Form authentication:

Here,we are using studentspringsecurity application downloaded in the path: C:\Users\Raj\Desktop\TestNG\Rest\_assured\_API\studentspringsecurityapplication

Extract the zip

Run in java🡪cd C:\Users\Raj\Desktop\TestNG\Rest\_assured\_API\studentspringsecurityapplication\studentSpringSecurity java -jar studentSpringSecurity.war --server.port=8085

Now:run localhost:8085

We can find the app

Provide credentials:

Username:user

Password:user

How to test the form manually and inspect ?

1.check network calls:rightclick🡪inspect🡪Network🡪enable red button to record the activity🡪click any call🡪u can see:

Request URL

Statuc code:yellow color 302🡪represents page is redirected to some other url.

In Request Headers🡪session id should be always provided to get response

Response🡪html

Note:whenever we access any webpage,we ger response in html.

Automate this Form submission with Eclipse:

What is form authentication:

It is a user filling out the form with username and password and submitting login button with a simple html page.

Steps:

1.Request params:

\*form authentication:.Oauth().form()🡪pass 3 parameters in .form()

“username”,”password”,” FormAuthConfig”//here username and password is user,user

FormAuthConfig🡪create new FormAuthConfig class and pass:

/login🡪action mechanism available in the form tag in html code: action="/login"

text box attribute name for username and password taken from html tag

\*Filter:create new session filter class and pass as request parameter.

session object will be captured in session filter class and we can get the session id from it.

@BeforeMethod

**public** **void** init()

{

RestAssured.*baseURI*="http://localhost:8085";

FormAuthConfig form=**new** FormAuthConfig("/login", "uname", "pwd");

//session object will be captured in session filter class and we can get the session id from it.

filter=**new** SessionFilter();

*given*()

.filter(filter)

.auth()

.form("user", "user",form)

.when()

.get();

}

@

Test

**public** **void** getallstudents()

{

*given*()

.sessionId(filter.getSessionId())

.when()

.get("http://localhost:8085/student/list")

.then()

.log()

.all();

}

//this method is to retrieve all the student info from where login page has redirected.

//it requires session id to be passes for valid html response with student information.

.sessionId(filter.getSessionId())🡪to get session id from session filter class.

Form Authentication with CSRF token:

Here,we are using studentpringsecurity\_ CSRF application downloaded in the path: C:\Users\Raj\Desktop\TestNG\Rest\_assured\_API\students\_springsecurity\_CSRF

Extract the zip

Run in java🡪cd C:\Users\Raj\Desktop\TestNG\Rest\_assured\_API\students\_springsecurity\_CSRF\studentSpringSecurity-CSRF java -jar studentSpringSecurity\_CSRF.war --server.port=8085

Now:run localhost:8085

We can find the app

Provide credentials:

Username:user

Password:user

Steps:

This app in addition formauthentication,session id ,it also required CSRF token to be provided with .form()

**public** **class** formsubmissionwith\_CSRFtoken {

**public** SessionFilter filter;

//passing CSRF tokens

//client requests for login page to server,if the client is valid,server sents back CSRF token

//this method now returns session id only if CSRF token is passed.

@BeforeMethod

**public** **void** init()

{

RestAssured.*baseURI*="http://localhost:8085";

FormAuthConfig form=**new** FormAuthConfig("/login", "uname", "pwd");

//session object will be captured in session filter class and we can get the session id from it.

filter=**new** SessionFilter();

*given*()

.filter(filter)

.auth()

.form("user", "user",form.withAutoDetectionOfCsrf())

.when()

.get();

}

// form.withAutoDetectionOfCsrf()🡪automatically extracts CSRF token from html login page.