

*Automation Testing of the TeamSync Web Application – Test Case Execution using Selenium IDE*

**Testing Approach:** Automated Functional Testing

**Tool Used:** Selenium IDE

**System Under Test (SUT):** TeamSync – Web-based Project Management Platform

MD ASSADULLA AL GALIB

## Overview:

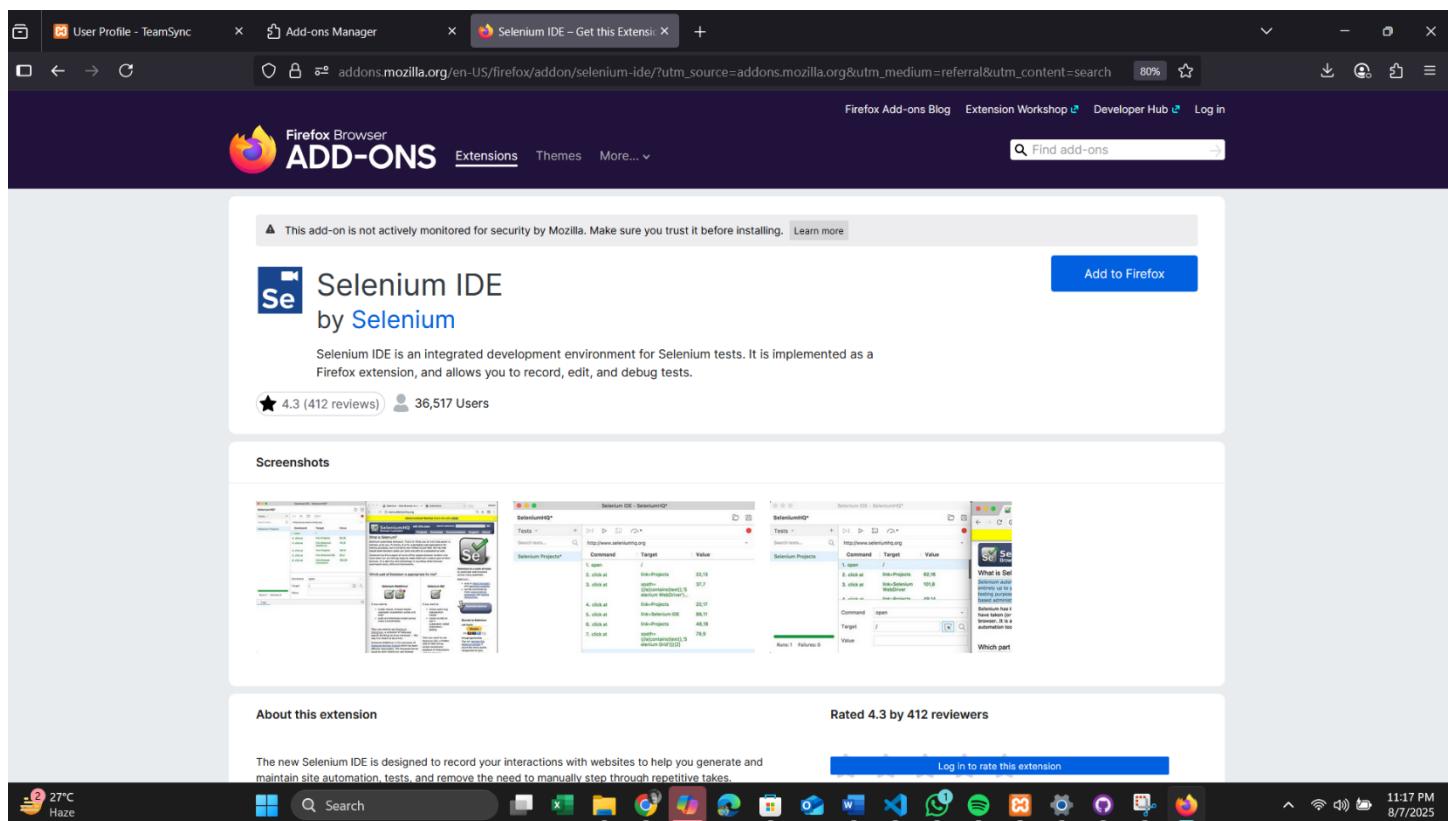
**TeamSync** is a web-based project management platform designed to help teams efficiently manage tasks, monitor progress, and collaborate in real time. The system provides features such as task assignment, progress tracking, document sharing, and user role management. Team members can view project updates, deadlines, and assigned tasks, while administrators can oversee project performance and team activity. The platform also includes a responsive user interface and a centralized dashboard for better navigation and control. Overall, TeamSync streamlines project workflows, enhances communication, and improves overall team productivity.

## Installation steps:

**Step 1:** First, we will add the Selenium IDE extension from the Firefox Add-ons Store.

- Open Firefox and visit: <https://addons.mozilla.org/en-US/firefox/addon/selenium-ide/>

**Step 2:** Click the “Add to Firefox” button.



**Step 3:** When prompted, click “Add” to confirm installation.

The screenshot shows the Firefox Add-ons Manager with the Selenium IDE extension page. A modal dialog is open over the 'Add' button, displaying the required permissions and optional settings. The permissions listed are: Access your data for all websites, Download files and read and modify the browser's download history, Access browser tabs, and Access browser activity during navigation. The optional settings include a checkbox for 'Allow extension to run in private windows', which is currently checked. The 'Add' button is highlighted in blue.

**Add Selenium IDE**

**Required permissions:**

- Access your data for all websites
- Download files and read and modify the browser's download history
- Access browser tabs
- Access browser activity during navigation

**Optional settings:**

- ☒ Allow extension to run in private windows

[Learn more](#)

**Add** **Cancel**

The screenshot shows the Selenium IDE extension page on the Firefox Add-ons website. The 'Remove' button is highlighted in blue. The page displays the extension's name, version, and user ratings. Below the 'About this extension' section, there is a list of features and a bar chart showing the distribution of user ratings.

**Selenium IDE**  
by Selenium

Selenium IDE is an integrated development environment for Selenium tests. It is implemented as a Firefox extension, and allows you to record, edit, and debug tests.

★ 4.3 (412 reviews) 36,517 Users

**Screenshots**

**About this extension**

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 tasks.

**Rated 4.3 by 412 reviewers**

[Log in to rate this extension](#)

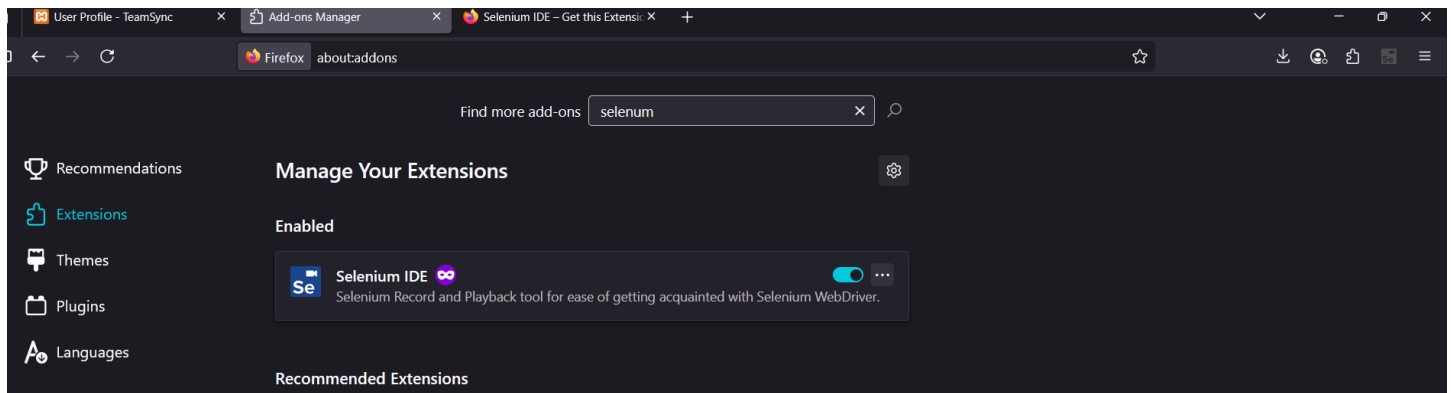
**Features include:**

- Recording and playing back tests on Firefox and Chrome.
- Organizing tests into suites for easy management.
- Saving and loading scripts for later playback.

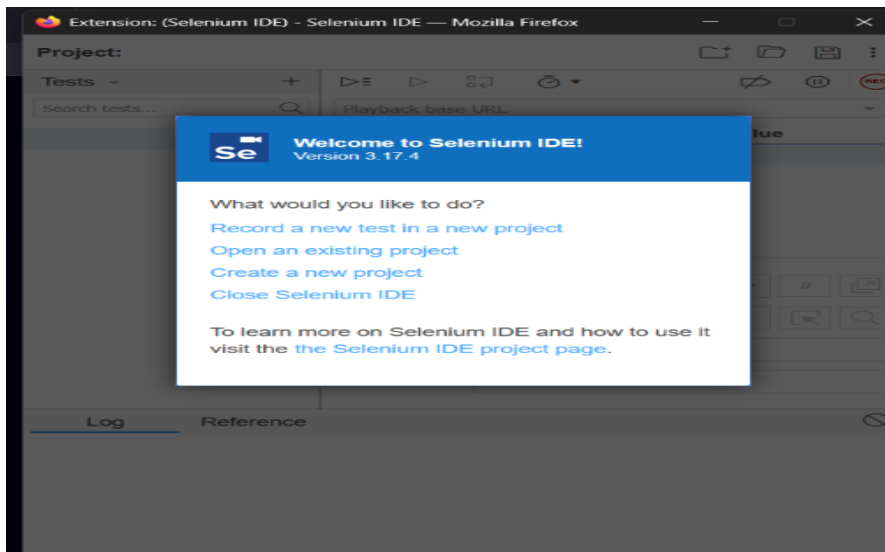
**Log in to rate this extension**

Rating	Count
5 stars	285
4 stars	57
3 stars	24
2 stars	9

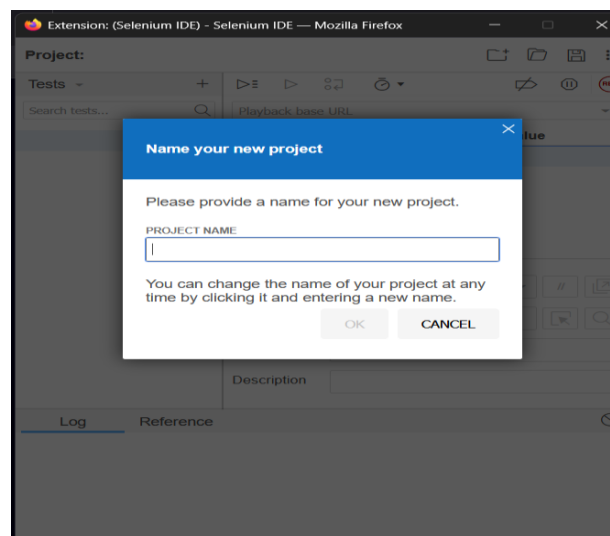
**Step 4:** After installation, the Selenium IDE icon will appear in the top-right corner of your browser toolbar.



**Step 5:** Then, click “Create a new project” to start a new test project.



**Step 6:** Enter the project name you want to test, then click “Start Recording.”

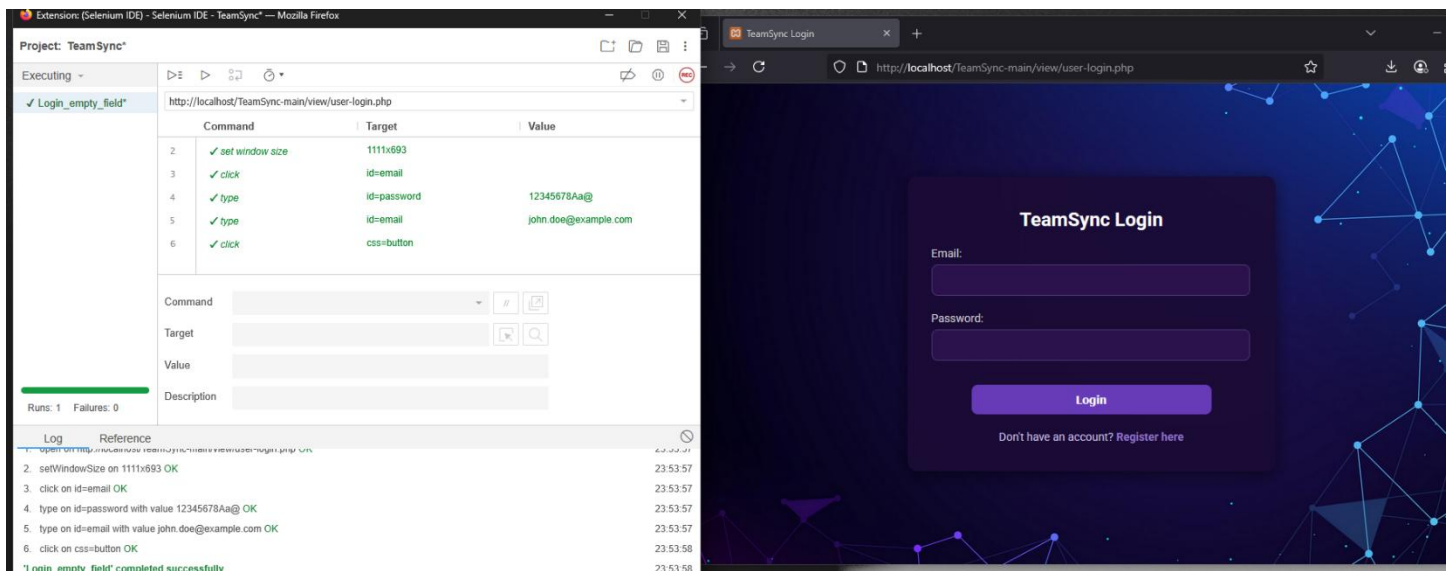
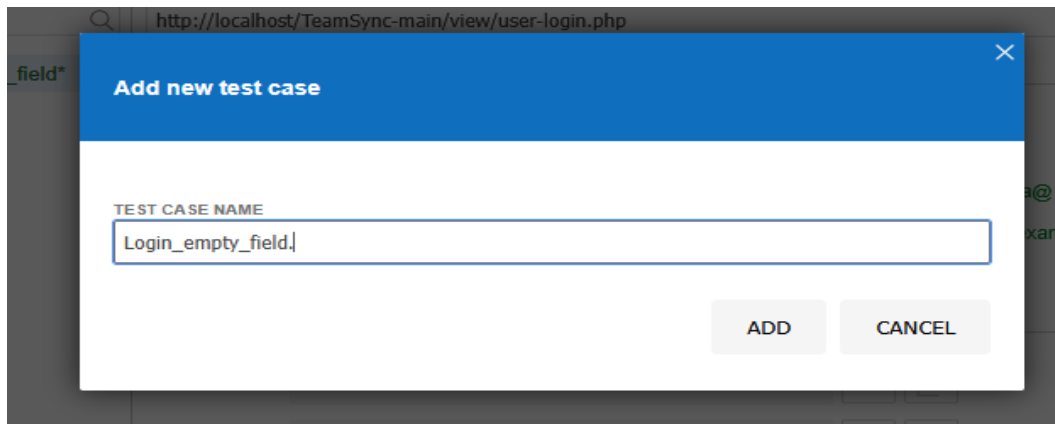


## Testing:

### Test Case 1 – Login Page Validation

**Description:** Verify that if both username and password fields are left blank, the system displays an appropriate error message in a dialogue box.

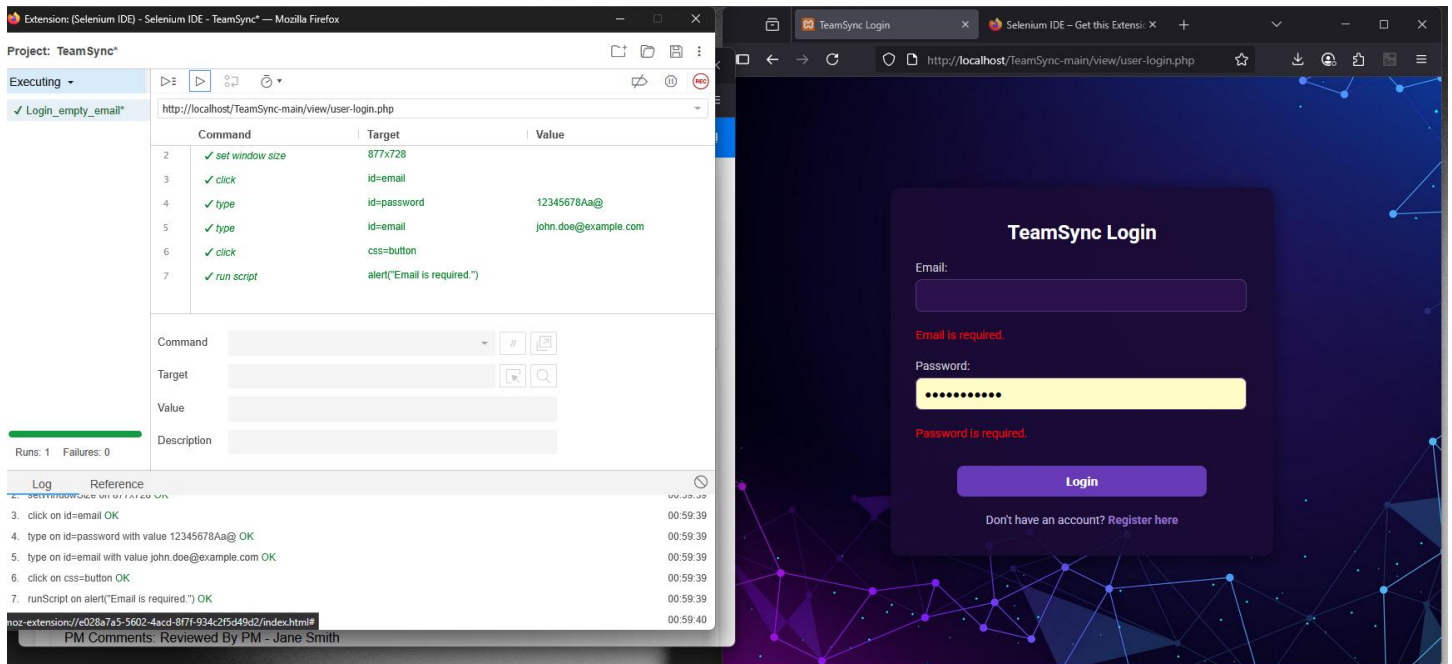
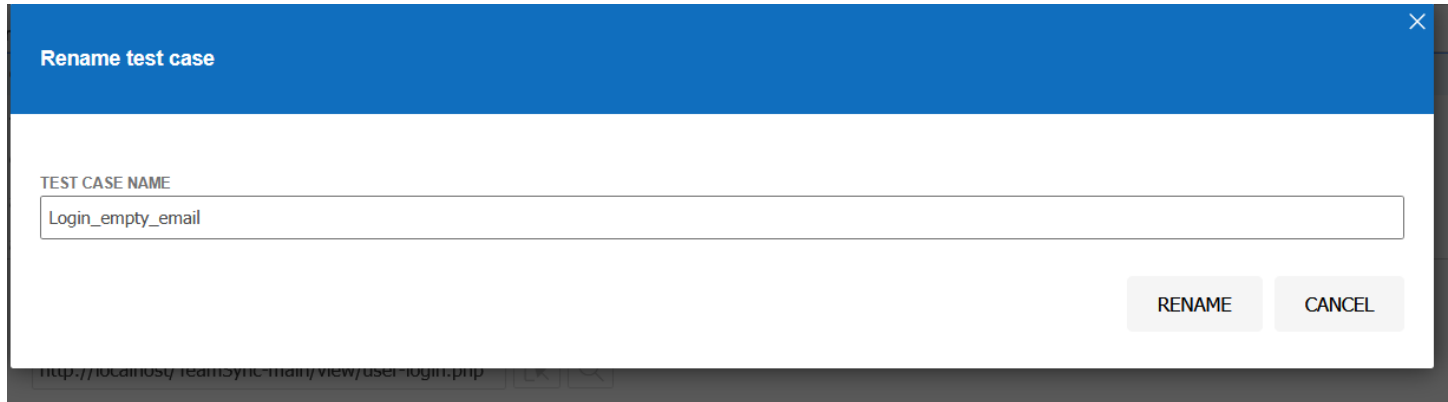
Screenshots:



## Test Case 2 – Invalid Login (Empty Email)

**Description:** Verify that when the email field is left blank and password is entered, the system displays an error message indicating that email is required.

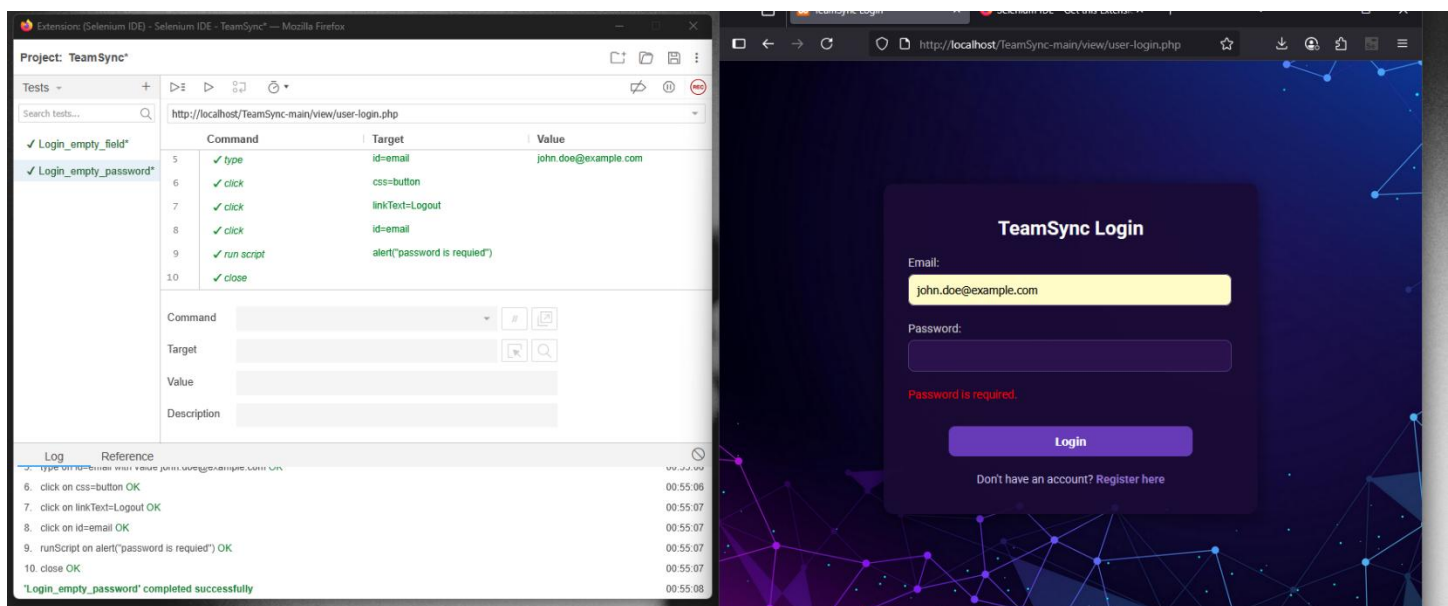
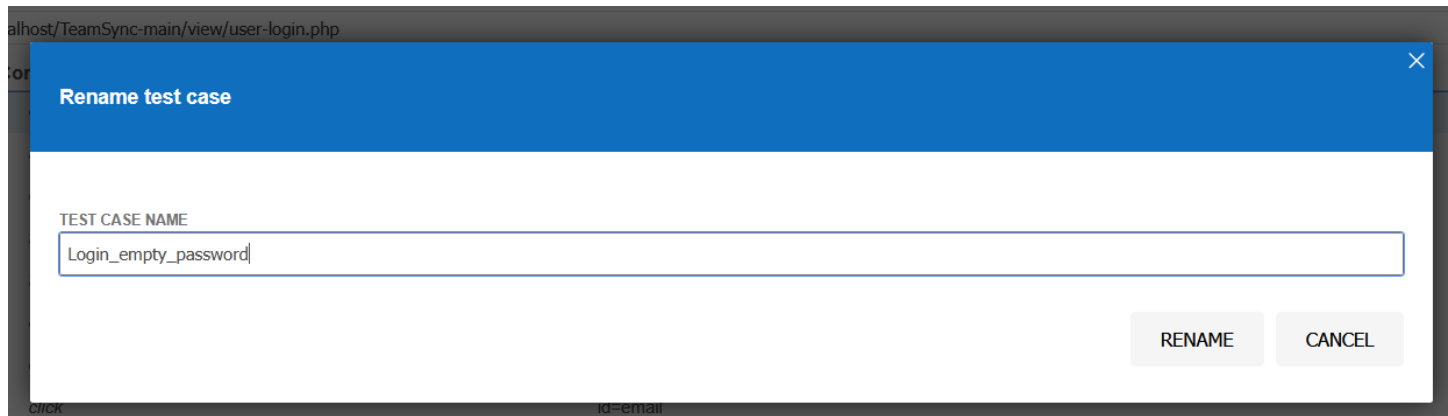
Screenshots:



### Test Case 3 – Invalid Login (Empty Password)

**Description:** Verify that when the password field is left blank and email is entered, the system displays an error message indicating that password is required.

#### Screenshots



#### Test Case 4 – Successful Login

**Description:** Verify that entering valid credentials grants access to the dashboard.

**Screenshots:**

Rename test case

TEST CASE NAME

Login

RENAMECANCEL

Project: TeamSync\*

Tests +

Search tests...

✓ Login\*

✓ Login\_empty\_email\*

✓ Login\_empty\_field\*

✓ Login\_empty\_password\*

http://localhost/TeamSync-main/view/user-login.php

	Command	Target	Value
1	✓ open	http://localhost/TeamSync-main/view/user-login.php	
2	✓ set window size	877x758	
3	✓ click	id-loginForm	
4	✓ click	id=email	
5	✓ type	id=password	12345678Aa@
6	✓ type	id=email	john.doe@example.com
7	✓ click	css=button	

Command # [img]

Target [img]

Value

Description

Log

Reference

2. set window size OK 01:01:22

3. click on id-loginForm OK 01:01:22

4. click on id=email OK 01:01:22

5. type on id=password with value 12345678Aa@ OK 01:01:22

6. type on id=email with value john.doe@example.com OK 01:01:22

7. click on css=button OK 01:01:23

"Login" completed successfully 01:01:23

Developer Dashboard - TeamSy

Selenium IDE - Get this Extensi

http://localhost/TeamSync-main/controller/user-dashboard

TeamSync

Home All Tasks Logout Welcome, John Doe!

Total Tasks 5

Active Tasks 2

Completed Tasks 3

Search Tasks

Search Tasks...

Active Tasks

#10

Waiting For Approval

Task 10

Project Name: Project Gammaaa

Managed By: Jane

Start Date: 2025-01-01

Deadline: 2025-01-31

PM Comments: Reviewed By PM - Jane Smith

#15

#### Test Case 5 – View All Tasks

**Description:** Verify that all tasks assigned to the user are displayed on the dashboard

**Screenshots:**

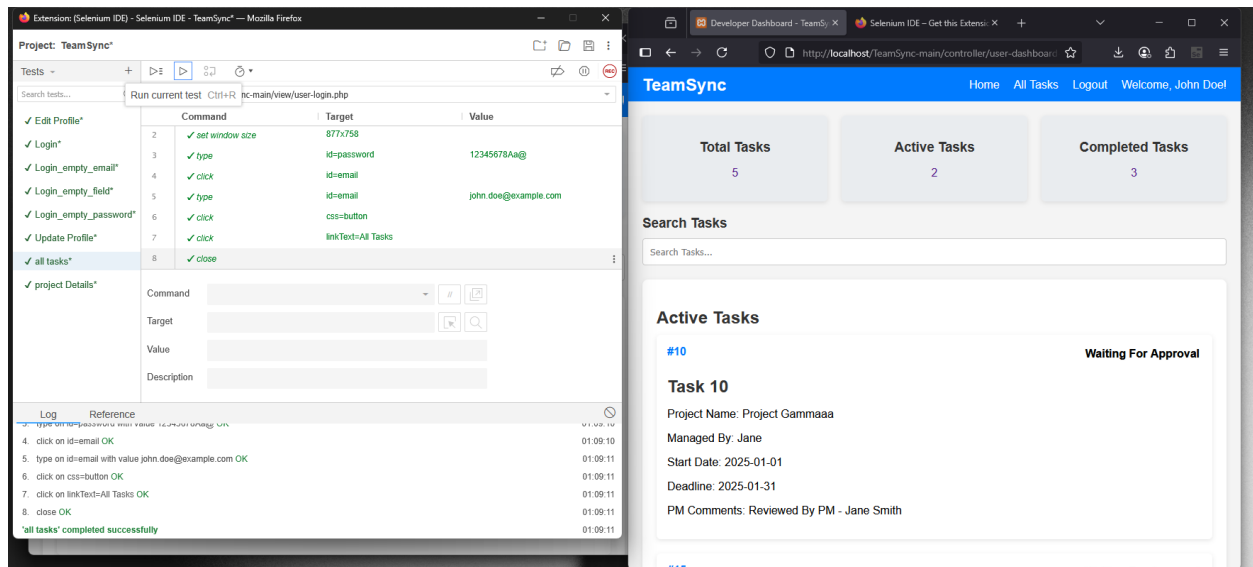
Rename test case

TEST CASE NAME

all tasks

RENAMECANCEL

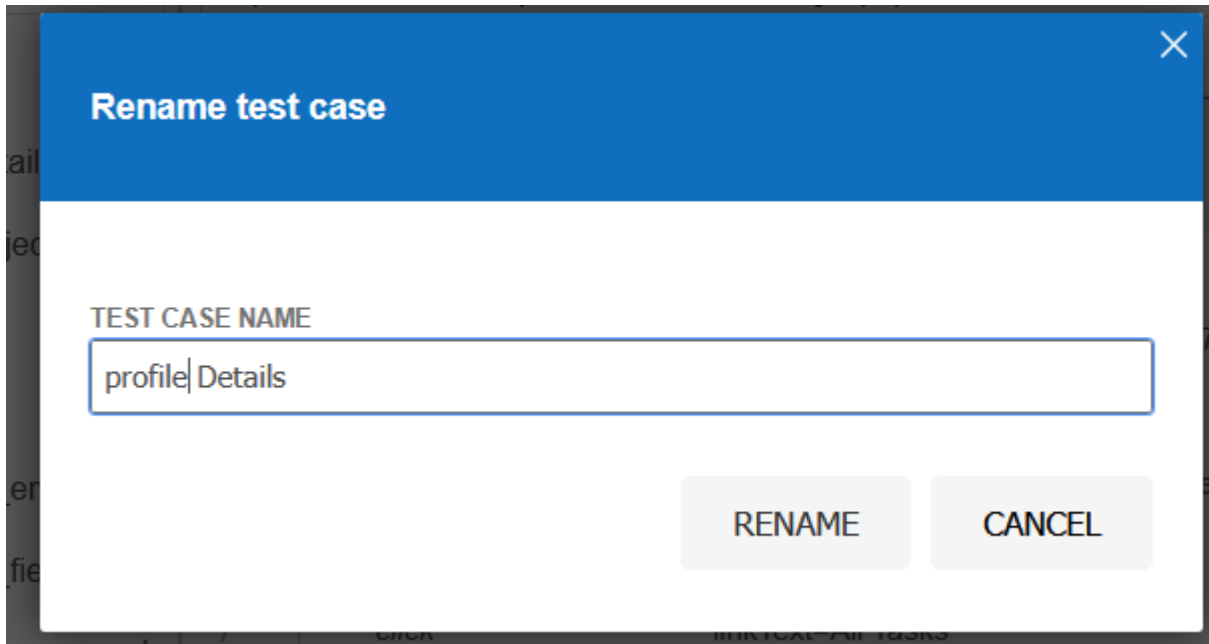


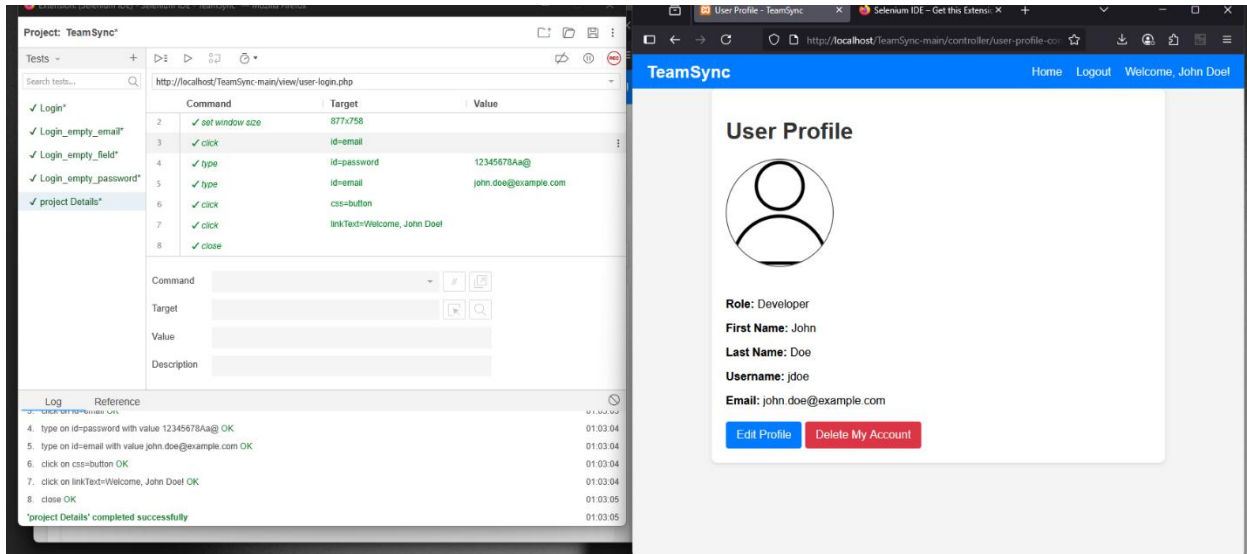


### Test Case 6 – View Profile Details

**Description:** Verify that the user can view complete profile details from the dashboard.

**Screenshots:**

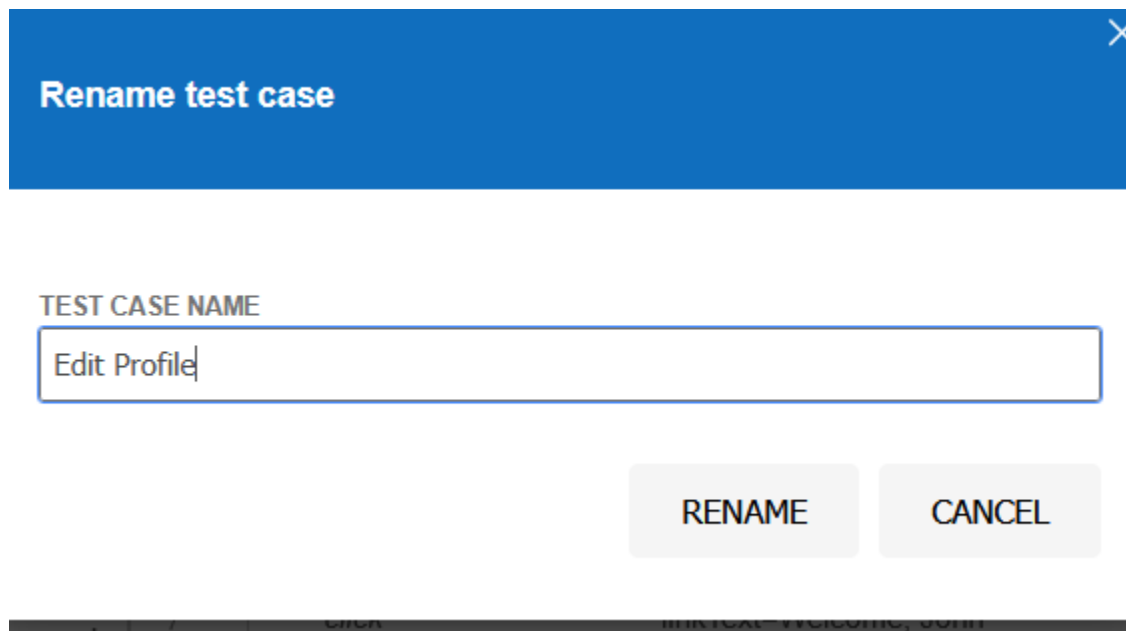


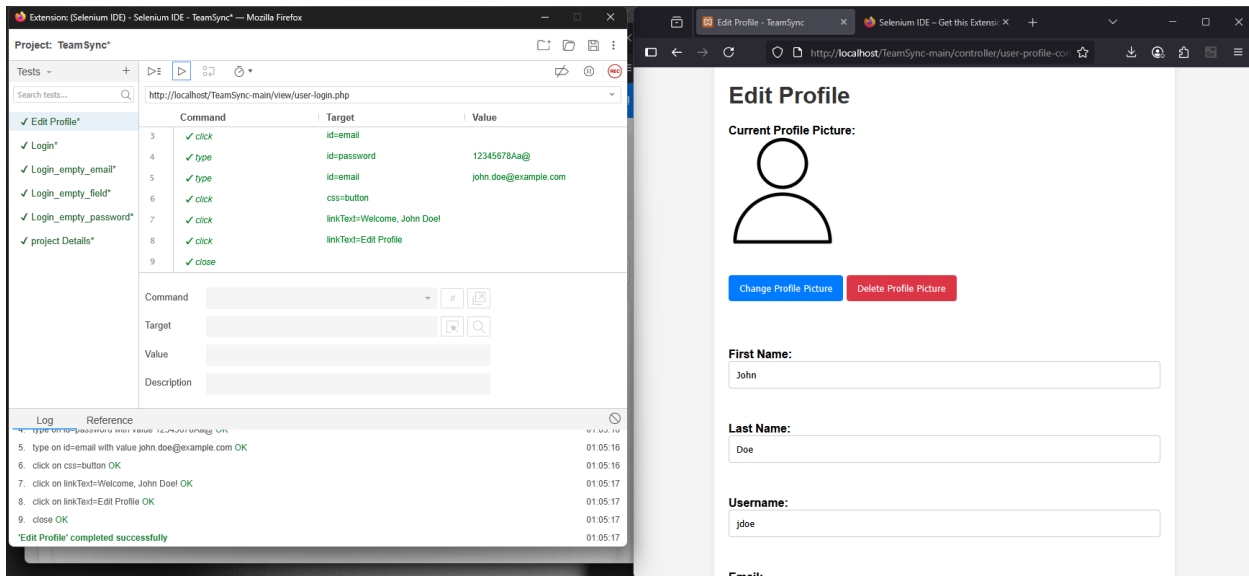


## Test Case 7 – Edit Profile

**Description:** Verify that the user can open and edit profile information from the dashboard.

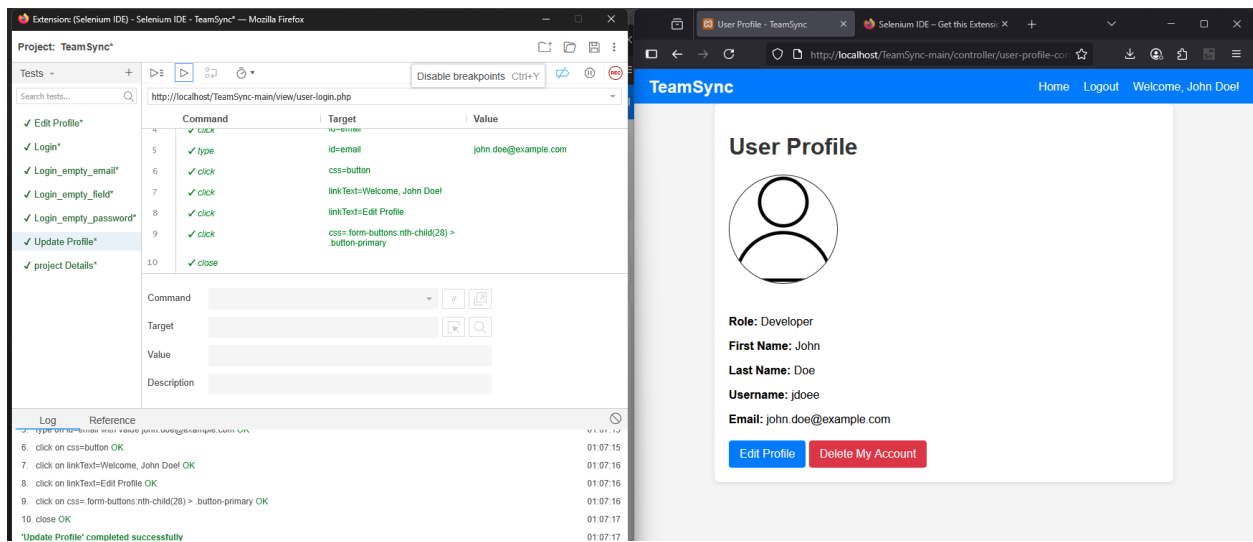
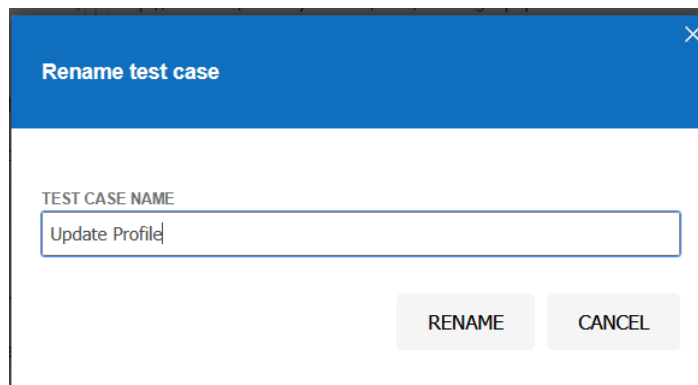
### Screenshots:





## Test Case 8 – Update Profile

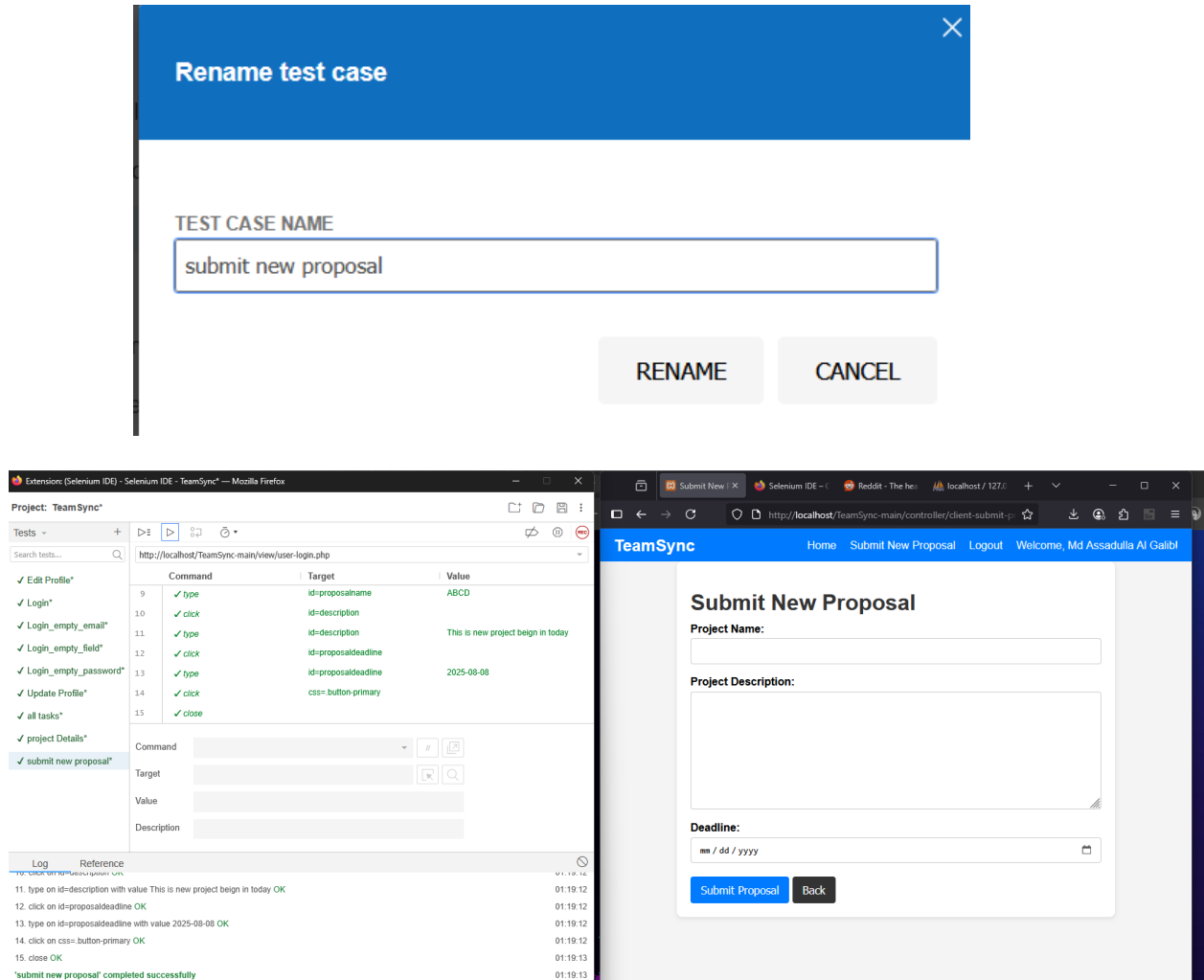
**Description:** Verify that changes made to the profile are successfully updated and reflected on the dashboard.



### Test Case 9 – Submit New Proposal

**Description:** Verify that the user can submit a new proposal and that it appears in the relevant section.

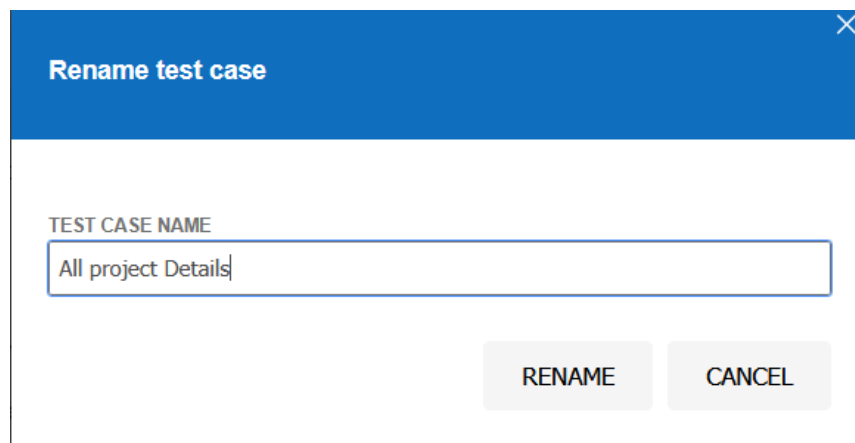
**Screenshots:**

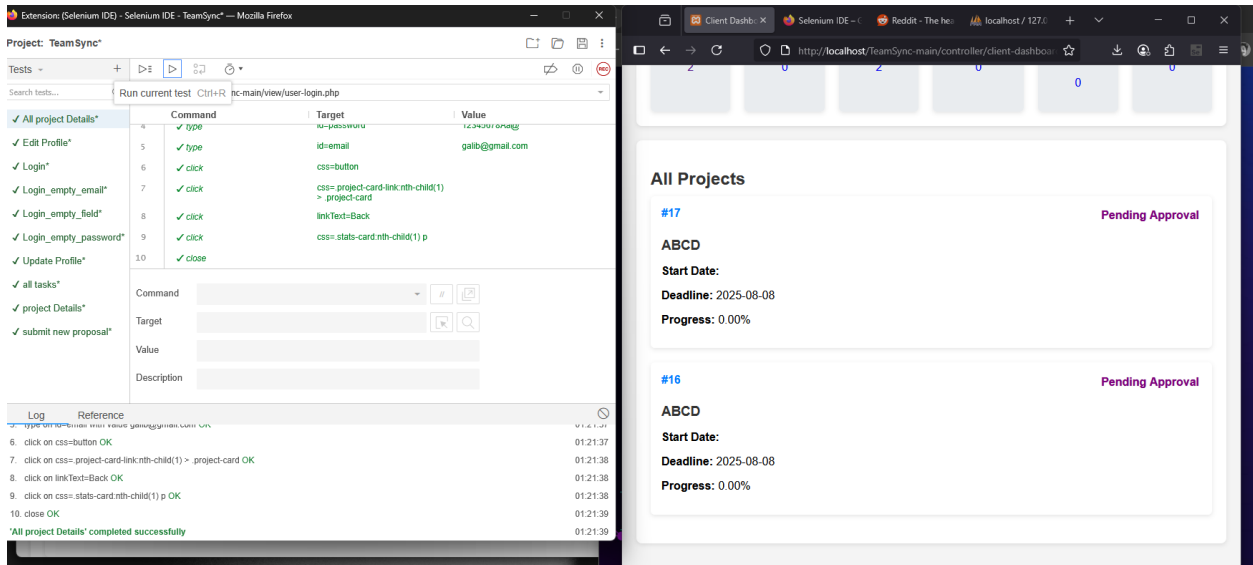


### Test Case 10 – View All Project Details

**Description:** Verify that the system displays complete details of all projects.

**Screenshots:**

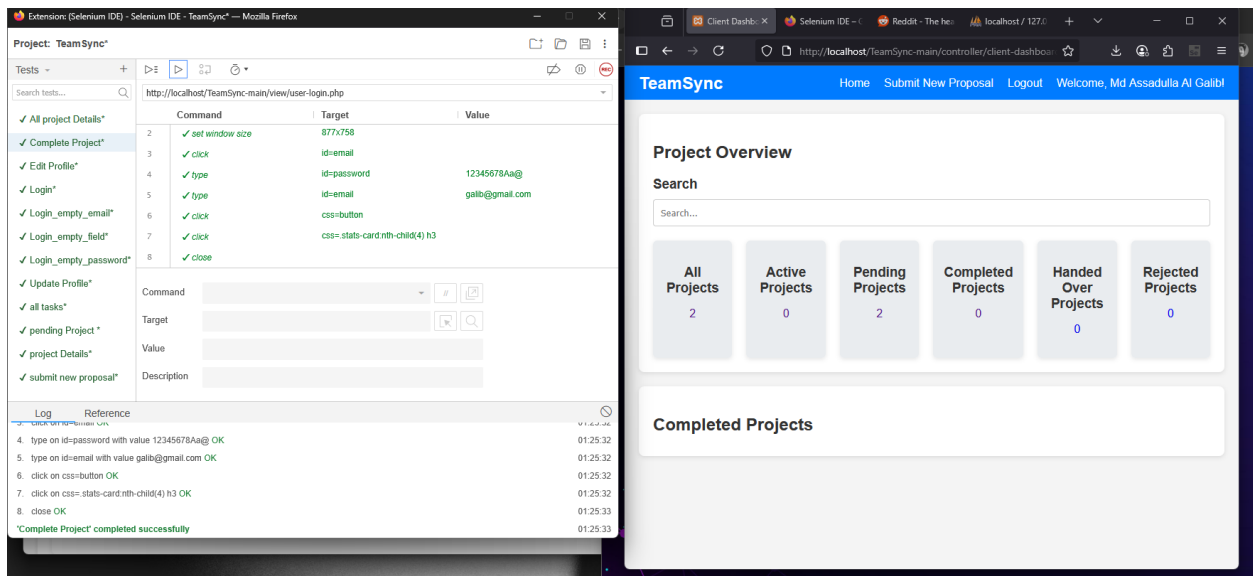
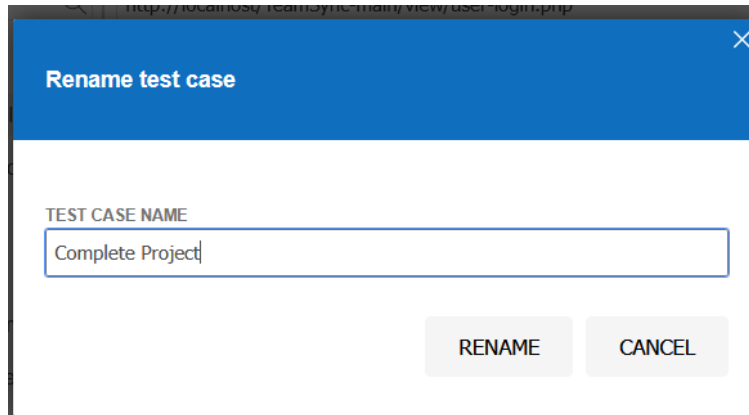




## Test Case 11 – View Completed Projects

**Description:** Verify that the dashboard correctly lists all completed projects.

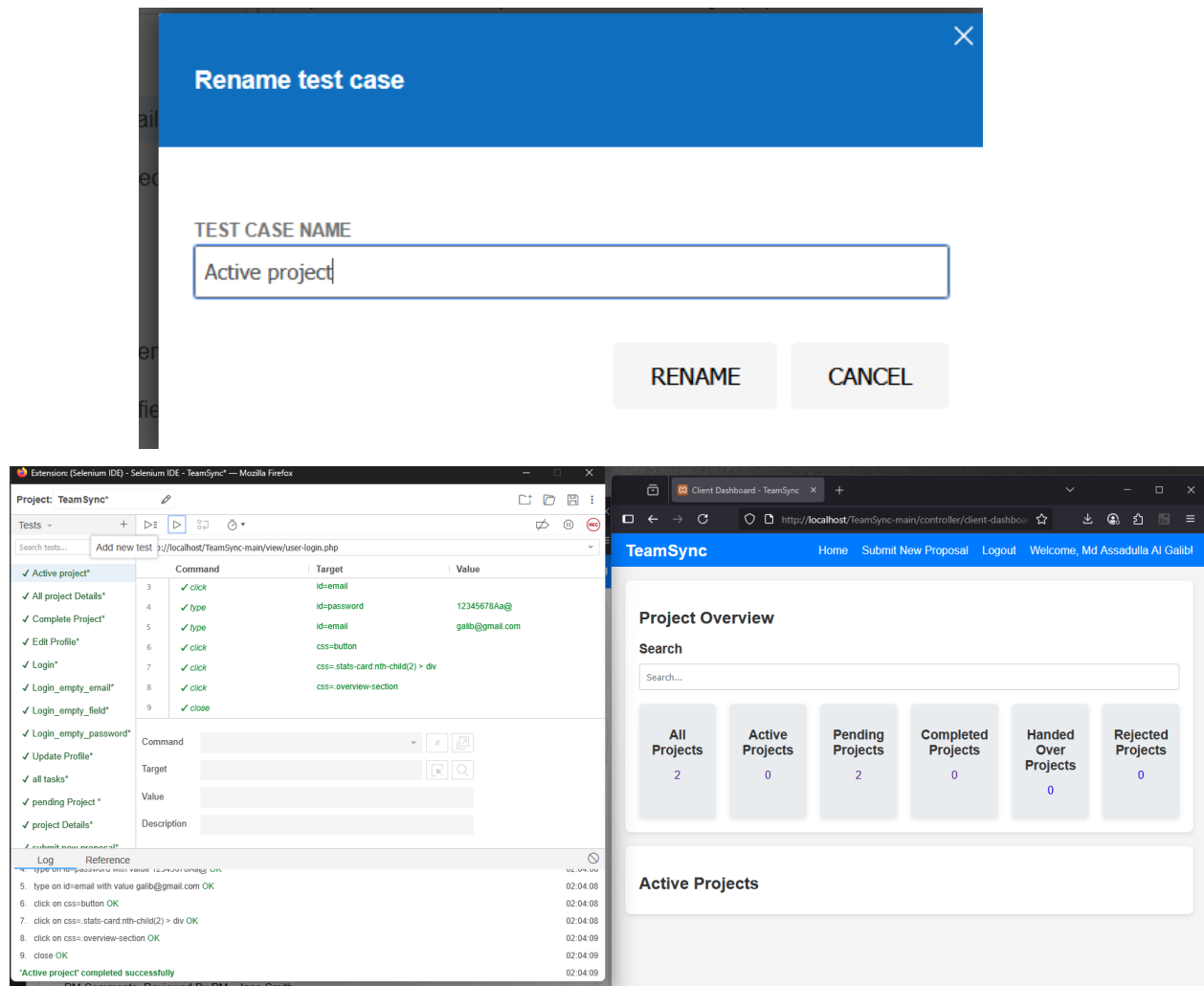
### Screenshots:



### Test Case 12 – View Active Projects

**Description:** Verify that the dashboard correctly lists all active projects.

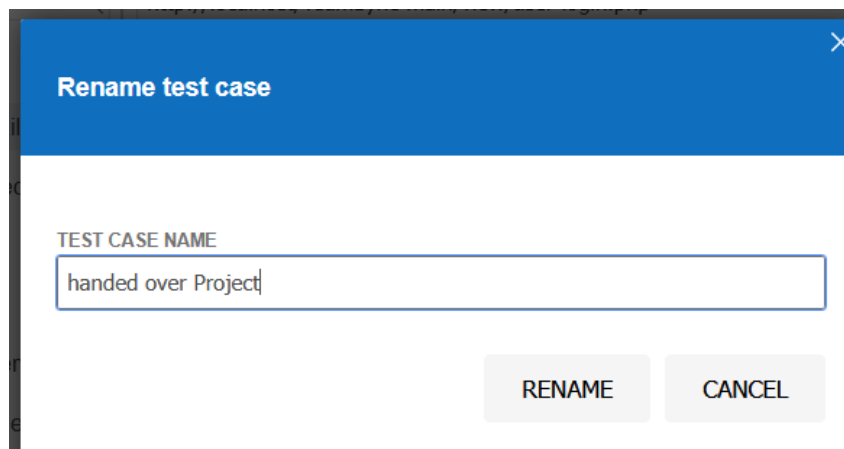
**Screenshots:**

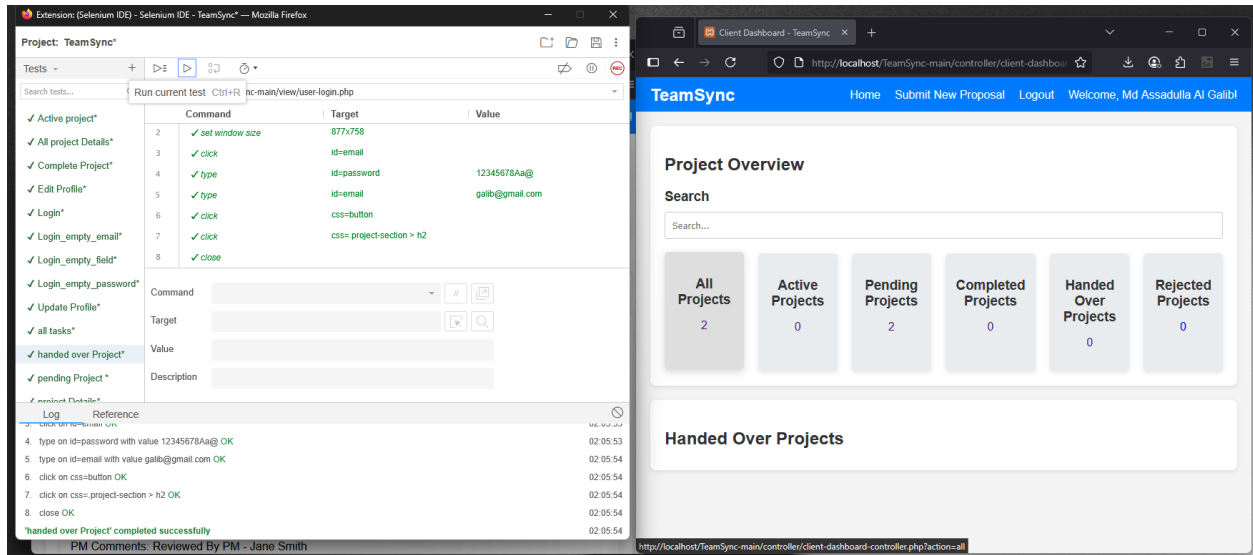


### Test Case 13 – View Handed Over Projects

**Description:** Verify that the dashboard correctly lists all handed over projects.

**Screenshots:**

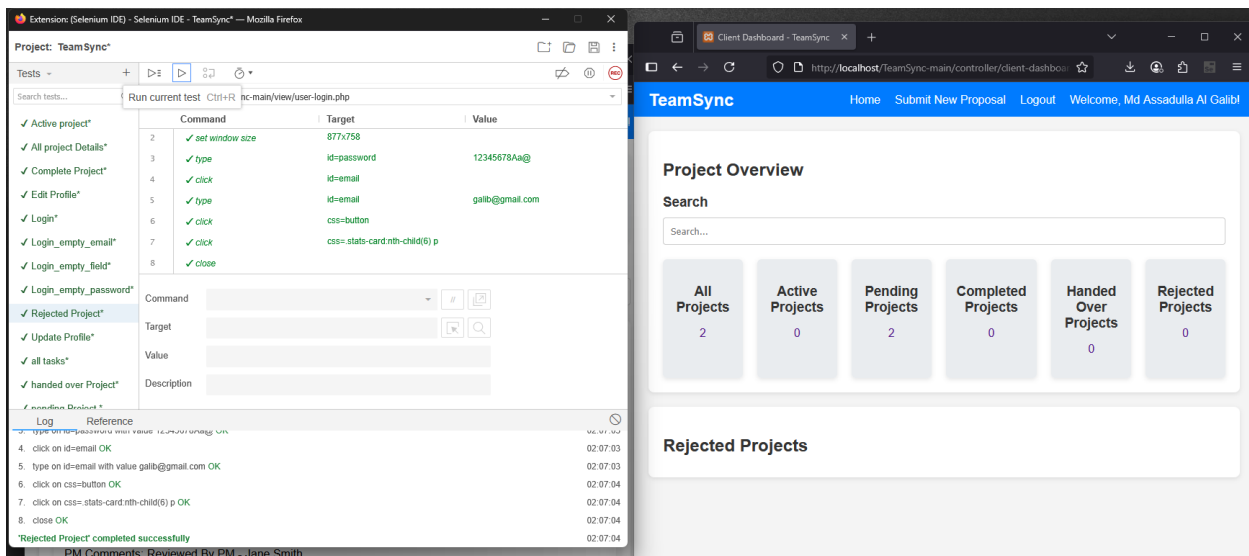
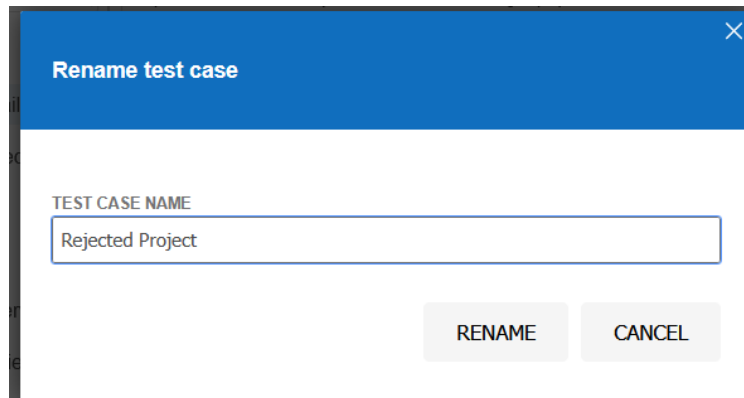




## Test Case 14 – View Rejected Projects

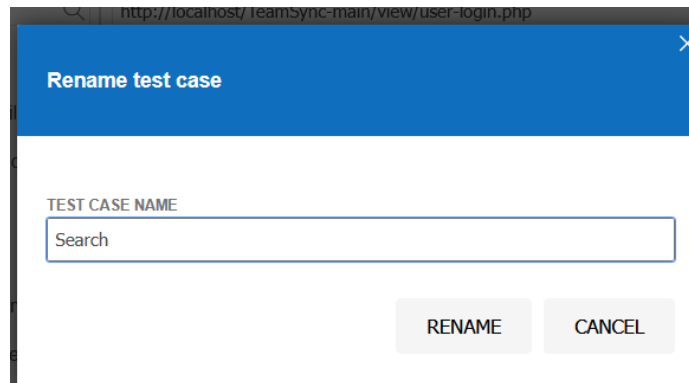
**Description:** Verify that the dashboard correctly lists all rejected projects

**Screenshots:**



### Test Case 15 – Search Functionality

**Description:** Verify that the search feature returns correct results based on the query entered by the user.

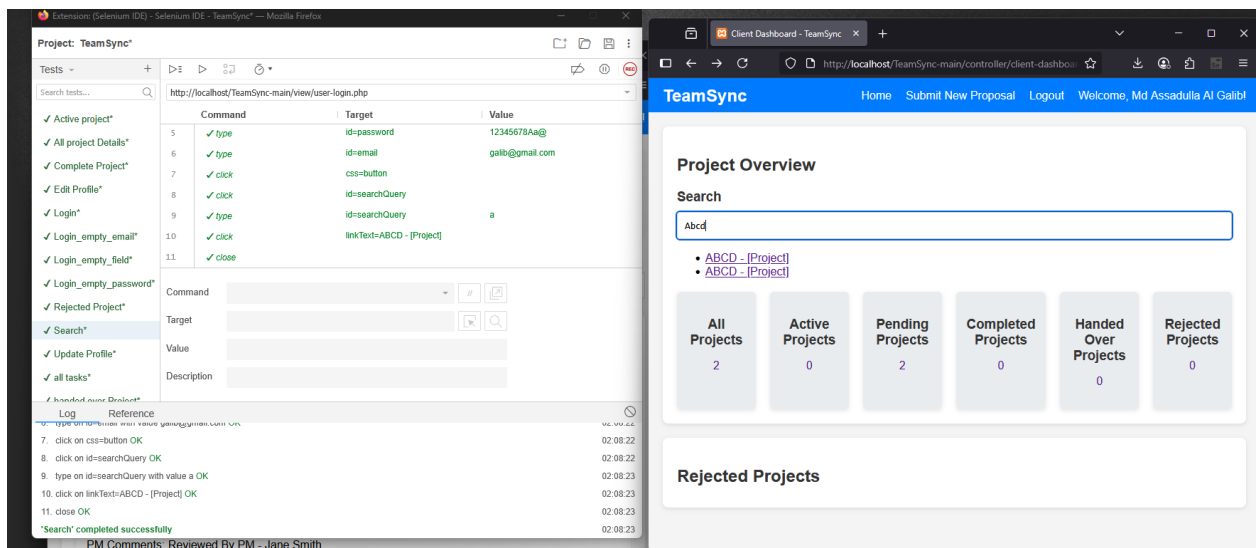


Rename test case

TEST CASE NAME

Search

RENAME CANCEL



The left screenshot shows the Selenium IDE interface with a test case named "Search\*" selected. The test case steps are as follows:

Step	Command	Target	Value
5	type	id=password	12345678Aa@
6	type	id=email	galib@gmail.com
7	click	css=button	
8	click	id=searchQuery	
9	type	id=searchQuery	a
10	click	linkText=ABCD - [Project]	
11	close		

The right screenshot shows the TeamSync web application dashboard. The search bar contains the text "Abcd". The search results are as follows:

- ABCD - [Project]
- ABCD - [Project]

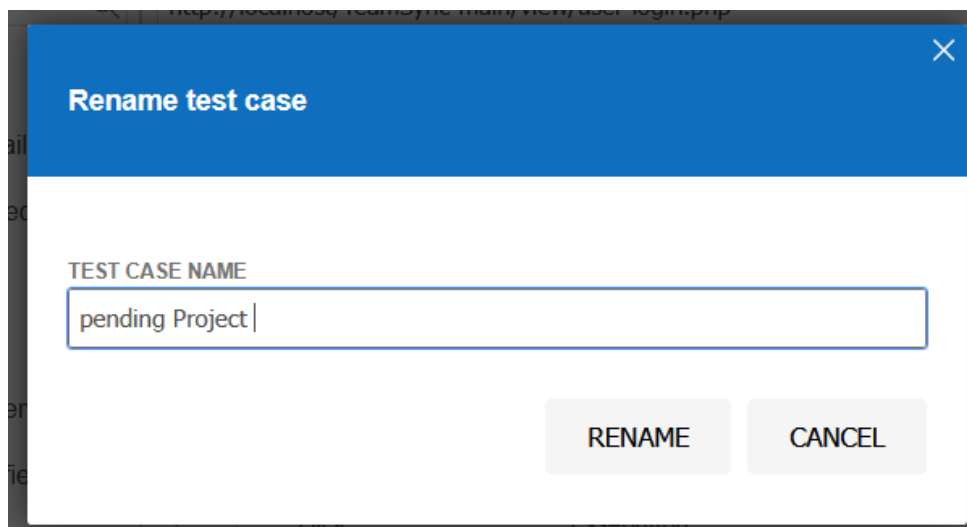
The dashboard also displays a summary of project counts:

Category	Count
All Projects	2
Active Projects	0
Pending Projects	2
Completed Projects	0
Handed Over Projects	0
Rejected Projects	0

### Test Case 16 – View Pending Projects

**Description:** Verify that the dashboard correctly lists all pending projects.

**Screenshots:**



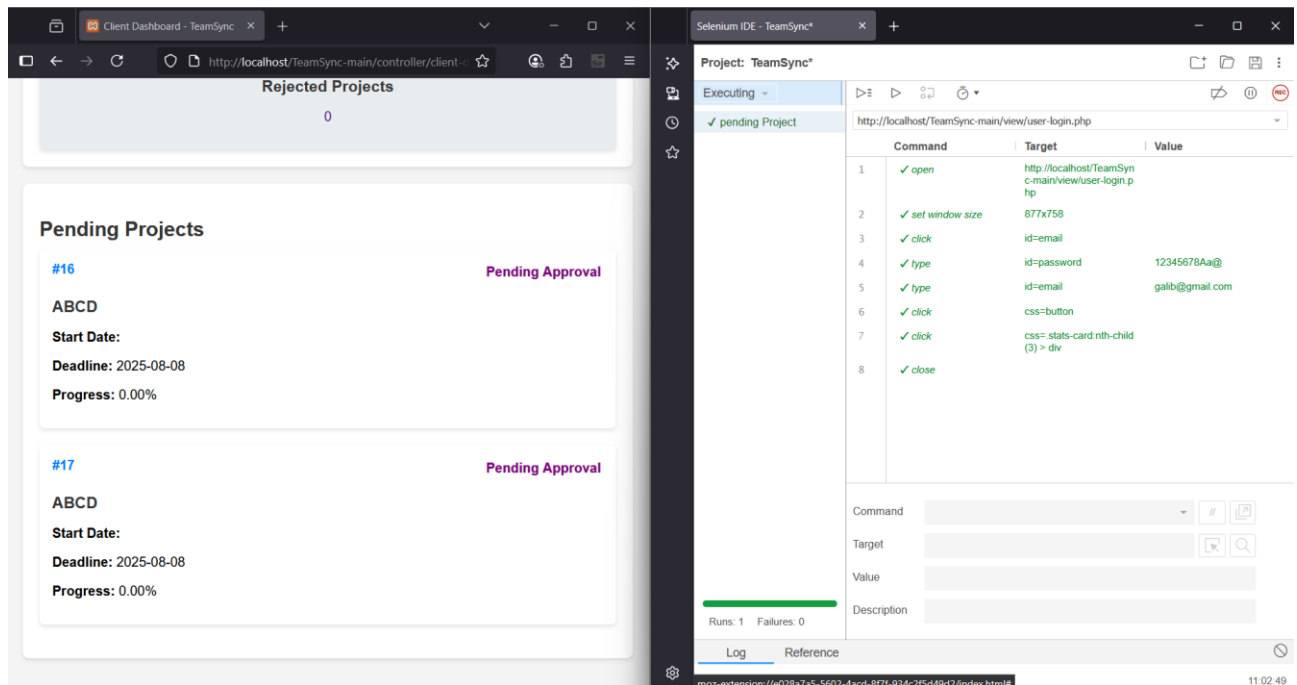
Rename test case

TEST CASE NAME

pending Project

RENAME CANCEL





## Test Case 17 – Logout Functionality

**Description:** Verify that logging out redirects the user to the login page and ends the active session.

**Screenshots:**

