AMERICAN INTERNATIONAL UNIVERSITY–BANGLADESH (AIUB)

FACULTY OF SCIENCE & TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE

SOFTWARE QUALITY AND TESTING

Spring 2024-2025

Section: [C]

Assignment 1

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Submitted By:

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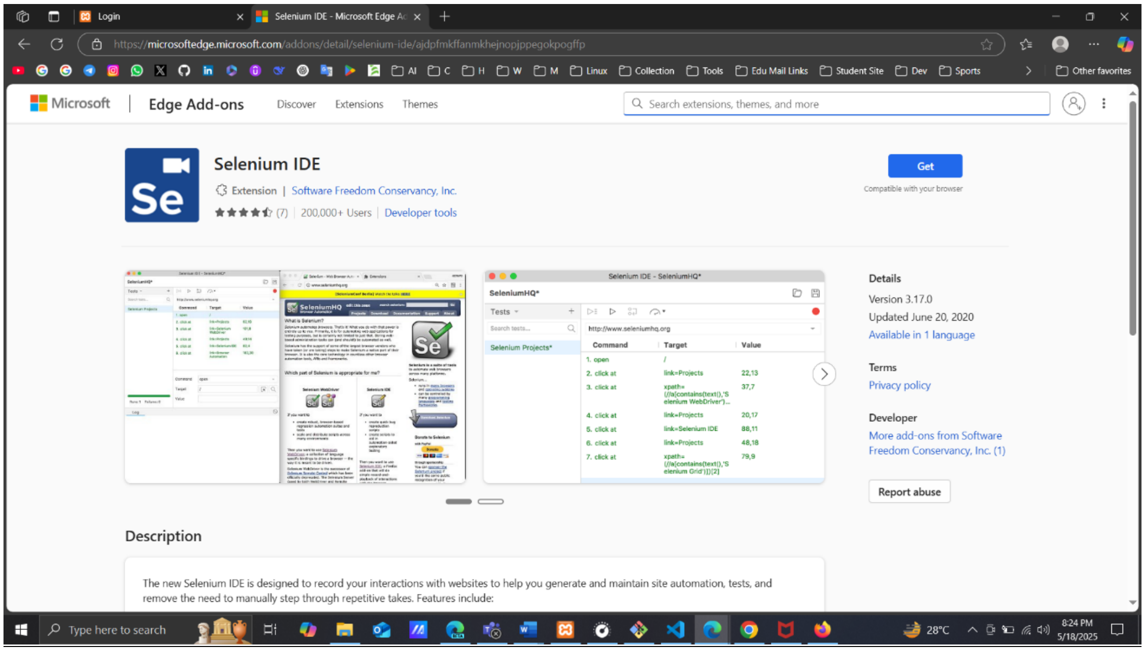
Submission date: May-19, 2025

Installation of Selenium


Login
Selenium IDE - Microsoft Edge Ad
https://microsoftedge.microsoft.com/addons/detail/selenium-ide/ajdpfmkffanmkhejnopjppegokpogffp
Microsoft
Edge Add-ons
Discover
Extensions
Themes
Search extensions, themes, and more
Get
Compatible with your browser
Type here to search
28°C
8:24 PM
5/18/2025

Selenium IDE

Extension | Software Freedom Conservancy, Inc.

★★★★☆ (7) | 200,000+ Users | Developer tools

Details

Version 3.17.0

Updated June 20, 2020

Available in 1 language

Terms

Privacy policy

Developer

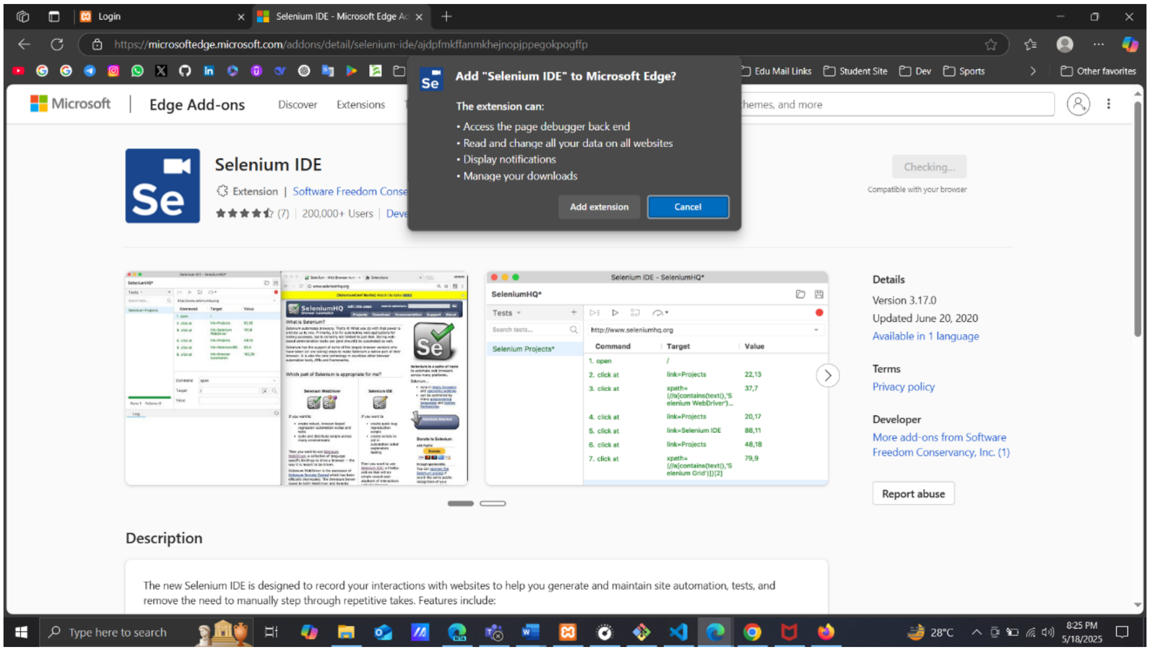
More add-ons from Software Freedom Conservancy, Inc. (1)

Report abuse

Description

The new Selenium IDE is designed to record your interactions with websites to help you generate and maintain site automation, tests, and remove the need to manually step through repetitive takes. Features include:

Step1: Firstly, we went into our browser then in the search bar we typed selenium IDE. After going into the proper website, we clicked on the get button to install the Extension of the Selenium IDE for our browser.

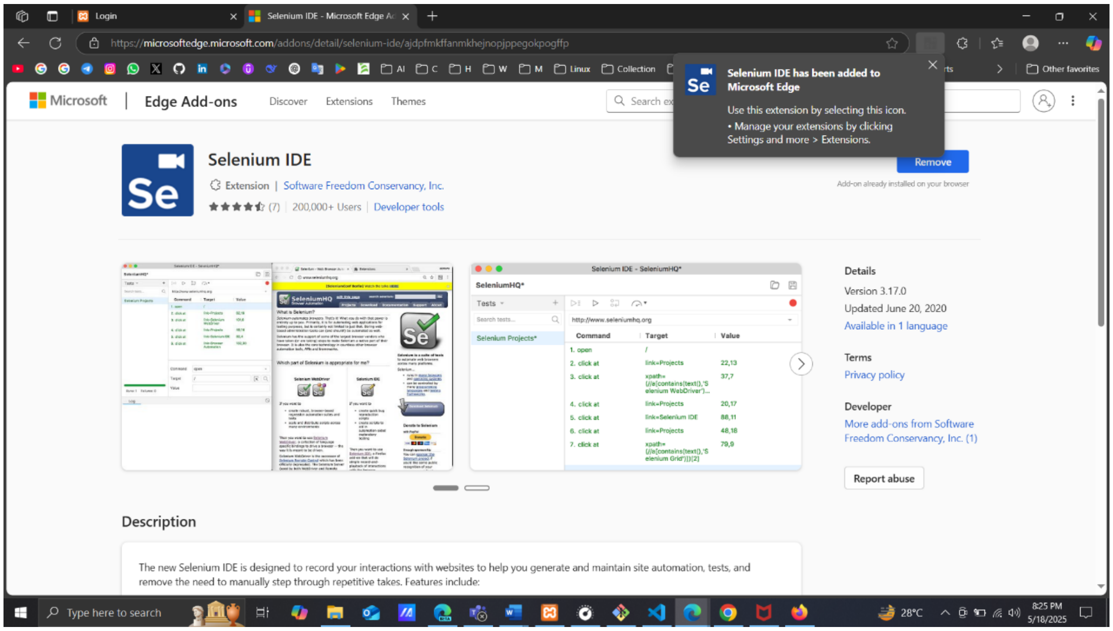

Login
Selenium IDE - Microsoft Edge Ad
https://microsoftedge.microsoft.com/addons/detail/selenium-ide/ajdpfmkffanmkhejnopjppegokpogffp
Microsoft
Edge Add-ons
Discover
Extensions
Checking...
Compatible with your browser
Add extension
Cancel
Type here to search
28°C
8:25 PM
5/18/2025

Add "Selenium IDE" to Microsoft Edge?

The extension can:

- Access the page debugger back end
- Read and change all your data on all websites
- Display notifications
- Manage your downloads

Step 2: After clicking on get to edge button it shows a warning. After that we clicked on the add extension button to install the extension into our browser


Login
Selenium IDE - Microsoft Edge Add-ons
https://microsoftedge.microsoft.com/addons/detail/selenium-ide/ajdpfmkffanmkhejnopjppegokpogffp
Microsoft
Edge Add-ons
Discover
Extensions
Themes
Search ex
Selenium IDE
Extension | Software Freedom Conservancy, Inc.
(7) | 200,000+ Users | Developer tools
Remove
Add-on already installed on your browser
Details
Terms
Privacy policy
Developer
More add-ons from Software Freedom Conservancy, Inc. (1)
Report abuse
Description
Type here to search
28°C
8:25 PM
5/18/2025

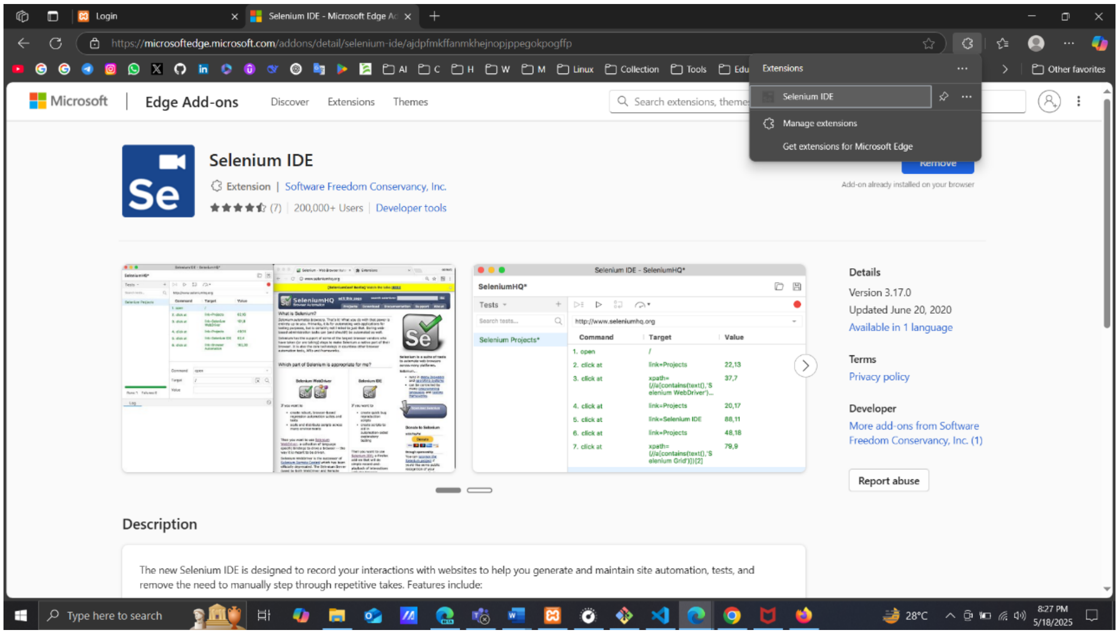
Selenium IDE has been added to Microsoft Edge

Use this extension by selecting this icon.
• Manage your extensions by clicking Settings and more > Extensions.

Version 3.17.0
Updated June 20, 2020
Available in 1 language

The new Selenium IDE is designed to record your interactions with websites to help you generate and maintain site automation, tests, and remove the need to manually step through repetitive takes. Features include:

Step 3: The output shows that the selenium extension has been added to our browser.

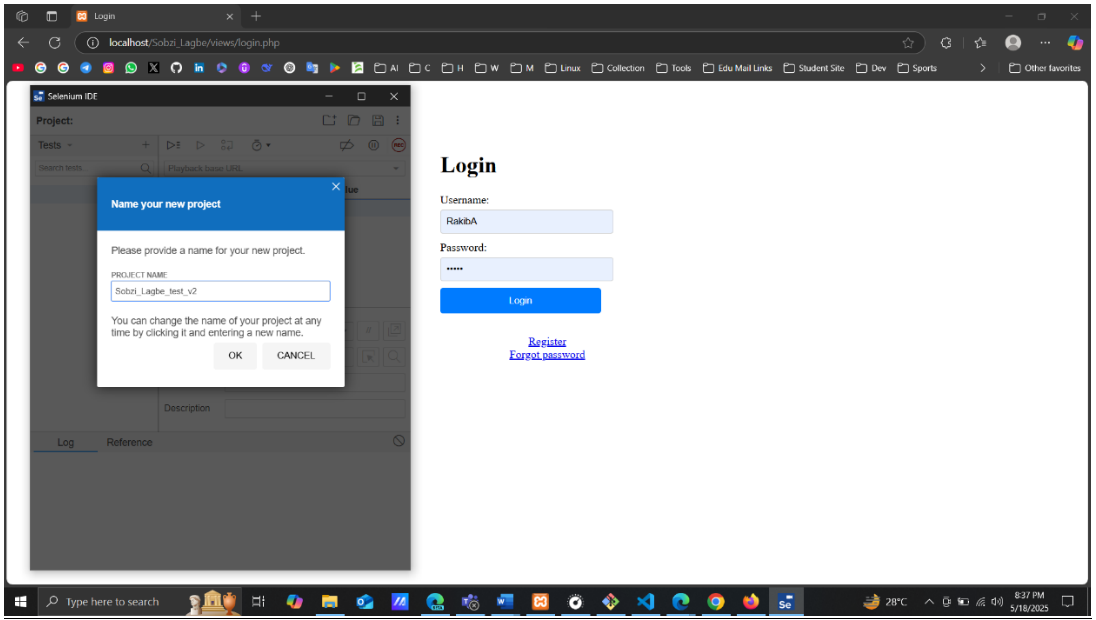

Login
Selenium IDE - Microsoft Edge Add-ons
https://microsoftedge.microsoft.com/addons/detail/selenium-ide/ajdpfmkffanmkhejnopjppegokpogffp
Extensions
Selenium IDE
Manage extensions
Get extensions for Microsoft Edge
Microsoft
Edge Add-ons
Discover
Extensions
Themes
Search extensions, theme
Selenium IDE
Extension | Software Freedom Conservancy, Inc.
(7) | 200,000+ Users | Developer tools
Remove
Add-on already installed on your browser
Details
Terms
Privacy policy
Developer
More add-ons from Software Freedom Conservancy, Inc. (1)
Report abuse
Description
Type here to search
28°C
8:27 PM
5/18/2025

Version 3.17.0
Updated June 20, 2020
Available in 1 language

The new Selenium IDE is designed to record your interactions with websites to help you generate and maintain site automation, tests, and remove the need to manually step through repetitive takes. Features include:

Step 4: To verify that selenium has been installed properly in our browser here after clicking into our browser's extension option the selenium IDE extension is properly installed into our web browser as a result the icon of the selenium IDE is showing in our extension.

<u>**Creating a project on selenium:**</u>



Name your new project

Please provide a name for your new project.

PROJECT NAME: Sobzi_Lagbe_test_v2

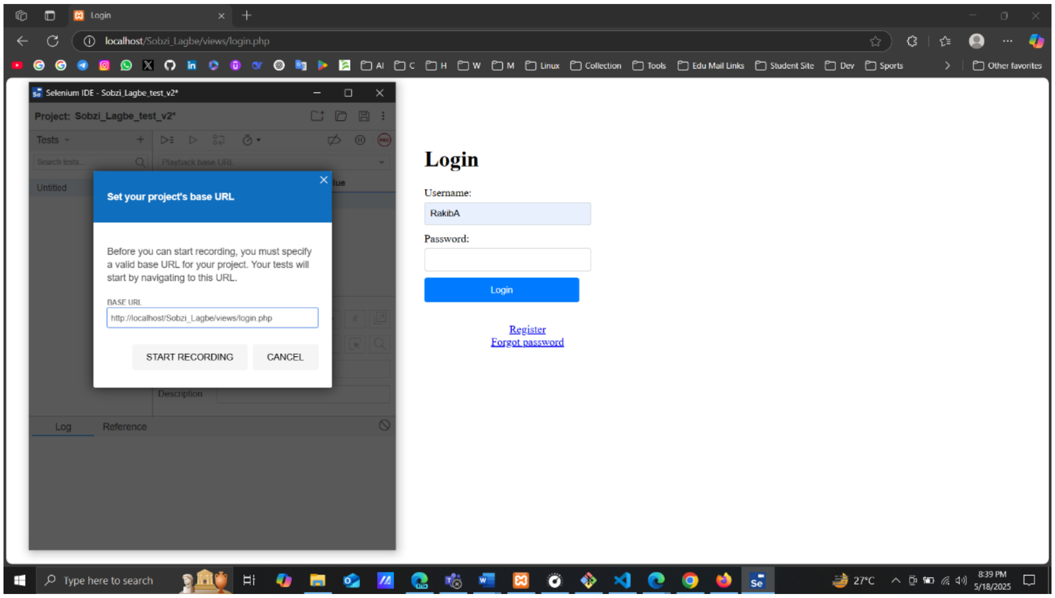
You can change the name of your project at any time by clicking it and entering a new name.

Login

Username: RakibA

Password: •••••

Step 1: Here after clicking on the extension of the selenium from our browser a prompt showing that to choose between various options such as creating a new project, opening an existing project etc. From here we clicked on to create a new project and then a text-box appeared asking to provide an input for project name and here we named our project as Sobzi_Lagbe_test_v2.



Set your project's base URL

Before you can start recording, you must specify a valid base URL for your project. Your tests will start by navigating to this URL.

BASE URL: http://localhost/Sobzi_Lagbe/views/login.php

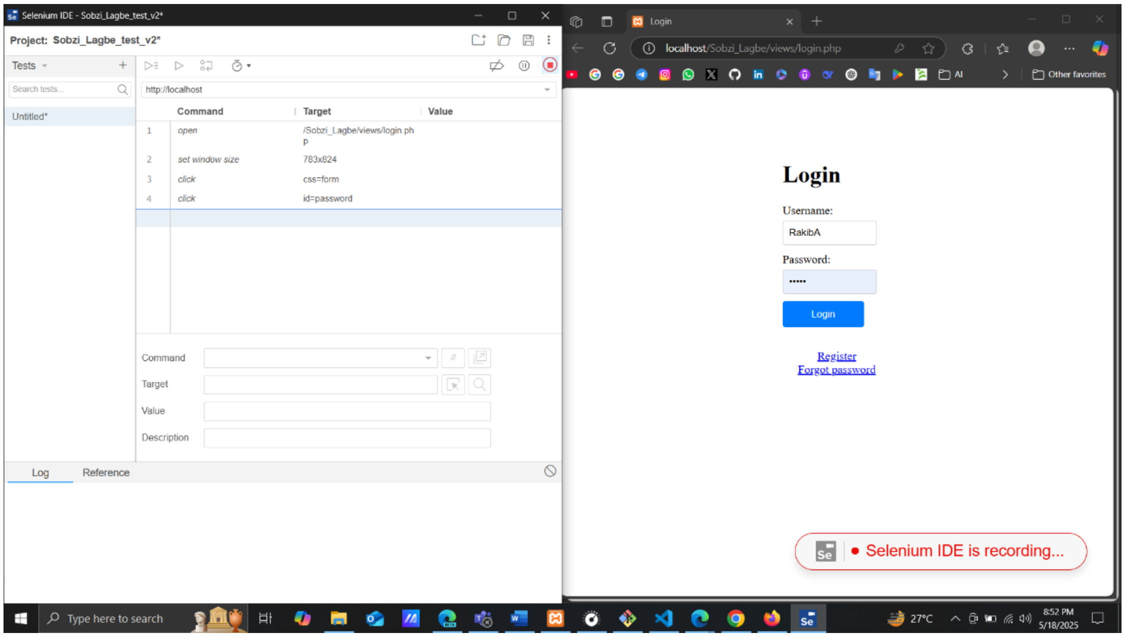
Login

Username: RakibA

Password:

Step 2: after naming our project the selenium is asked for to provide the URL of the webpage which we want to test through the software. Here we put the URL of our own created project based on HTML, CSS, JS, AJAX vegetables shop management system. Then we clicked on the start recording button.

<u>Test 1:</u> Log-in with valid user email address and password



Selenium IDE - Sobzi_Lagbe_test_v2*

Project: Sobzi_Lagbe_test_v2*

http://localhost

	Command	Target	Value
1	*open*	/Sobzi_Lagbe/views/login.php	
2	*set window size*	783x824	
3	*click*	css=form	
4	*click*	id=password	

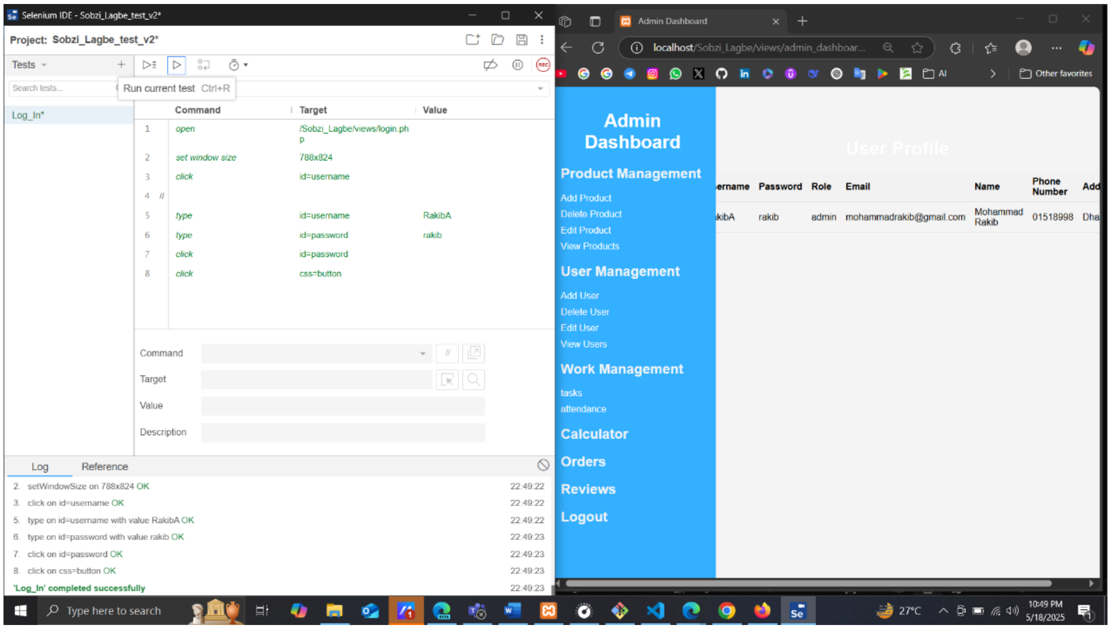
localhost/Sobzi_Lagbe/views/login.php

Login

Username: RakibA

Password: •••••

Step 1: After clicking on start recording in the previous step it can be seen that the selenium has been started recording of the test it can be verified by noticing on the top right corner a red colored button is showing that the test has been recording also in the web page there is a text showing that selenium IDE is recording in the right side of the screen. So, here for every click Command, Target and value is recorded automatically in the selenium. Where command means about the Selenium what action to perform. Target means which element on the page the command should interact with, and value means if extra data needed by some commands, especially textbox and select option.



	Command	Target	Value
1	open	/Sobzi_Lagbe/views/login.php	
2	set window size	788x824	
3	click	id=username	
4 //			
5	type	id=username	RakibA
6	type	id=password	rakib
7	click	id=password	
8	click	css=button	

Command
Target
Value
Description

```
2.  setWindowSize on 788x824 OK                          22:49:22
3.  click on id=username OK                              22:49:22
5.  type on id=username with value RakibA OK             22:49:22
6.  type on id=password with value rakib OK              22:49:23
7.  click on id=password OK                              22:49:23
8.  click on css=button OK                               22:49:23
'Log_In' completed successfully                          22:49:23
```

User Profile

ername	Password	Role	Email	Name	Phone Number	Add
kibA	rakib	admin	mohammadrakib@gmail.com	Mohammad Rakib	01518998	Dha

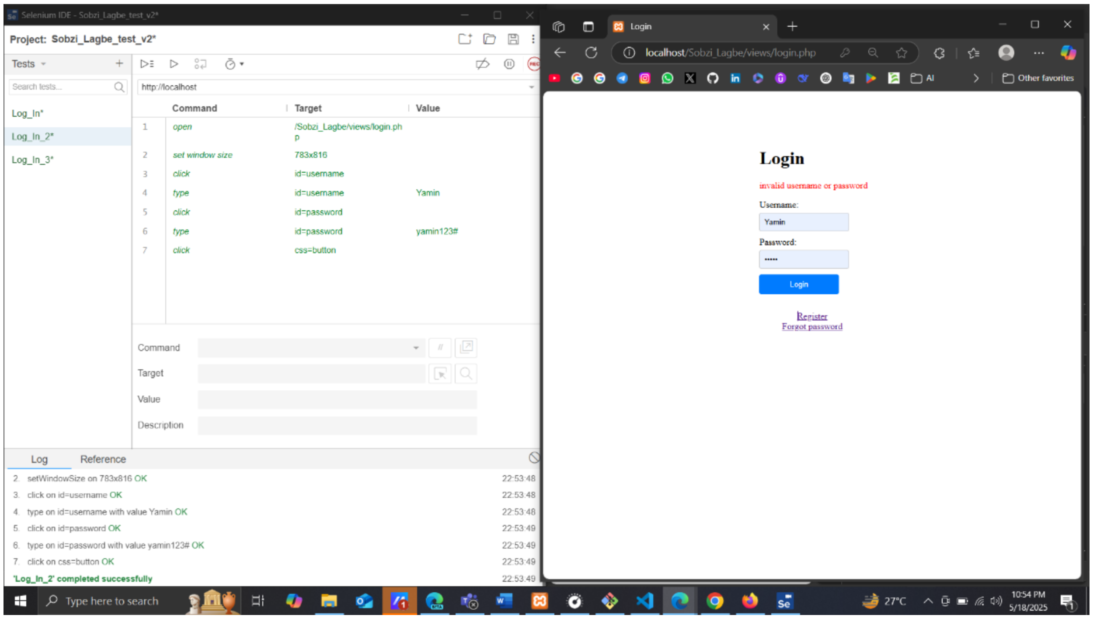
Step 2: After the recording has successfully been recorded now it can be seen that there are 2 options in the lower top side of the left sided screen where one option is for running all tests and another option is for running current tests. Here, running current test case runs only the selected test step-by-step automatically. Run all test cases runs all test cases listed in our suite in a sequence. So, for our testing we selected the run current test case which shows us:

The automated test case simulates a user logging in as an Admin and there were these following steps performed:

- The browser navigated to the login page (/Sobzi_Lagbe/views/login.php).
- The browser window was resized to simulate a realistic view.
- The username field (id=username) was clicked and filled with a valid username: RakibA.
- The password field was selected and filled with the password “rakib”.
- The login button (identified via CSS selector) was clicked to submit the form.

Each step executed successfully, confirming that the login page's inputs and form submission are working correctly under normal conditions.

<u>Test 2:</u> Log-in with unregistered user-email and password



Selenium IDE - Sobzi_Lagbe_test_v2*

Project: Sobzi_Lagbe_test_v2*

Tests: Log_In*, Log_In_2*, Log_In_3*

http://localhost

	Command	Target	Value
1	open	/Sobzi_Lagbe/views/login.php	
2	set window size	783x816	
3	click	id=username	
4	type	id=username	Yamin
5	click	id=password	
6	type	id=password	yamin123#
7	click	css=button	

```
2.  setWindowSize on 783x816 OK                              22:53:48
3.  click on id=username OK                                  22:53:48
4.  type on id=username with value Yamin OK                  22:53:48
5.  click on id=password OK                                  22:53:49
6.  type on id=password with value yamin123# OK              22:53:49
7.  click on css=button OK                                   22:53:49
'Log_In_2' completed successfully                            22:53:49
```

localhost/Sobzi_Lagbe/views/login.php

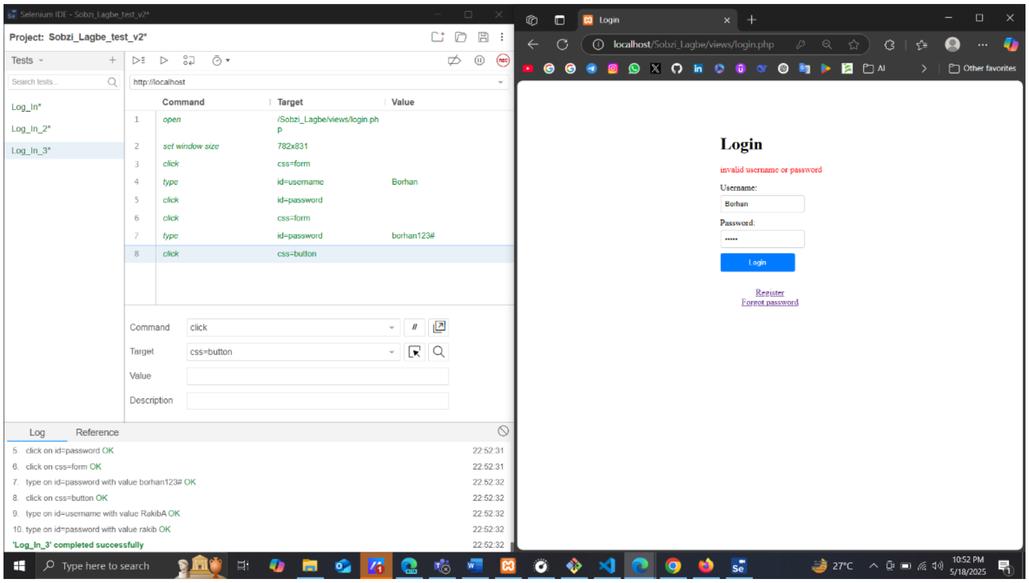
Login

invalid username or password

Username: Yamin

Password: •••••

Step 1: We manually created another test by clicking on the top upper + sign where we named the untitled test as Log_in_2. Then by following the same steps we start recording our test but here what we did is give input of some unregistered mail and password which means these mail and password are not registered in our project.



Selenium IDE - Sobzi_Lagbe_test_v2*

Project: Sobzi_Lagbe_test_v2*

Tests: Log_In*, Log_In_2*, Log_In_3*

http://localhost

	Command	Target	Value
1	open	/Sobzi_Lagbe/views/login.php	
2	set window size	782x831	
3	click	css=form	
4	type	id=username	Borhan
5	click	id=password	
6	click	css=form	
7	type	id=password	borhan123#
8	click	css=button	

Command: click

Target: css=button

```
5.  click on id=password OK                                  22:52:31
6.  click on css=form OK                                     22:52:31
7.  type on id=password with value borhan123# OK             22:52:32
8.  click on css=button OK                                   22:52:32
9.  type on id=username with value RakibA OK                 22:52:32
10. type on id=password with value rakib OK                  22:52:32
'Log_In_3' completed successfully                            22:52:32
```

localhost/Sobzi_Lagbe/views/login.php

Login

invalid username or password

Username: Borhan

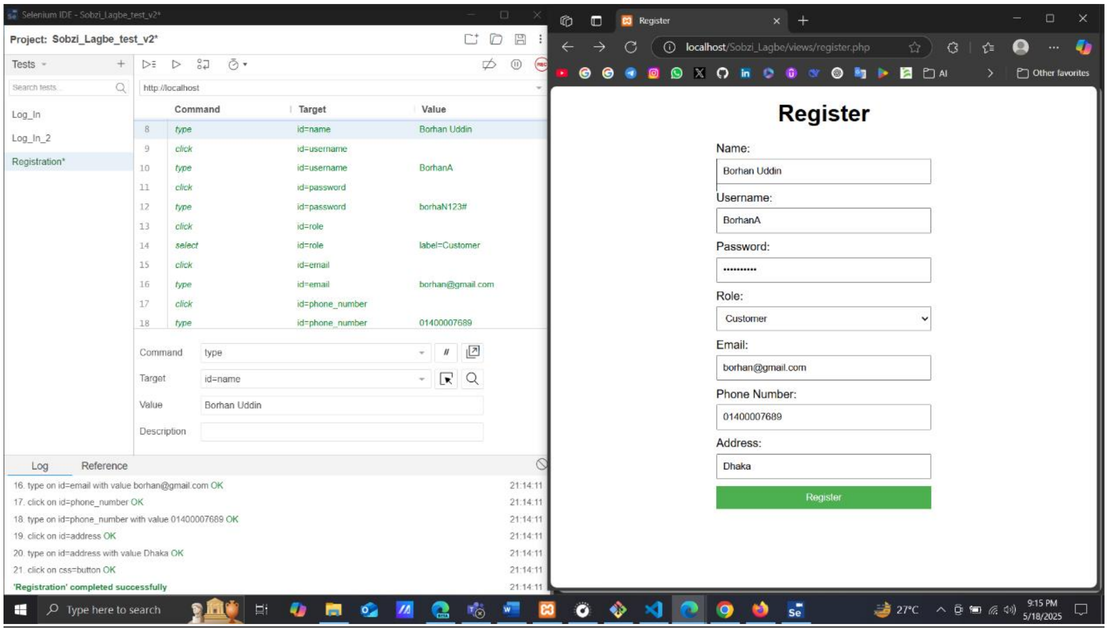
Password: •••••

Step 2: This automated test case was created and executed using Selenium IDE to verifythe login process on the system.

- The test began by opening the login page (/Sobzi_Lagbe/views/login.php) and adjusting the browser window size.
- The test initially attempted to enter the password before the username, simulating a realistic user error.
- It then corrected the input sequence by entering the correct username (RakibA) and updated password (rakib).
- The login button was clicked twice: once with incorrect input order and again after correcting it.
- The final attempt succeeded, and the login process completed successfully.

This test confirms that the login form correctly handles user input and functions as expected when valid credentials are provided.

<u>Test 3:</u> Testing the Registration functionalities of the website



Selenium IDE - Sobzi_Lagbe_test_v2*

Project: Sobzi_Lagbe_test_v2*

Tests: Log_In, Log_In_2, Registration*

http://localhost

	Command	Target	Value
8	type	id=name	Borhan Uddin
9	click	id=username	
10	type	id=username	BorhanA
11	click	id=password	
12	type	id=password	borhaN123#
13	click	id=role	
14	select	id=role	label=Customer
15	click	id=email	
16	type	id=email	borhan@gmail.com
17	click	id=phone_number	
18	type	id=phone_number	01400007689

Command: type
Target: id=name
Value: Borhan Uddin
Description:

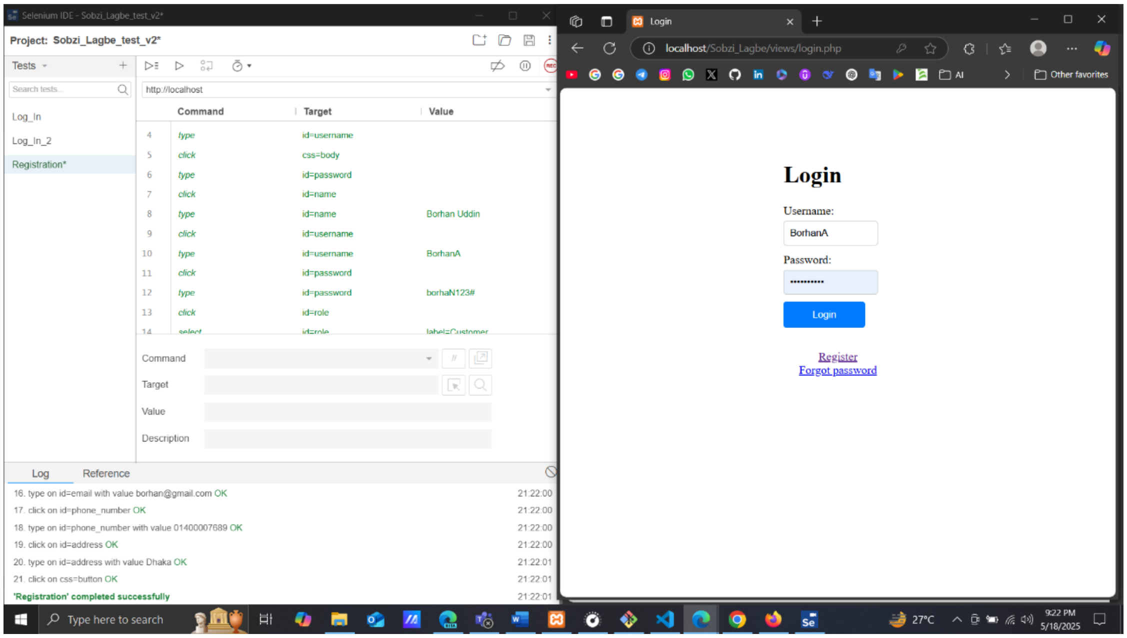
```
16. type on id=email with value borhan@gmail.com OK                21:14:11
17. click on id=phone_number OK                                     21:14:11
18. type on id=phone_number with value 01400007689 OK               21:14:11
19. click on id=address OK                                          21:14:11
20. type on id=address with value Dhaka OK                          21:14:11
21. click on css=button OK                                          21:14:11
'Registration' completed successfully                               21:14:11
```

localhost/Sobzi_Lagbe/views/register.php

Register

Name: Borhan Uddin
Username: BorhanA
Password: ••••••••••
Role: Customer
Email: borhan@gmail.com
Phone Number: 01400007689
Address: Dhaka

Step 1: We manually created another test by clicking on the top upper + sign where we named the untitled test as Registration. Then by following the same steps we start recording our test.



http://localhost

	Command	Target	Value
4	type	id=username	
5	click	css=body	
6	type	id=password	
7	click	id=name	
8	type	id=name	Borhan Uddin
9	click	id=username	
10	type	id=username	BorhanA
11	click	id=password	
12	type	id=password	borhaN123#
13	click	id=role	
14	select	id=role	label=Customer

```
16. type on id=email with value borhan@gmail.com OK                21:22:00
17. click on id=phone_number OK                                     21:22:00
18. type on id=phone_number with value 01400007689 OK              21:22:00
19. click on id=address OK                                          21:22:00
20. type on id=address with value Dhaka OK                          21:22:01
21. click on css=button OK                                          21:22:01
'Registration' completed successfully                               21:22:01
```

Login

Username: BorhanA

Password: ••••••••••

Login

Register
Forgot password

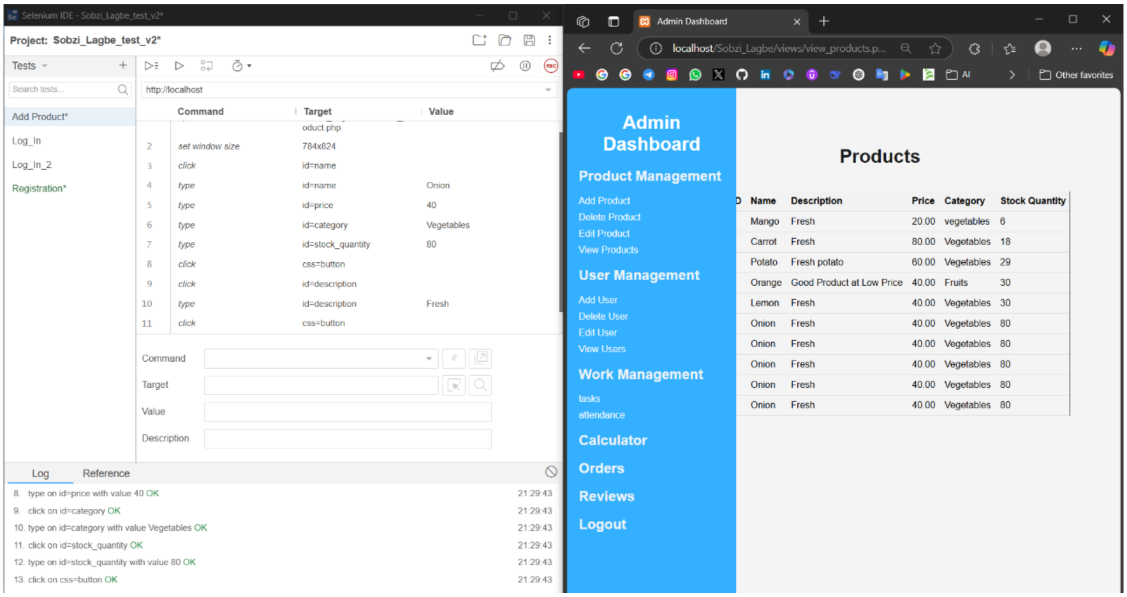
Step 2: After successfully recording the test, we now clicked on run current test case which shows:

An automated test was executed using Selenium IDE to verify the registration process for an customer user on the page http://localhost/Sobzi_Lagbe/views/register.php.

- The test began by opening the registration page and setting the browser window size for consistency.
- The user role was selected as Customer.
- Form fields were filled with valid input values:
    - Name: Borhan Uddin
    - Phone: 01400007689
    - Email: borhan@gmail.com
    - Password:borhaN123#
    - Role: Customer
    - Address: Dhaka
- After all required inputs were entered, the registration form (id=regis) was submitted.

The test was completed successfully, indicating that the registration flow and form validation were functioning correctly for the admin role.

Test 4: Testing the Add new Product functionalities of the website



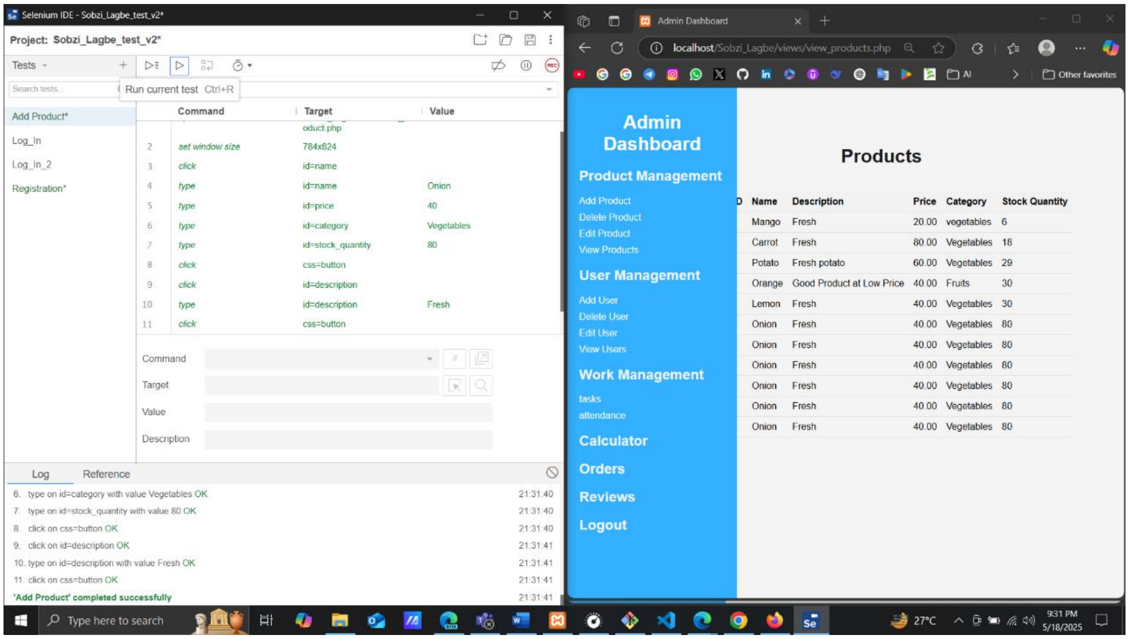
	Command	Target	Value
		oduct.php	
2	set window size	784x824	
3	click	id=name	
4	type	id=name	Onion
5	type	id=price	40
6	type	id=category	Vegetables
7	type	id=stock_quantity	80
8	click	css=button	
9	click	id=description	
10	type	id=description	Fresh
11	click	css=button	

```
8.  type on id=price with value 40 OK                          21:29:43
9.  click on id=category OK                                    21:29:43
10. type on id=category with value Vegetables OK               21:29:43
11. click on id=stock_quantity OK                              21:29:43
12. type on id=stock_quantity with value 80 OK                 21:29:43
13. click on css=button OK                                     21:29:43
```

Products

D	Name	Description	Price	Category	Stock Quantity
	Mango	Fresh	20.00	vegetables	6
	Carrot	Fresh	80.00	Vegetables	18
	Potato	Fresh potato	60.00	Vegetables	29
	Orange	Good Product at Low Price	40.00	Fruits	30
	Lemon	Fresh	40.00	Vegetables	30
	Onion	Fresh	40.00	Vegetables	80
	Onion	Fresh	40.00	Vegetables	80
	Onion	Fresh	40.00	Vegetables	80
	Onion	Fresh	40.00	Vegetables	80
	Onion	Fresh	40.00	Vegetables	80

Step1: We added a new test case as like previous steps and named the test case as Add Product then as like previous steps for every clicking the command, target and value were recorded inside of the selenium ide.



	Command	Target	Value
		oduct.php	
2	set window size	784x824	
3	click	id=name	
4	type	id=name	Onion
5	type	id=price	40
6	type	id=category	Vegetables
7	type	id=stock_quantity	80
8	click	css=button	
9	click	id=description	
10	type	id=description	Fresh
11	click	css=button	

```
6.  type on id=category with value Vegetables OK               21:31:40
7.  type on id=stock_quantity with value 80 OK                 21:31:40
8.  click on css=button OK                                     21:31:40
9.  click on id=description OK                                 21:31:41
10. type on id=description with value Fresh OK                 21:31:41
11. click on css=button OK                                     21:31:41
'Add Product' completed successfully                           21:31:41
```

Products

D	Name	Description	Price	Category	Stock Quantity
	Mango	Fresh	20.00	vegetables	6
	Carrot	Fresh	80.00	Vegetables	18
	Potato	Fresh potato	60.00	Vegetables	29
	Orange	Good Product at Low Price	40.00	Fruits	30
	Lemon	Fresh	40.00	Vegetables	30
	Onion	Fresh	40.00	Vegetables	80
	Onion	Fresh	40.00	Vegetables	80
	Onion	Fresh	40.00	Vegetables	80
	Onion	Fresh	40.00	Vegetables	80
	Onion	Fresh	40.00	Vegetables	80
	Onion	Fresh	40.00	Vegetables	80
	Onion	Fresh	40.00	Vegetables	80

Step 2: After successfully recording the test, we now clicked on run current test case which shows:

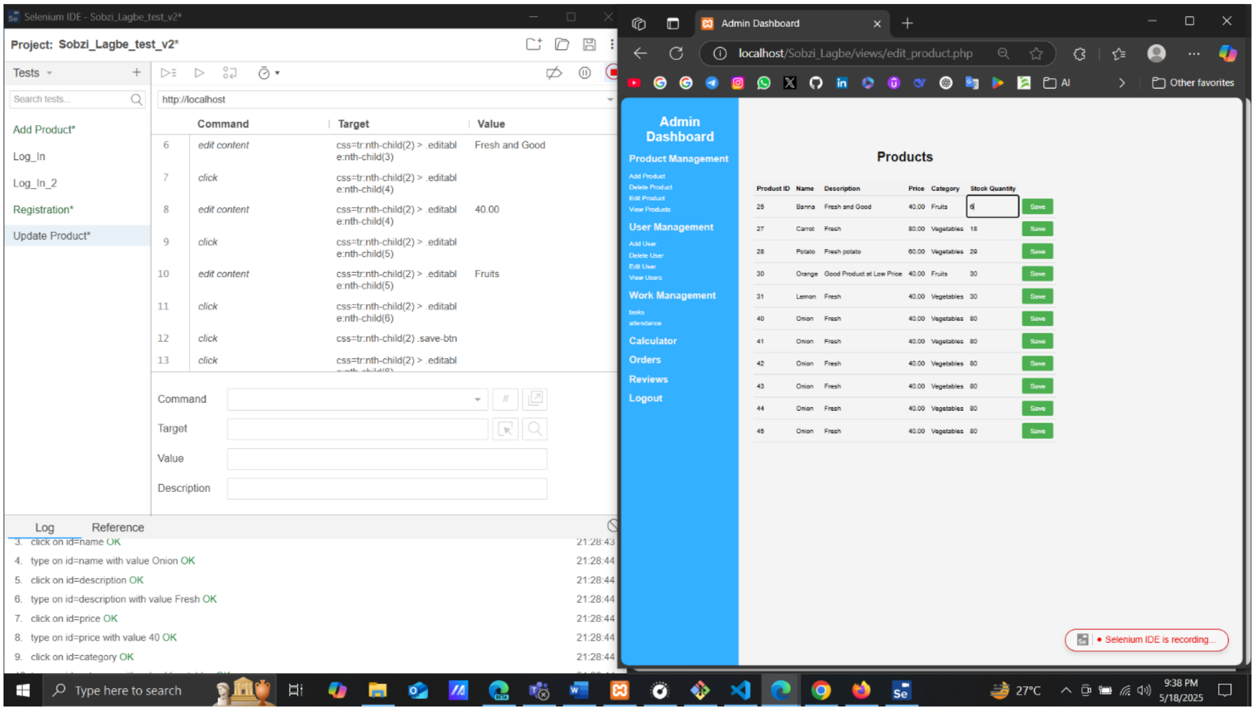
The test began by opening the Edit Product page and setting the browser window size.

It filled out the product form with the following details:

- Product Name: Onion
- Description:Fresh
- Price: 40
- Category: Vegetables
- Stock Quantity

After entering all the required details, the form was submitted by clicking the Add Product button (name=Add Product). The test was completed successfully, confirming that the product addition process works as expected when valid inputs are provided. Test completed successfully – product was added without any errors.

<u>Test 5:</u> Testing the Update Product functionalities of our website



Project: Sobzi_Lagbe_test_v2*

http://localhost

	Command	Target	Value
6	edit content	css=tr:nth-child(2) > .editable:nth-child(3)	Fresh and Good
7	click	css=tr:nth-child(2) > .editable:nth-child(4)	
8	edit content	css=tr:nth-child(2) > .editable:nth-child(4)	40.00
9	click	css=tr:nth-child(2) > .editable:nth-child(5)	
10	edit content	css=tr:nth-child(2) > .editable:nth-child(5)	Fruits
11	click	css=tr:nth-child(2) > .editable:nth-child(6)	
12	click	css=tr:nth-child(2) .save-btn	
13	click	css=tr:nth-child(2) > .editabl	

```
3.  click on id=name OK                              21:28:43
4.  type on id=name with value Onion OK              21:28:44
5.  click on id=description OK                       21:28:44
6.  type on id=description with value Fresh OK       21:28:44
7.  click on id=price OK                             21:28:44
8.  type on id=price with value 40 OK                21:28:44
9.  click on id=category OK                          21:28:44
```

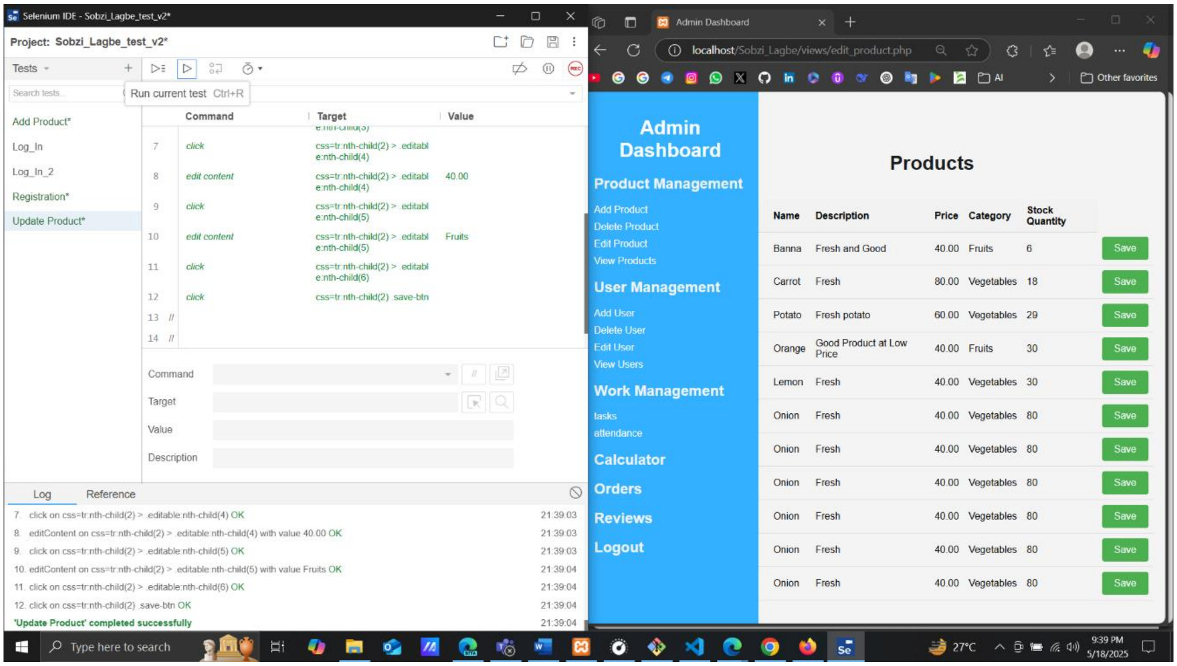
localhost/Sobzi_Lagbe/views/edit_product.php

Admin Dashboard

Products

Product ID	Name	Description	Price	Category	Stock Quantity	
26	Banna	Fresh and Good	40.00	Fruits	6	Save
27	Carrot	Fresh	80.00	Vegetables	18	Save
28	Potato	Fresh potato	60.00	Vegetables	29	Save
30	Orange	Good Product at Low Price	40.00	Fruits	30	Save
31	Lemon	Fresh	40.00	Vegetables	30	Save
40	Onion	Fresh	40.00	Vegetables	80	Save
41	Onion	Fresh	40.00	Vegetables	80	Save
42	Onion	Fresh	40.00	Vegetables	80	Save
43	Onion	Fresh	40.00	Vegetables	80	Save
44	Onion	Fresh	40.00	Vegetables	80	Save
45	Onion	Fresh	40.00	Vegetables	80	Save

Step1: We added a new test case as like previous steps and named the test case as Update Product then as like previous steps for every clicking the command, target and value were recorded inside of the selenium ide.



	Command	Target	Value
7	click	css=tr:nth-child(2) > .editable:nth-child(4)	
8	edit content	css=tr:nth-child(2) > .editable:nth-child(4)	40.00
9	click	css=tr:nth-child(2) > .editable:nth-child(5)	
10	edit content	css=tr:nth-child(2) > .editable:nth-child(5)	Fruits
11	click	css=tr:nth-child(2) > .editable:nth-child(6)	
12	click	css=tr:nth-child(2) .save-btn	
13 //			
14 //			

Command

Target

Value

Description

Log Reference

```
7.  click on css=tr:nth-child(2) > .editable:nth-child(4) OK                                  21:39:03
8.  editContent on css=tr:nth-child(2) > .editable:nth-child(4) with value 40.00 OK           21:39:03
9.  click on css=tr:nth-child(2) > .editable:nth-child(5) OK                                  21:39:03
10. editContent on css=tr:nth-child(2) > .editable:nth-child(5) with value Fruits OK          21:39:04
11. click on css=tr:nth-child(2) > .editable:nth-child(6) OK                                  21:39:04
12. click on css=tr:nth-child(2) .save-btn OK                                                 21:39:04
'Update Product' completed successfully                                                       21:39:04
```

Products

Name	Description	Price	Category	Stock Quantity	
Banna	Fresh and Good	40.00	Fruits	6	Save
Carrot	Fresh	80.00	Vegetables	18	Save
Potato	Fresh potato	60.00	Vegetables	29	Save
Orange	Good Product at Low Price	40.00	Fruits	30	Save
Lemon	Fresh	40.00	Vegetables	30	Save
Onion	Fresh	40.00	Vegetables	80	Save
Onion	Fresh	40.00	Vegetables	80	Save
Onion	Fresh	40.00	Vegetables	80	Save
Onion	Fresh	40.00	Vegetables	80	Save
Onion	Fresh	40.00	Vegetables	80	Save
Onion	Fresh	40.00	Vegetables	80	Save

Step 2: After successfully recording the test we now clicked on run current test case which shows: Opened the Update Product page http://localhost/Sobzi_Lagbe/views/edit_product.php.

Set the browser window size to ensure consistent layout rendering

- Clicked on the any product field to choose a product for update
- Clicked on the name input field (id=name)
- Entered new name: Banna
- Clicked on the Price input field (id=category)
- Entered new category: Fruits
- Clicked on the Price input field (id=price)
- Entered new price value: 40
- Clicked the save button (name=save)

Test completed successfully – product was updated without errors.