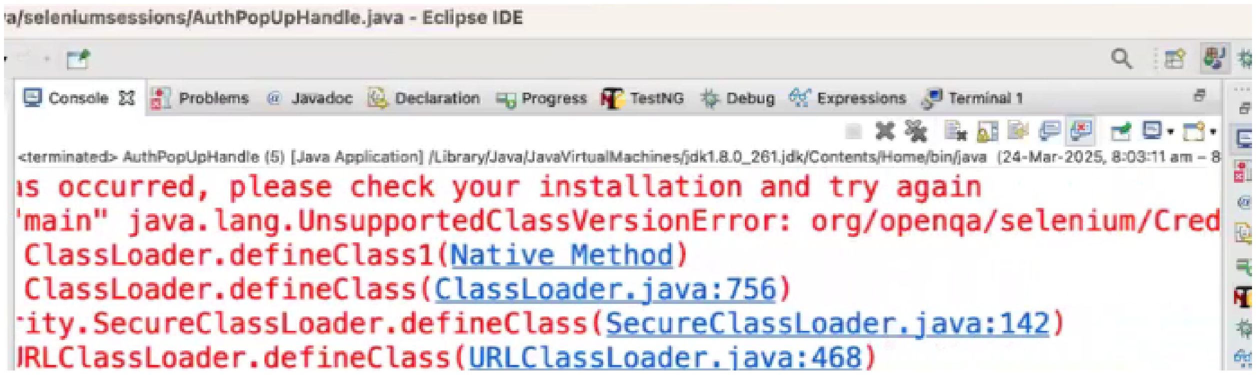
To access t1 method from uk just cast it and access the method.

Concept -

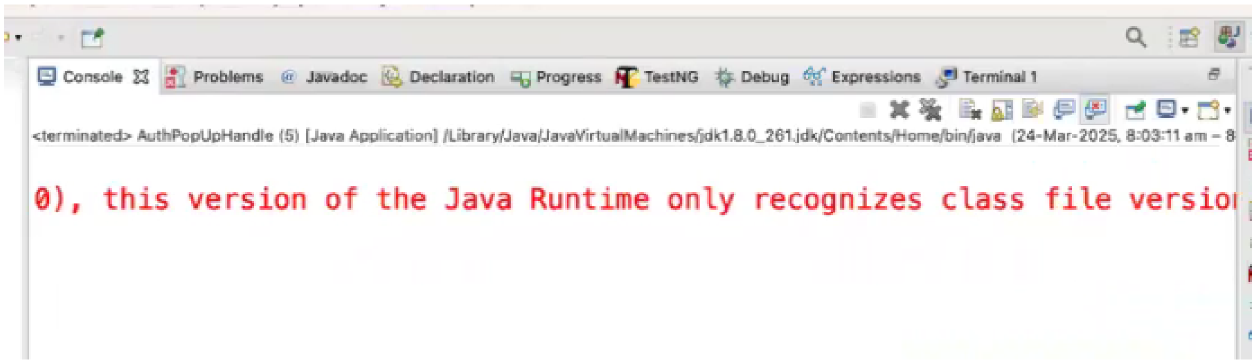


```
WebDriver driver = new ChromeDriver();
(HasAuthentication)driver.register()
```

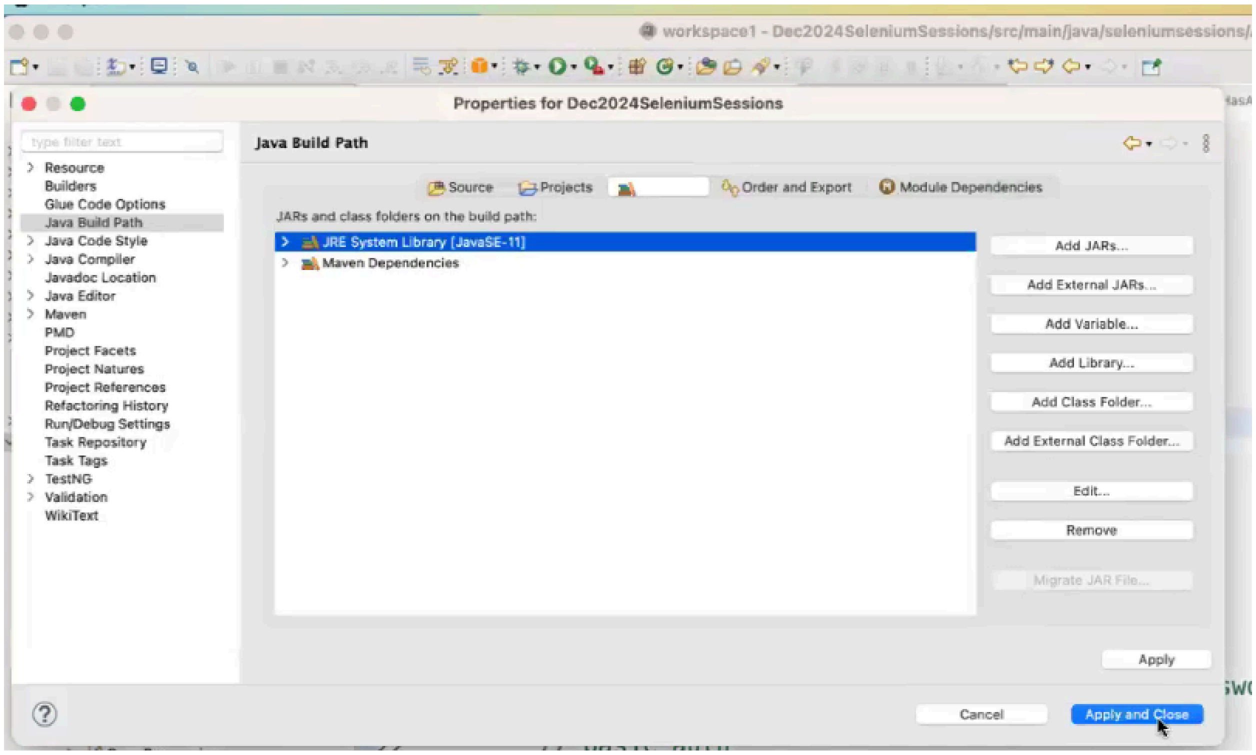

```
        String username = "admin";
        String password = "admin";

        WebDriver driver = new ChromeDriver();
        //driver.get("https://" + username + ":" + password + "@" + "the-internet.herokuapp.com/basic_auth");

        // basic auth
        ((HasAuthentication) driver).register(() -> new UsernameAndPassword(username, password));

        driver.get("https://the-internet.herokuapp.com/basic_auth");

        String mesg = driver.findElement(By.xpath("//div[@id='content']//p")).getText();
        System.out.println(mesg);

    }
```

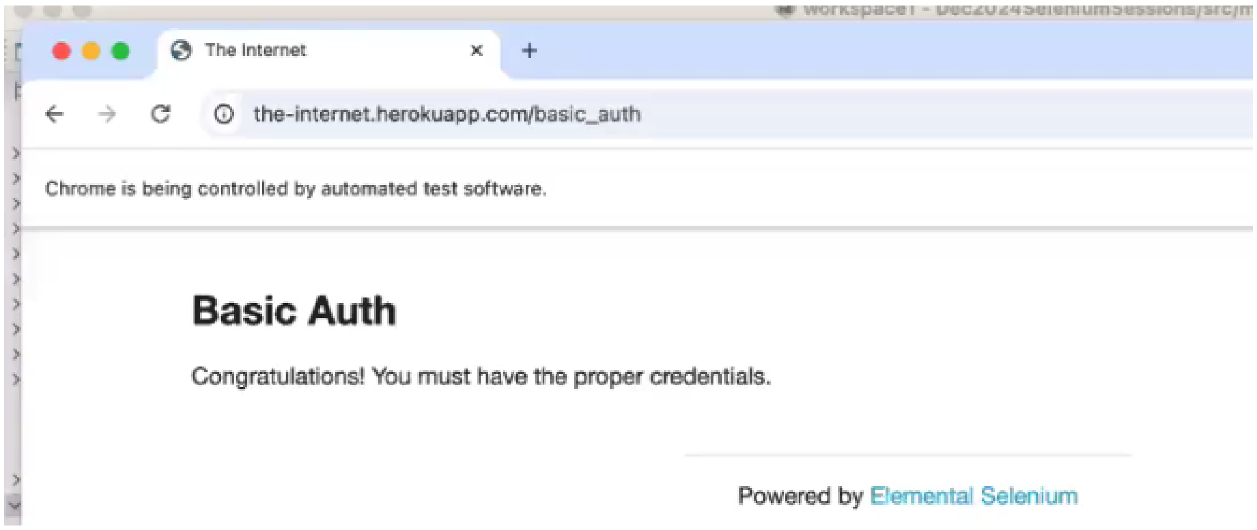

a/seleniumsessions/AuthPopUpHandle.java - Eclipse IDE

```
<terminated> AuthPopUpHandle (5) [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_261.jdk/Contents/Home/bin/java  (24-Mar-2025, 8:03:11 am – 8
ıs occurred, please check your installation and try again
'main" java.lang.UnsupportedClassVersionError: org/openqa/selenium/Cred
 ClassLoader.defineClass1(Native Method)
 ClassLoader.defineClass(ClassLoader.java:756)
·ity.SecureClassLoader.defineClass(SecureClassLoader.java:142)
JRLClassLoader.defineClass(URLClassLoader.java:468)
```


```
<terminated> AuthPopUpHandle (5) [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_261.jdk/Contents/Home/bin/java  (24-Mar-2025, 8:03:11 am – 8

0), this version of the Java Runtime only recognizes class file versio
```

Change java version to 11 as **has authentication** is present after 11 version only and new feature in selenium 4x- 1.04

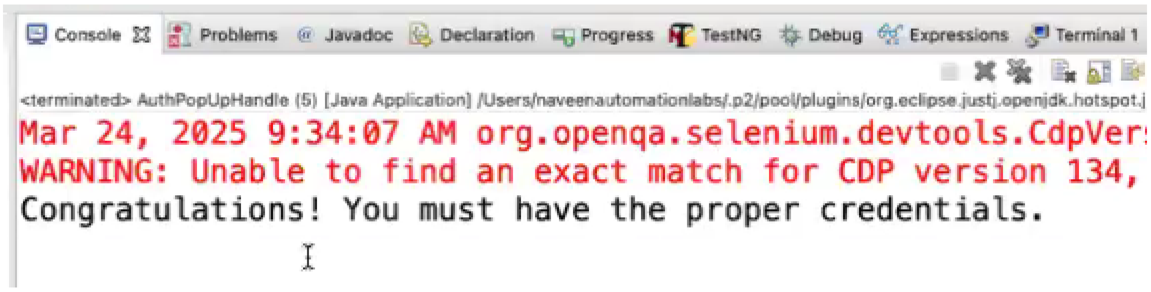



The Internet
the-internet.herokuapp.com/basic_auth
Chrome is being controlled by automated test software.

Basic Auth

Congratulations! You must have the proper credentials.

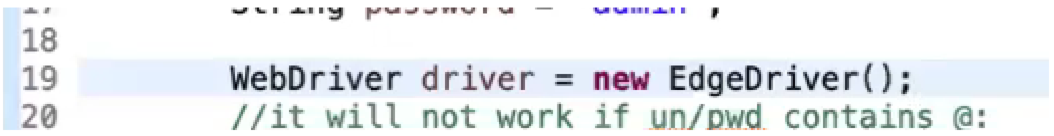
Powered by Elemental Selenium



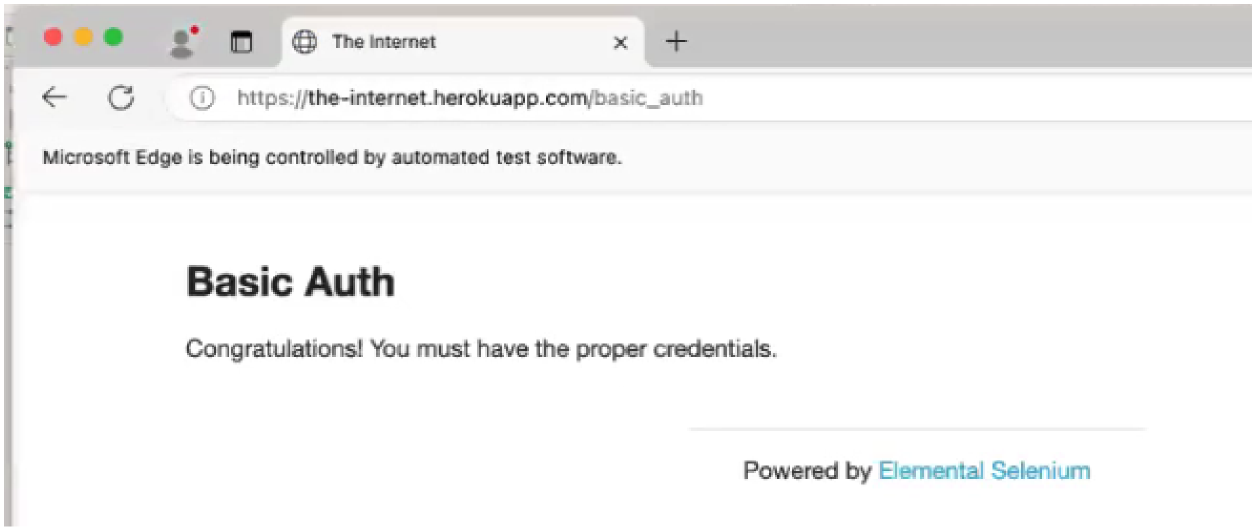
```
<terminated> AuthPopUpHandle (5) [Java Application] /Users/naveenautomationlabs/.p2/pool/plugins/org.eclipse.justj.openjdk.hotspot.j
Mar 24, 2025 9:34:07 AM org.openqa.selenium.devtools.CdpVer
WARNING: Unable to find an exact match for CDP version 134,
Congratulations! You must have the proper credentials.
```

This will work with any username and password with "@".

Change browser to edge and check if working-



```
        WebDriver driver = new EdgeDriver();
        //it will not work if un/pwd contains @:
```



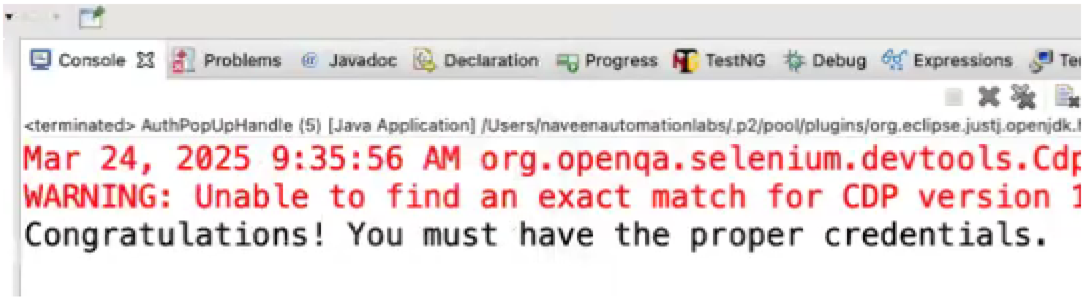
https://the-internet.herokuapp.com/basic_auth

Microsoft Edge is being controlled by automated test software.

Basic Auth

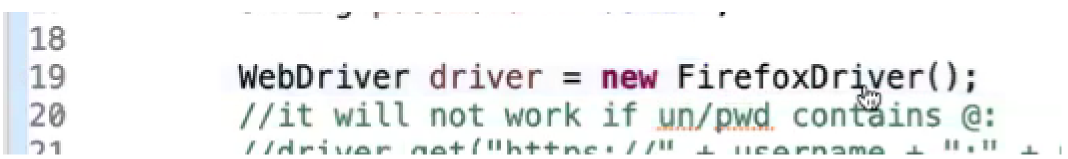
Congratulations! You must have the proper credentials.

Powered by Elemental Selenium



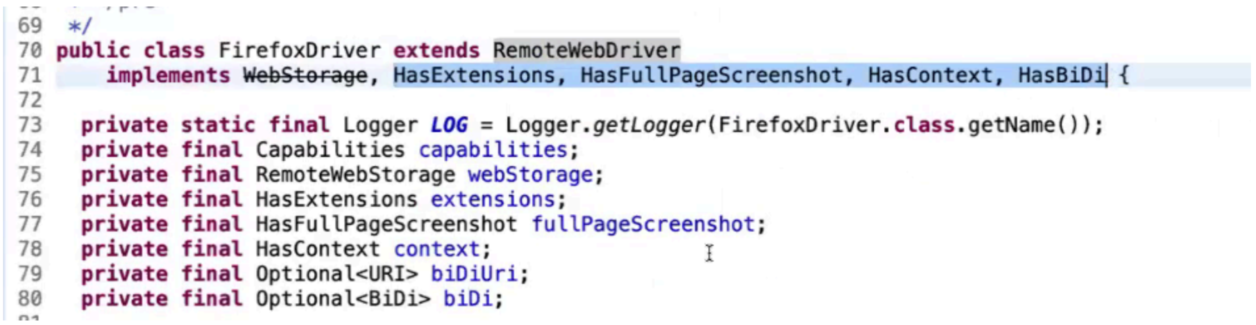
```
<terminated> AuthPopUpHandle (5) [Java Application] /Users/naveenautomationlabs/.p2/pool/plugins/org.eclipse.justj.openjdk.
Mar 24, 2025 9:35:56 AM org.openqa.selenium.devtools.Cdp
WARNING: Unable to find an exact match for CDP version 1
Congratulations! You must have the proper credentials.
```

Lets check for ff-



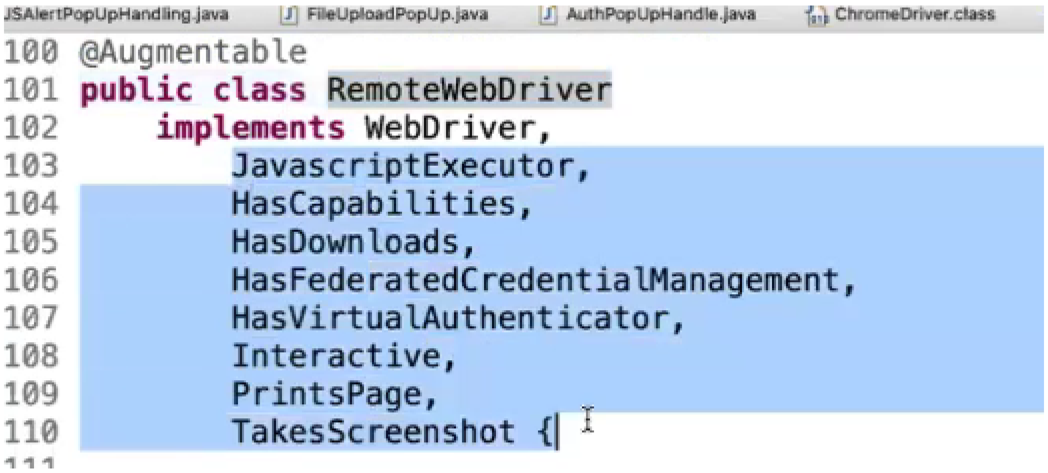
```
        WebDriver driver = new FirefoxDriver();
        //it will not work if un/pwd contains @:
```

No **has authenticator** interface in ff.



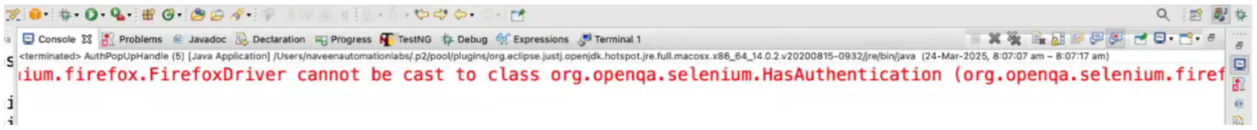
```
 */
public class FirefoxDriver extends RemoteWebDriver
    implements ~~WebStorage~~, HasExtensions, HasFullPageScreenshot, HasContext, HasBiDi {

  private static final Logger LOG = Logger.getLogger(FirefoxDriver.class.getName());
  private final Capabilities capabilities;
  private final RemoteWebStorage webStorage;
  private final HasExtensions extensions;
  private final HasFullPageScreenshot fullPageScreenshot;
  private final HasContext context;
  private final Optional<URI> biDiUri;
  private final Optional<BiDi> biDi;
```

No **has authenticator** in remote web driver



```
@Augmentable
public class RemoteWebDriver
    implements WebDriver,
        JavascriptExecutor,
        HasCapabilities,
        HasDownloads,
        HasFederatedCredentialManagement,
        HasVirtualAuthenticator,
        Interactive,
        PrintsPage,
        TakesScreenshot {
```

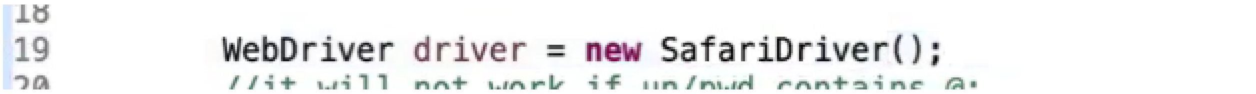
Class cast exception.



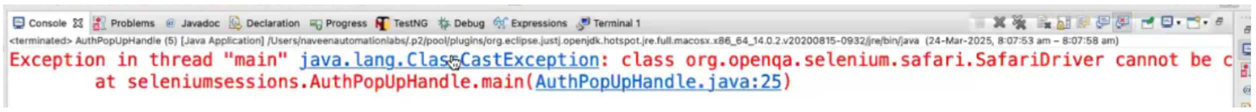
```
<terminated> AuthPopUpHandle (5) [Java Application] /Users/naveenautomationlabs/.p2/pool/plugins/org.eclipse.justj.openjdk.hotspot.jre.full.macosx.x86_64_14.0.2.v20200815-0932/jre/bin/java  (24-Mar-2025, 8:07:07 am – 8:07:17 am)
ium.firefox.FirefoxDriver cannot be cast to class org.openqa.selenium.HasAuthentication (org.openqa.selenium.firef
```

Check safari-

Same exception.



```
        WebDriver driver = new SafariDriver();
```



```
<terminated> AuthPopUpHandle (5) [Java Application] /Users/naveenautomationlabs/.p2/pool/plugins/org.eclipse.justj.openjdk.hotspot.jre.full.macosx.x86_64_14.0.2.v20200815-0932/jre/bin/java  (24-Mar-2025, 8:07:53 am – 8:07:58 am)
Exception in thread "main" java.lang.ClassCastException: class org.openqa.selenium.safari.SafariDriver cannot be c
	at seleniumsessions.AuthPopUpHandle.main(AuthPopUpHandle.java:25)
```

Only for chromium based browsers - **has authentication** will work.