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**UNIVERSITY-BANGLADESH**

**Faculty of Science and Technology**

**Assignment Cover Page**

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| --- | --- | --- | --- | --- |
| Assignment Title: | Selenium Installation Process and Testing Project Modules | | | |
| Assignment No: | 01 | | Date of Submission: | 19 March 2024 |
| Course Title: | Software Quality and Testing | | | |
| Course Code: | 01682 | | Section: | A |
| Semester: | Spring | 2023-24 | Course Teacher: | ABHIJIT BHOWMIK |

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**INTRODUCTION:**

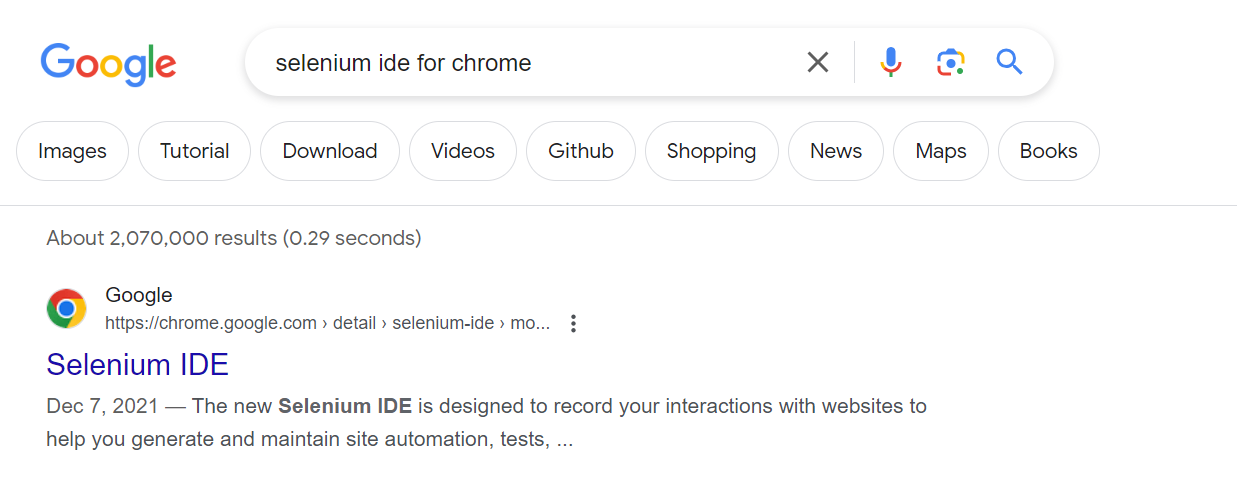
Selenium is a powerful suite of tools designed to automate web browsers, enabling developers and testers to simulate user interactions with web applications for testing purposes. It provides a rich set of testing functions specifically geared towards the needs of testing web applications of all types, ensuring that they work as expected across different browsers and platforms. Among its various components, Selenium IDE (Integrated Development Environment) stands out as an intuitive, open-source tool that significantly simplifies the process of automating web application testing.

Users, from novices to experienced developers, can easily leverage Selenium IDE to create, edit, and execute automated tests without the need for extensive programming knowledge. This is particularly achieved through its availability as a browser extension for popular web browsers like Firefox and Chrome. To utilize Selenium IDE, one simply needs to add it to their browser as an extension. Once installed, it integrates seamlessly with the browser, providing a user-friendly interface that allows for the recording of user interactions with web applications. These interactions can then be replayed to verify the application's functionality, making it an ideal tool for conducting regression tests to ensure consistent performance after updates or modifications to the web application.

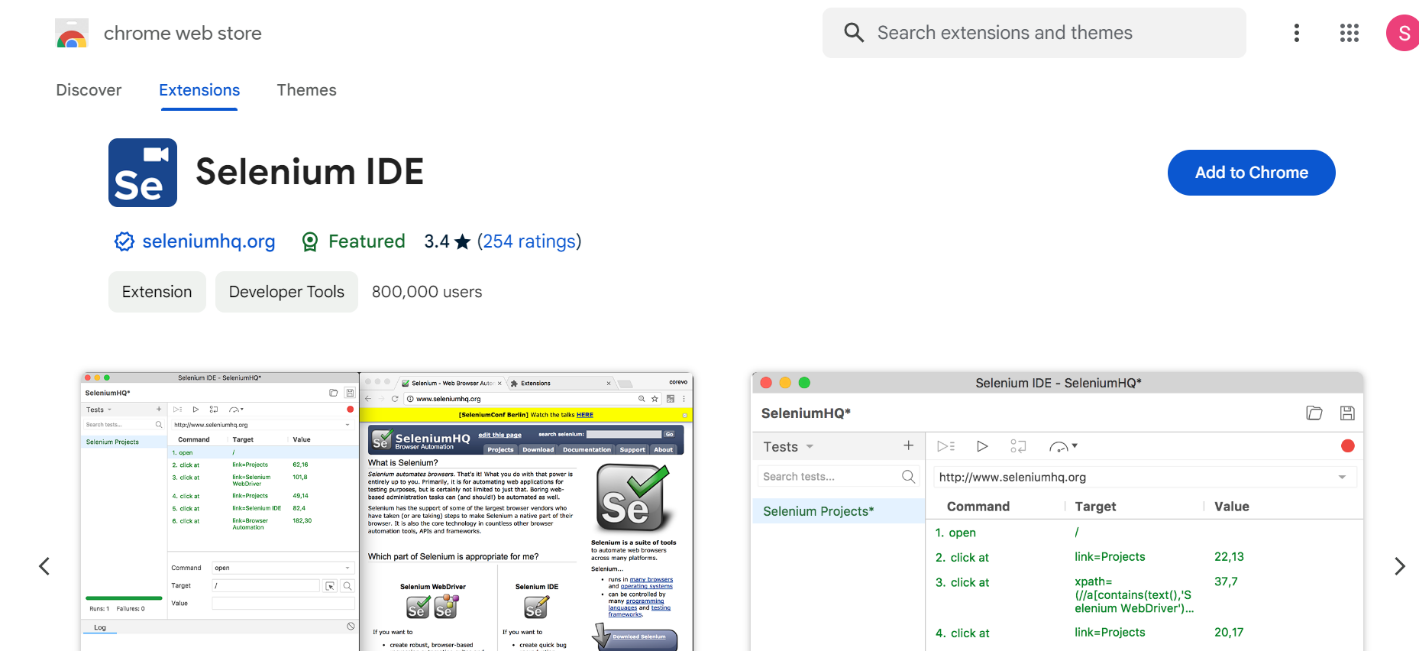
Selenium IDE's straightforward approach to test automation makes it an accessible entry point into the broader Selenium suite, offering a perfect blend of simplicity and efficacy for web application testing. Through its use as a Chrome extension or on Firefox, Selenium IDE not only facilitates rapid test development and execution but also enhances the overall quality assurance process, ensuring that web applications meet their functional requirements across different web environments.

**1. Selenium IDE installation:**

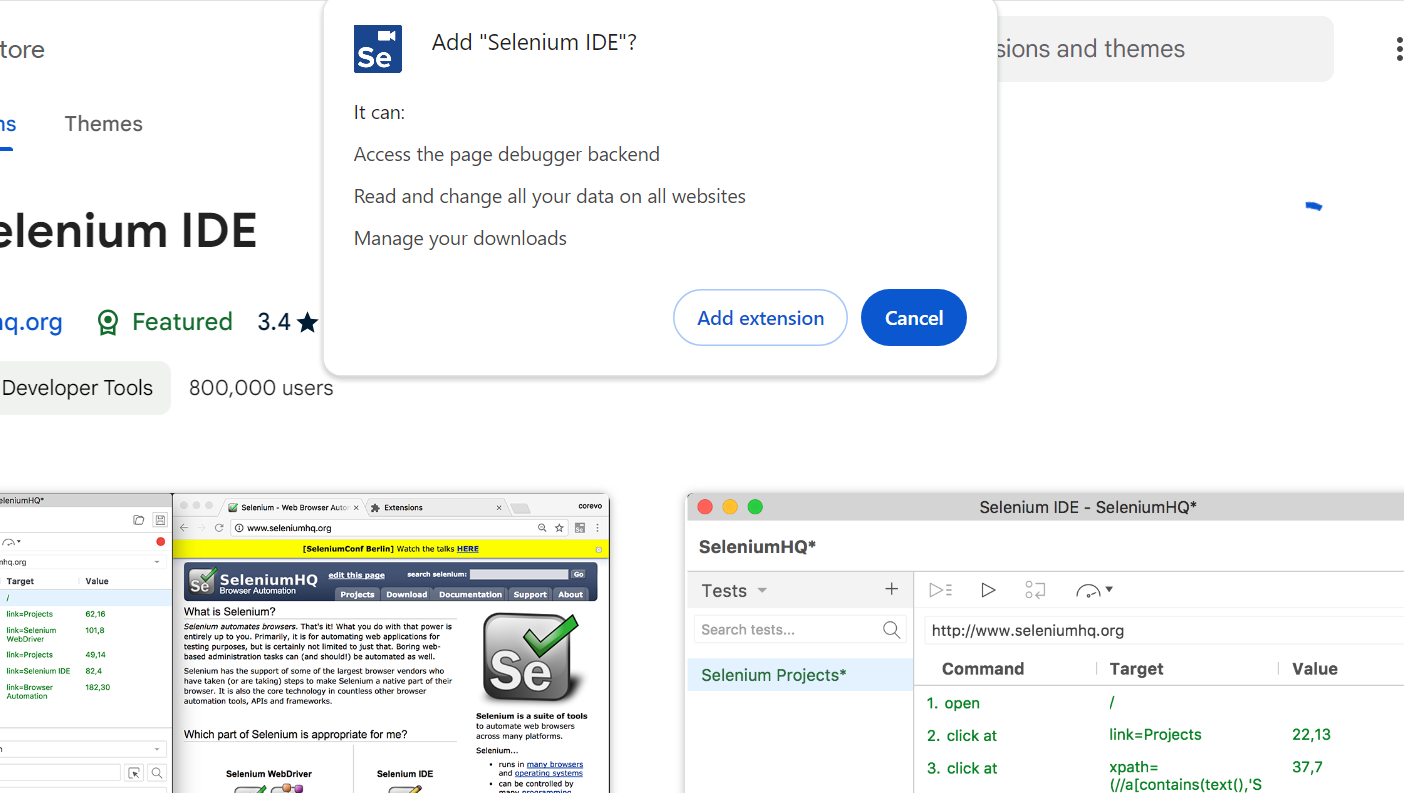
1. Searching selenium IDE for Chrome browser



1. Browsing Selenium IDE for Chrome browser

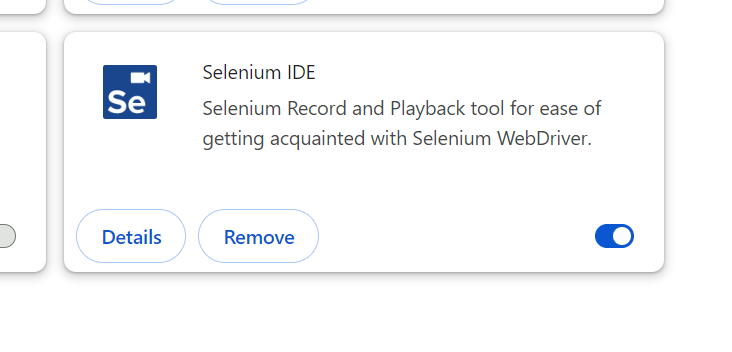


1. Adding Selenium IDE to Chrome browser

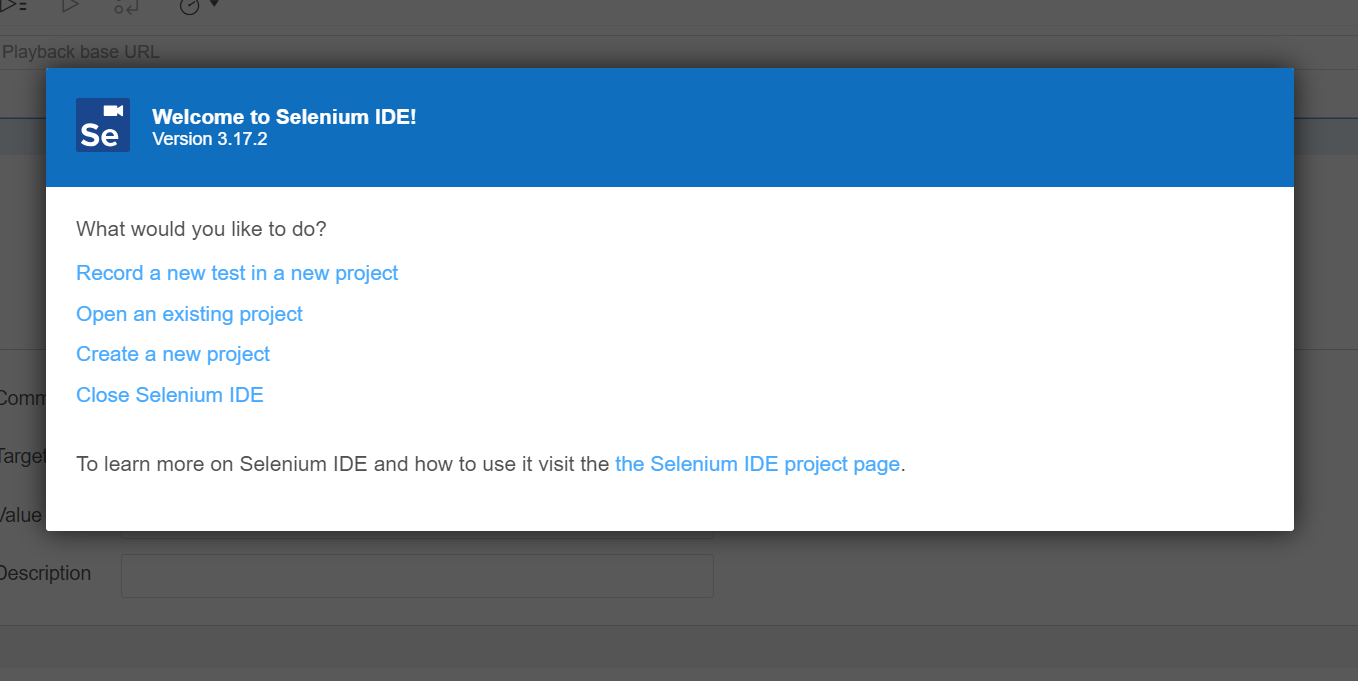


**2. Creating Selenium Project:**

1. Opening Selenium IDE in Chrome browser



1. Creating new Selenium project



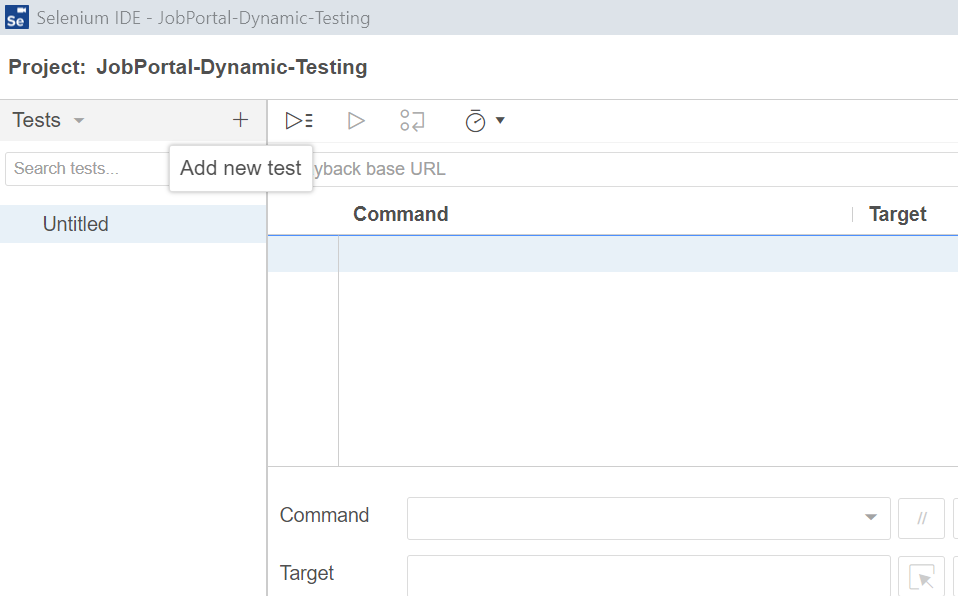
1. Naming new Selenium project

A screenshot of a computer

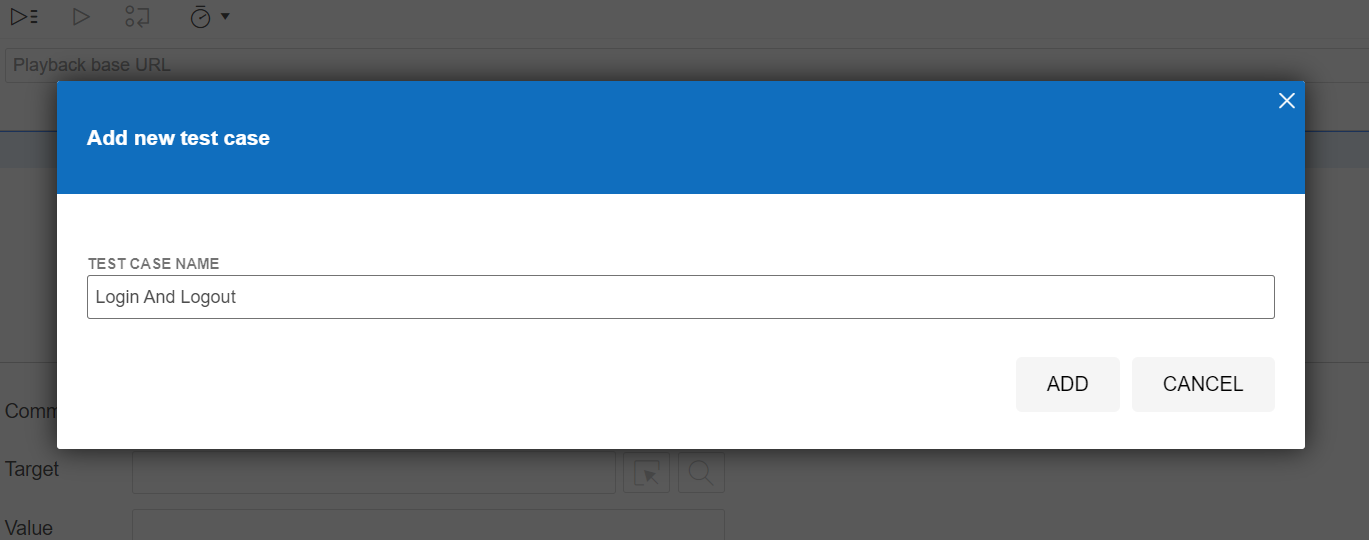
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**3. Creating test:**

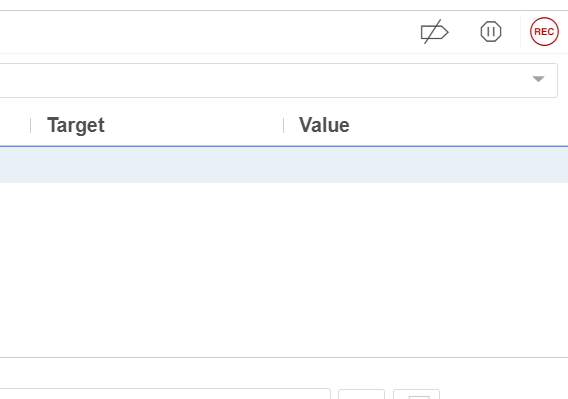
1. Adding new test



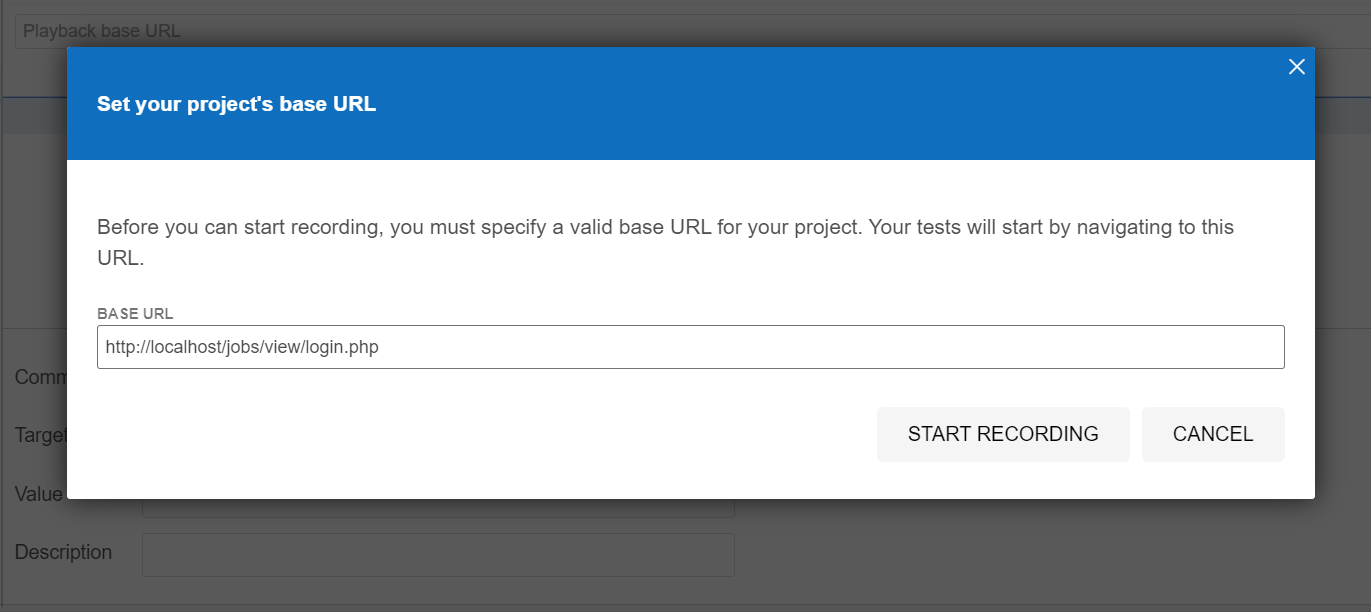
1. Naming new test



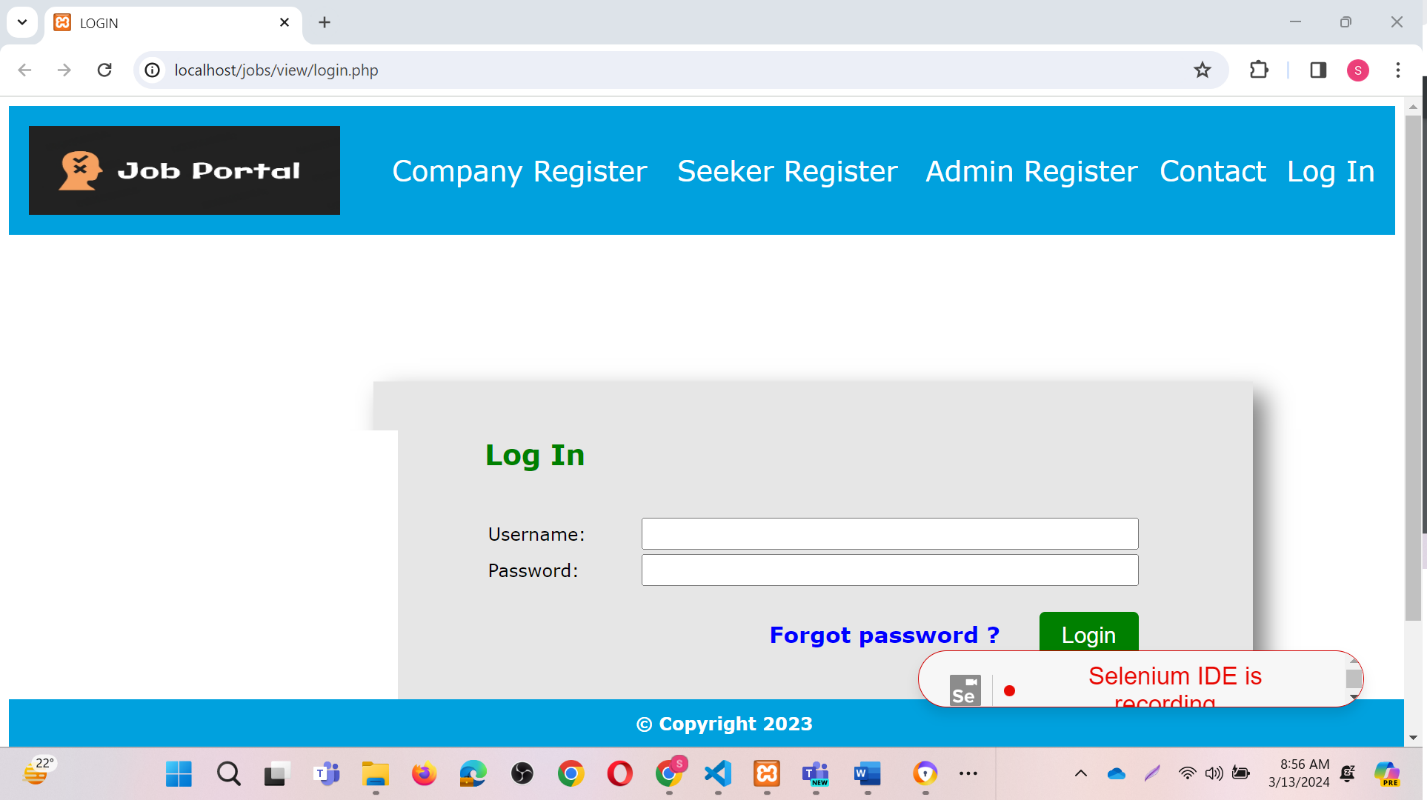
1. Start recording for the test



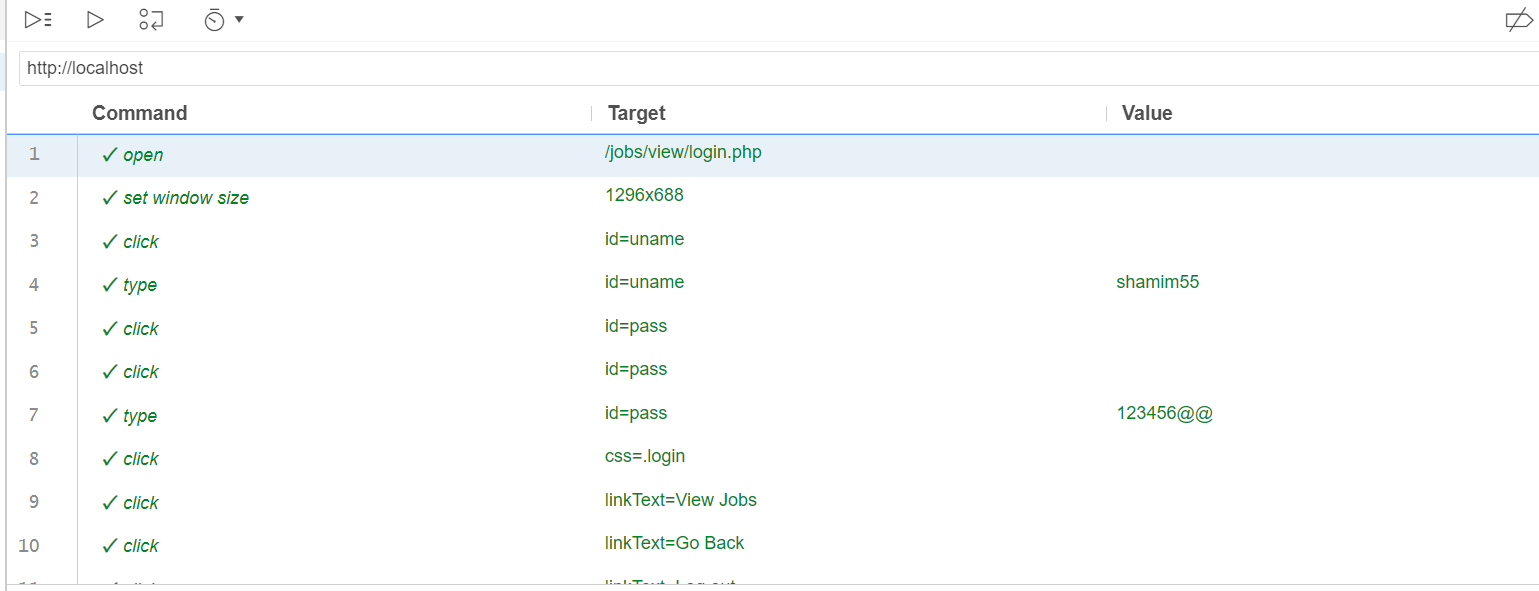
1. Input the website for testing



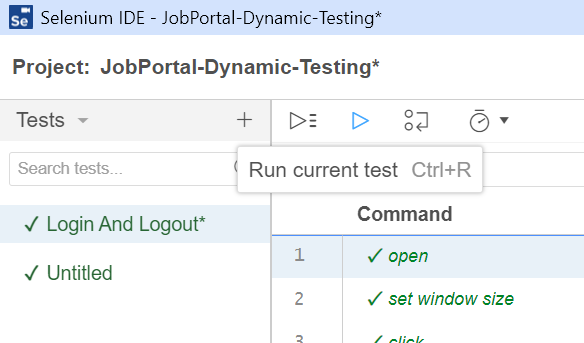
1. Recording started in Chrome browser



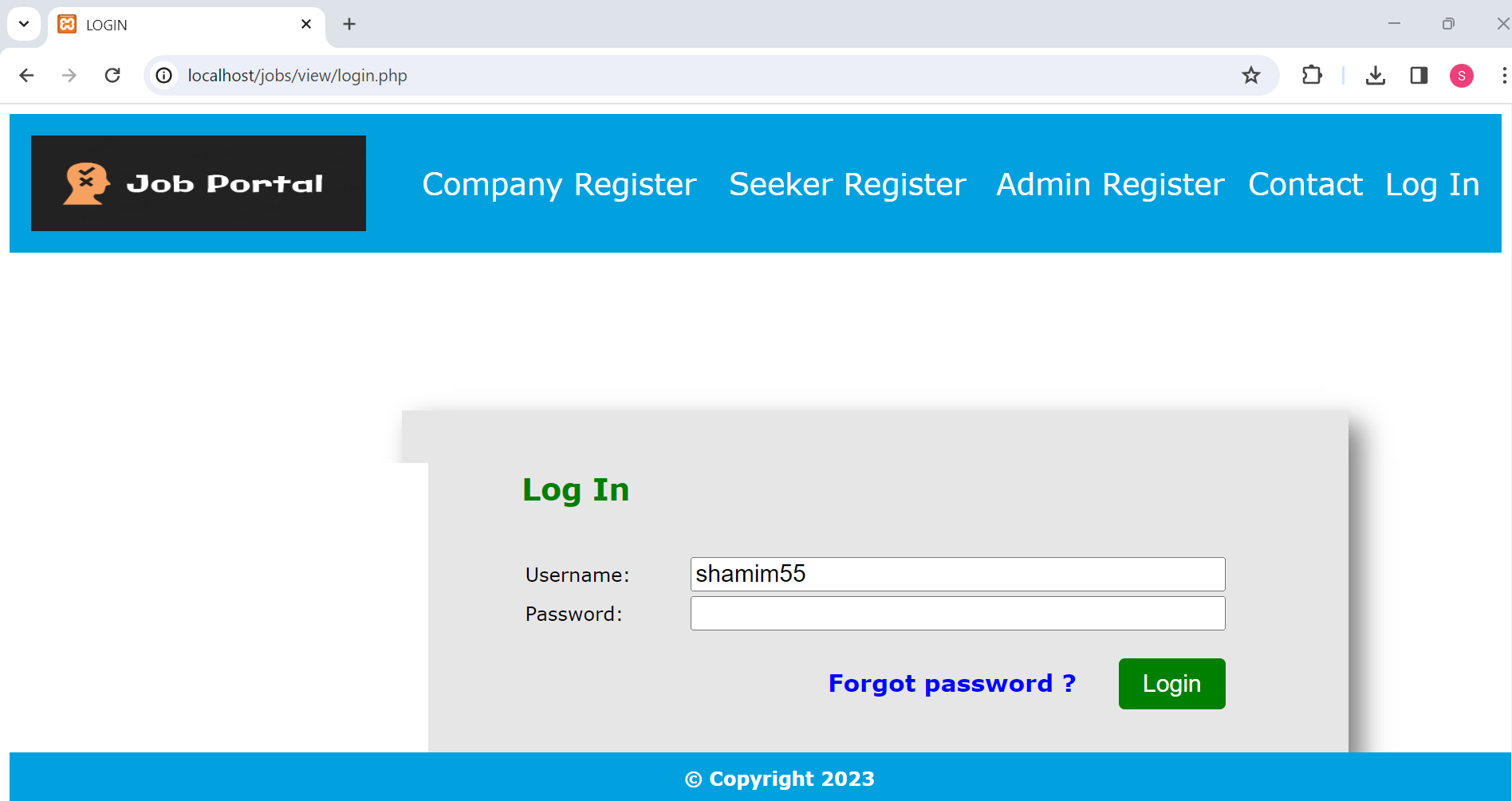
1. Recording Report



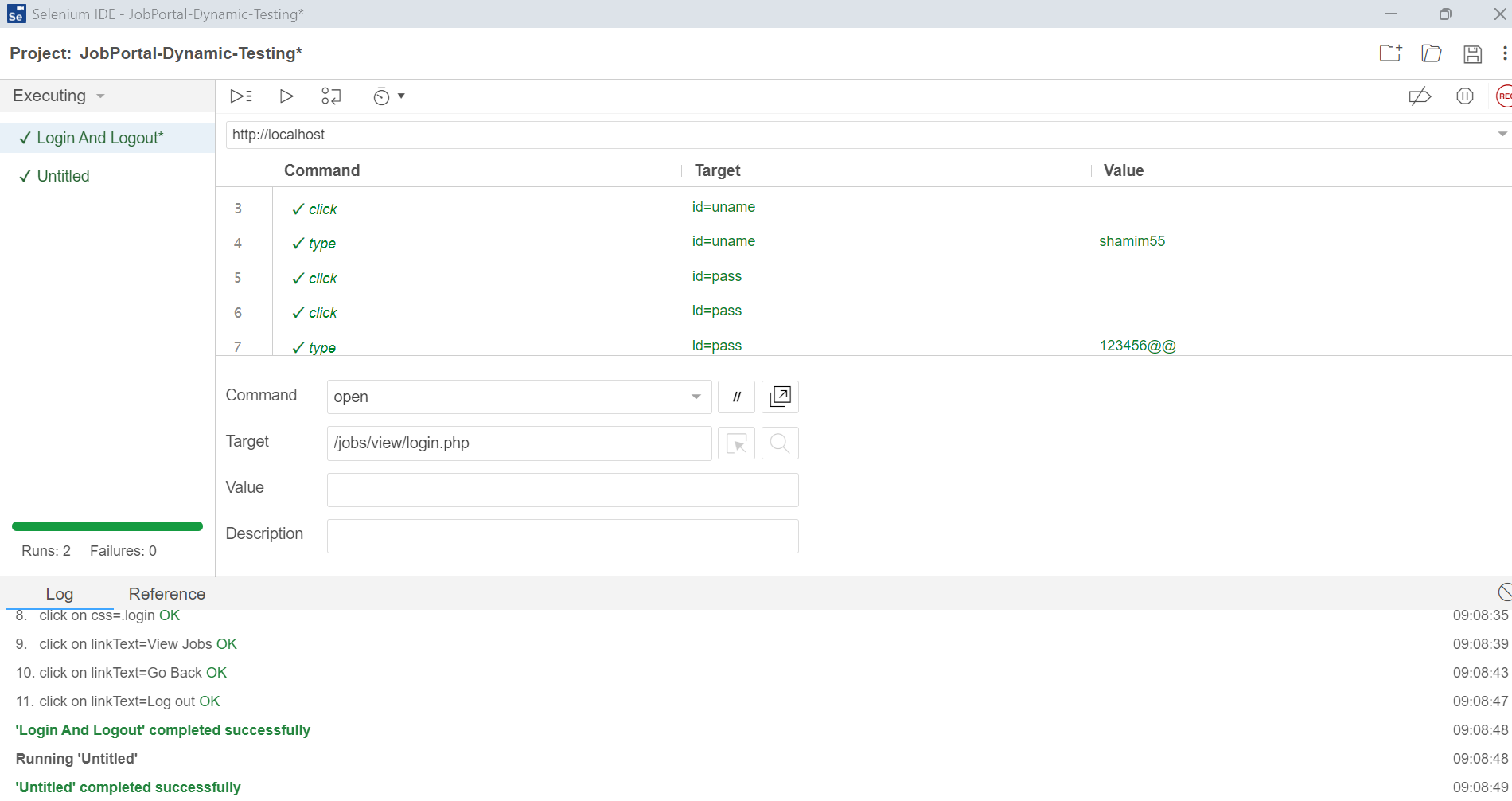
1. Start testing



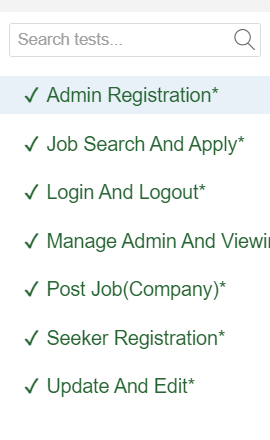
1. Testing started in Chrome browser



1. Testing report

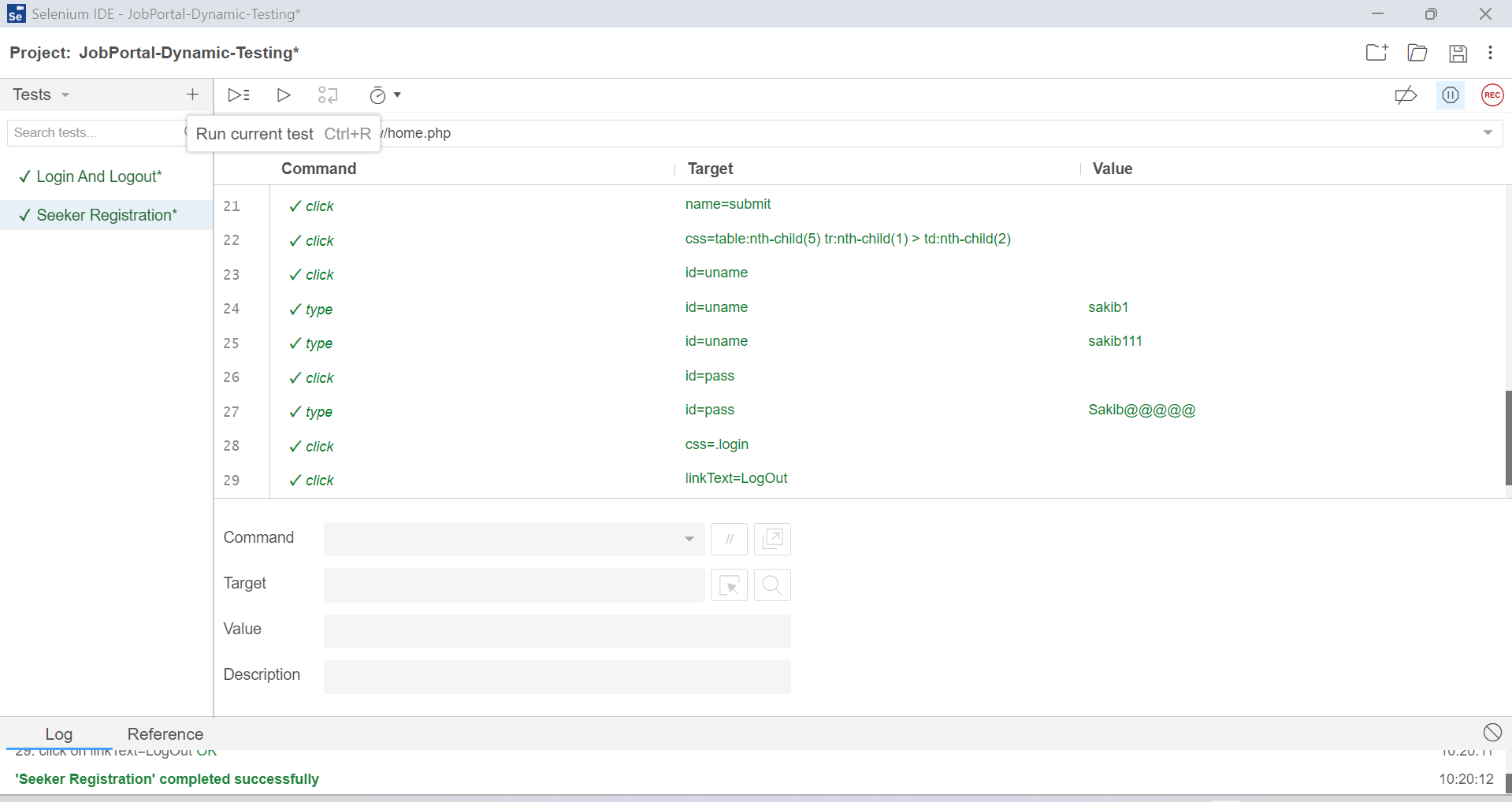


**4.Results:**



**5. All Testing Module**

**Test Module 01: Seeker Registration**

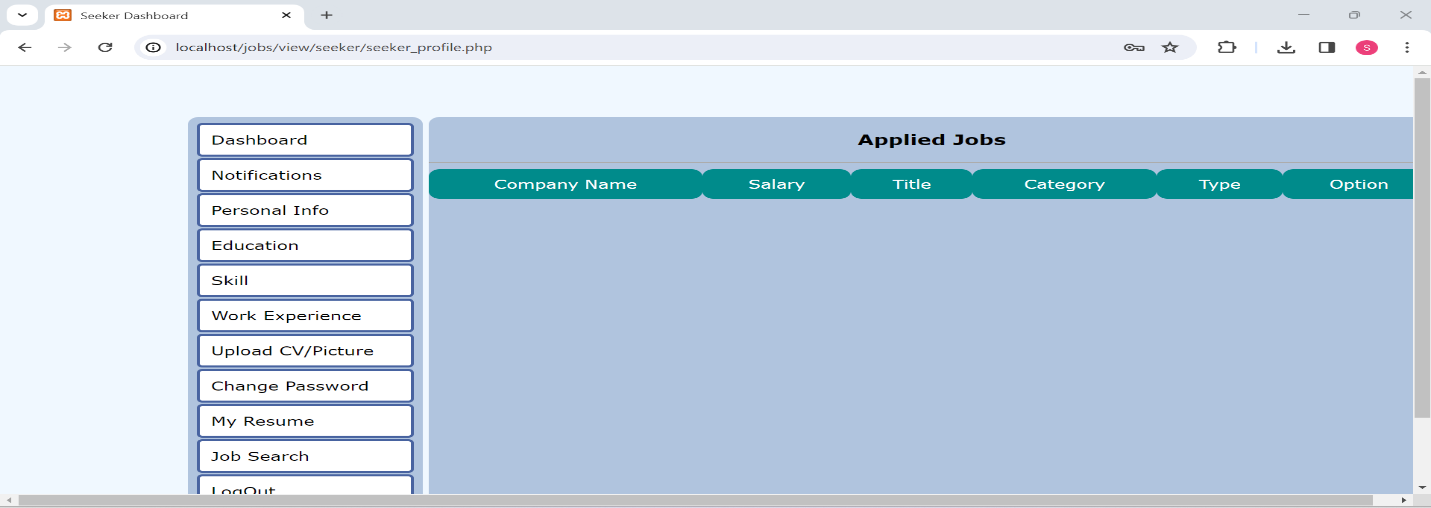
****

**Test: Seeker Registration**

**A screenshot of a computer

Description automatically generatedA computer screen shot of a registration form

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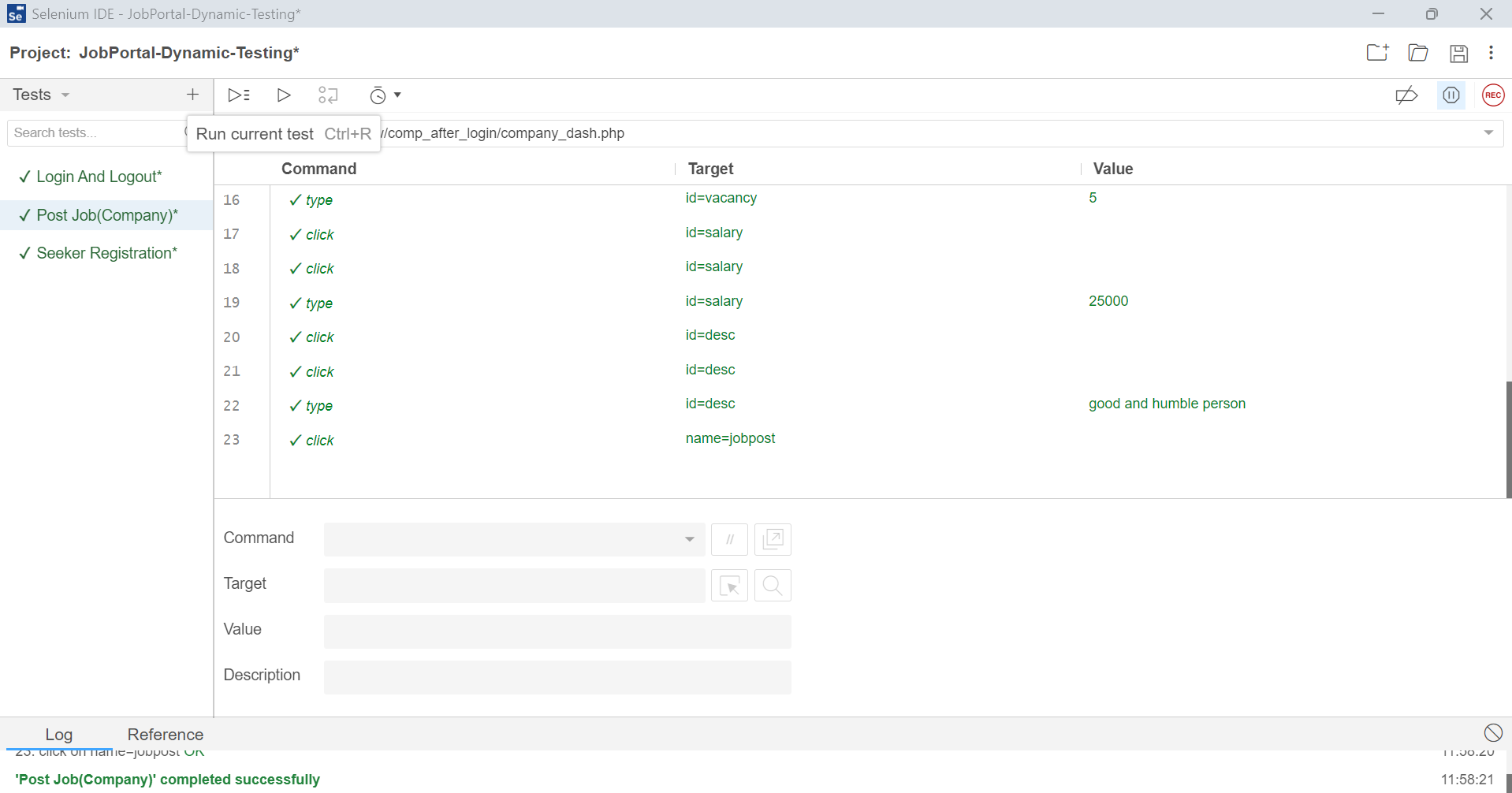
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**Figure 01: Snapshots of test module 01**

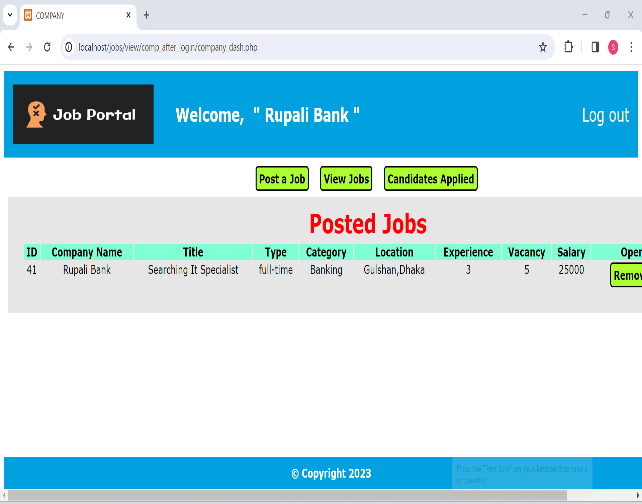
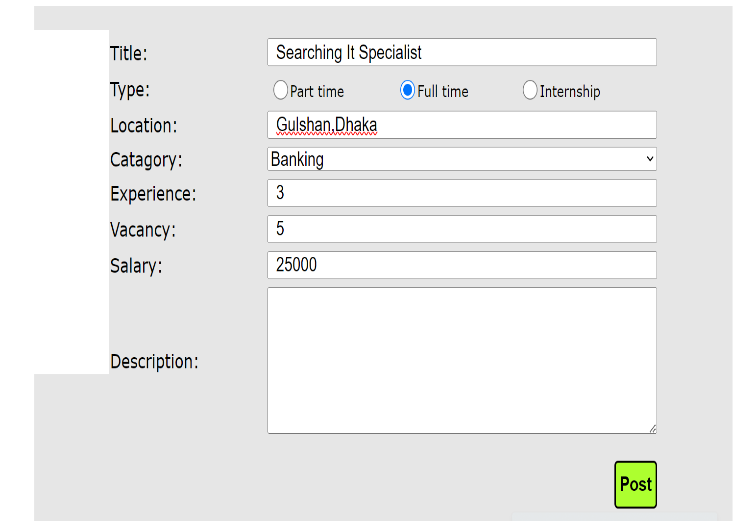
**Test Case**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Project Name:** Job Portal management system | | | **Test Designed by:** Md. Omar Faruk Sakib | | |
| **Test Case ID: FR\_1** | | | **Test Designed date:** 20-3-2024 | | |
| **Test Priority (Low, Medium, High):** High | | | **Test Executed by:** Md. Abu Hojifa | | |
| **Module Name: Registration Section** | | | **Test Execution date:** 21-3-2024 | | |
| **Test Title: Verify registration field providing credentials** | | |  | | |
| **Description:** Test seeker registration page | | |  | | |
| **Precondition: N/A** | | | | | |
| **Test Steps** | **Test Data** | **Expected Results** | | **Actual Results** | **Status (Pass/Fail)** |
| 1. Go to the website 2. Registration section 3. Click register | Username: sakib111 Email: sakibkst3811@gmail.com Password: Sakib@@@@@ | User get the message  “Registration Successful” | | As expected | Pass |
| **Post Condition:** User is validated with database and successfully login to account. The account session details are logged in the database | | | | | |

**Test Module 02: Job Post**

****

**Test: Job Post**

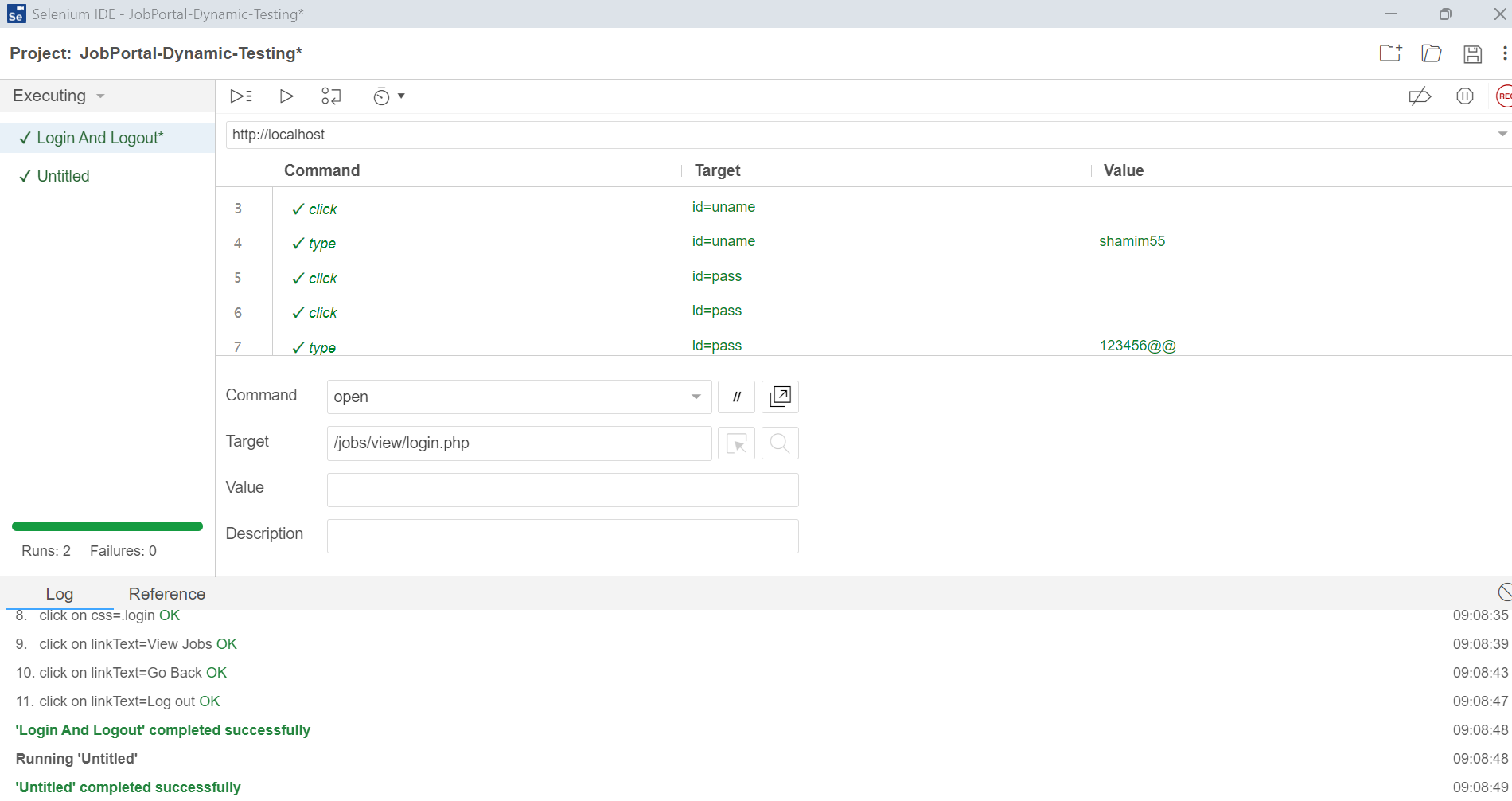
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**Figure 02: Snapshots of test module 02**

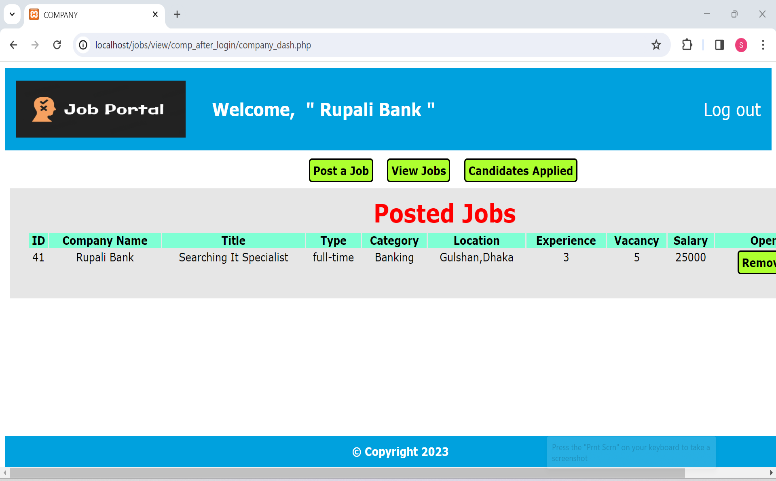
**Test Case**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Project Name:** Job Portal management system | | | **Test Designed by:** Md. Omar Faruk Sakib | | |
| **Test Case ID: FR\_2** | | | **Test Designed date:** 20-3-2024 | | |
| **Test Priority (Low, Medium, High):** High | | | **Test Executed by:** Md. Al Faiaz Rahman Fahim | | |
| **Module Name: Job Post Section** | | | **Test Execution date:** 21-3-2024 | | |
| **Test Title: Verify Job post Section providing credentials** | | |  | | |
| **Description:** Test website job post page | | |  | | |
| **Precondition: N/A** | | | | | |
| **Test Steps** | **Test Data** | **Expected Results** | | **Actual Results** | **Status (Pass/Fail)** |
| 1. Go to the website 2. Login section 3. Go to job Post   Post job | Username: sakib12 Email: sakibkst3811@gmail.com Password: Sakib@@@ | Company get the message  “Job Post Successful” | | As expected | Pass |
| **Post Condition:** Company successfully Post the Job. The Job Post session details are Save in the database | | | | | |

**Test Module 03: Login And Logout**

****

**Test: Login And Logout**

**A screenshot of a computer

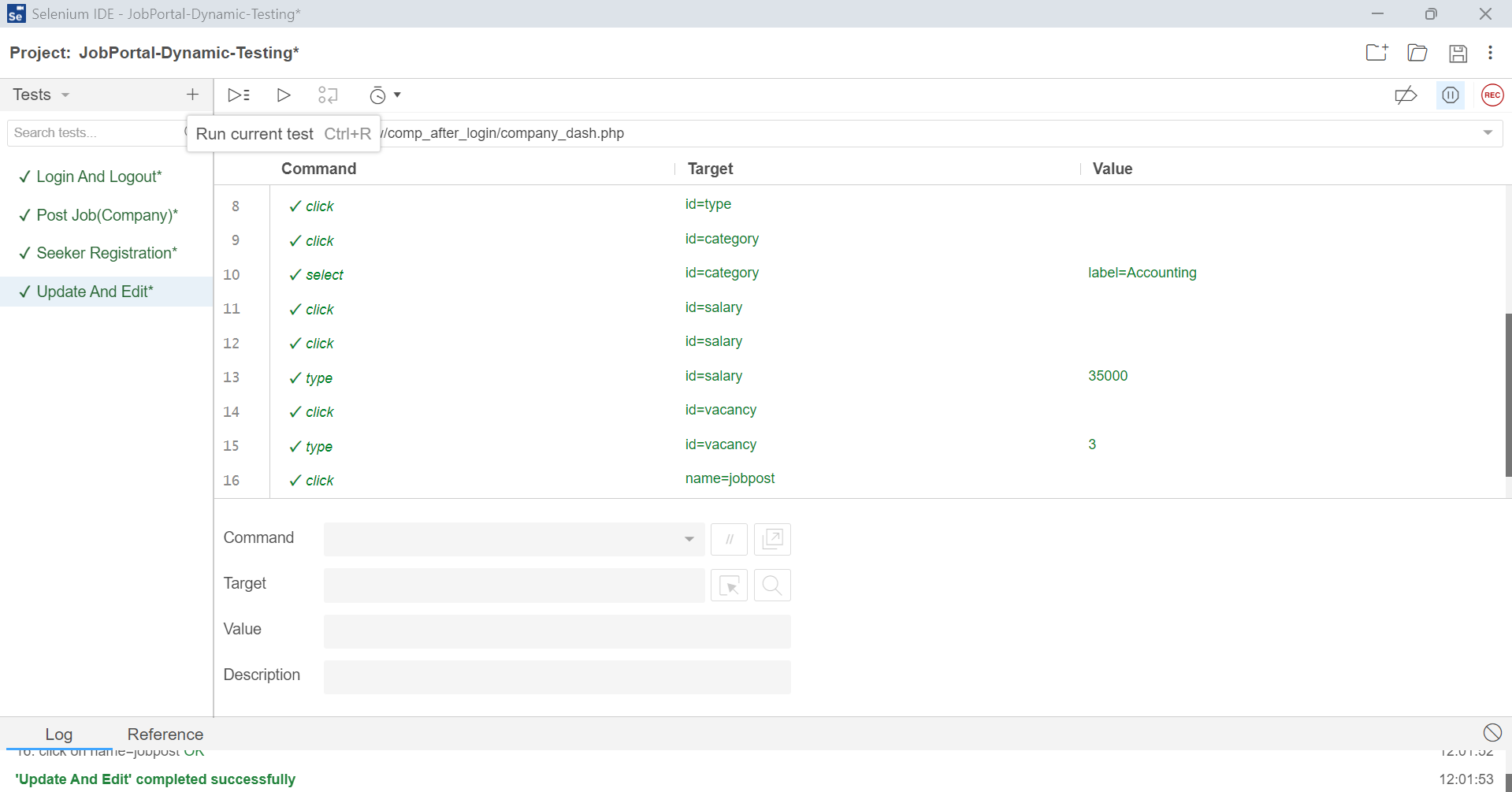
Description automatically generated**

**Figure 03: Snapshots of test module 03**

**Test Case**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Project Name:** Job Portal management system | | | **Test Designed by:** Md. Abu Hojifa | | |
| **Test Case ID: FR\_3** | | | **Test Designed date:** 19-3-2024 | | |
| **Test Priority (Low, Medium, High):** High | | | **Test Executed by:** Ashfat Ahmed Medul | | |
| **Module Name: Registration Section** | | | **Test Execution date:** 20-3-2024 | | |
| **Test Title: Verify the Login and Logout Season** | | |  | | |
| **Description:** Test website login and Logout season | | |  | | |
| **Precondition: N/A** | | | | | |
| **Test Steps** | **Test Data** | **Expected Results** | | **Actual Results** | **Status (Pass/Fail)** |
| 1. Go to the website 2. Login section 3. Login the account 4. Logout the account | Username: sakib12 Email: sakibkst3811@gmail.com Password: Sakib@@@ | All User get the message  “Login and logout Successful” | | As expected | Pass |
| **Post Condition:** all User successfully can Login and Logout. | | | | | |

**Test Module 04: Update And Edit**

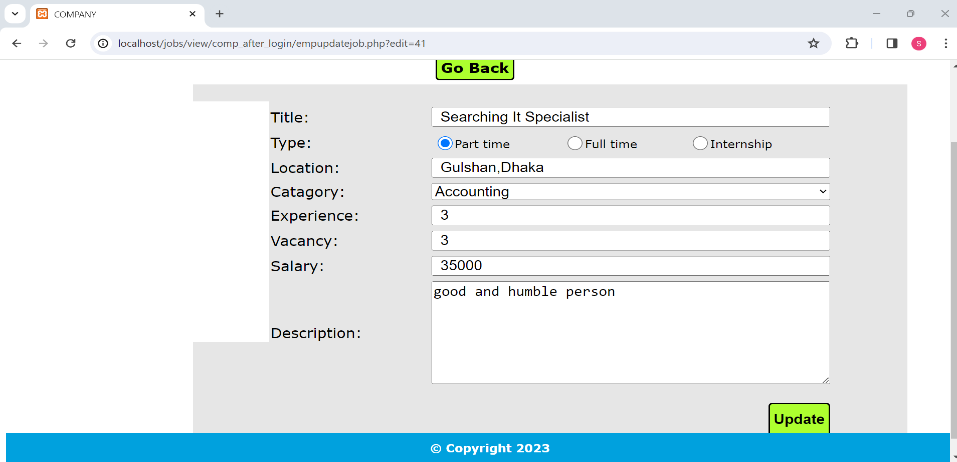
****

**Test: Update and edit**

**A screenshot of a computer

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Description automatically generated**

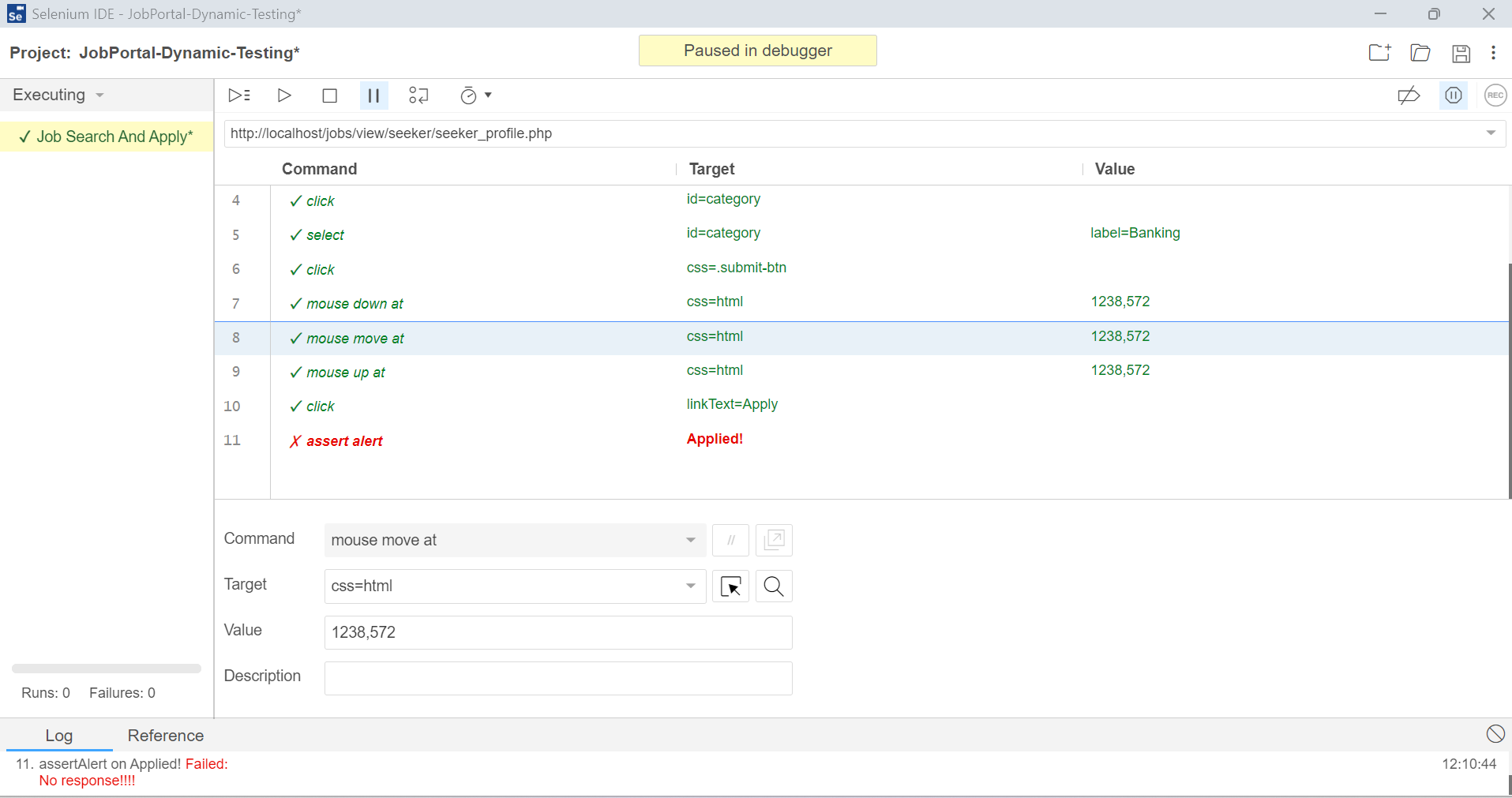
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**Figure 04: Snapshots of test module 04**

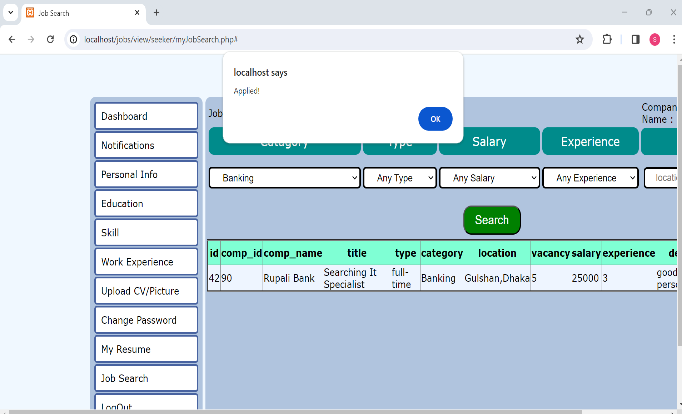
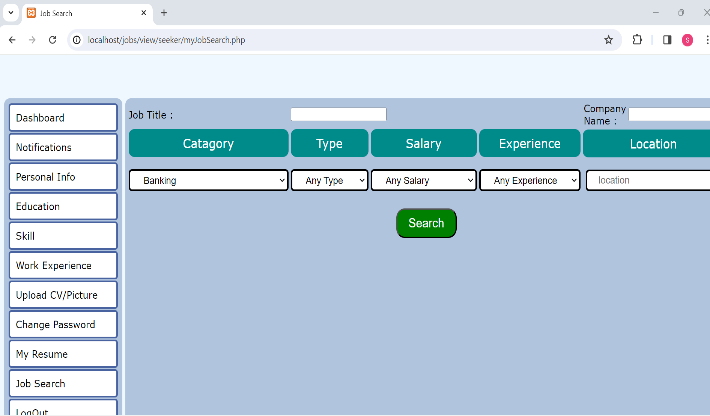
**Test Case**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Project Name:** Job Portal management system | | | **Test Designed by:** Md. Omar Faruk Sakib | | |
| **Test Case ID: FR\_4** | | | **Test Designed date:** 20-3-2024 | | |
| **Test Priority (Low, Medium, High):** High | | | **Test Executed by:** Md. Abu Hojifa | | |
| **Module Name: Update and Edit Section** | | | **Test Execution date:** 21-3-2024 | | |
| **Test Title: Check Update and Edit Function** | | |  | | |
| **Description:** Company can update and edit their job post | | |  | | |
| **Precondition: N/A** | | | | | |
| **Test Steps** | **Test Data** | **Expected Results** | | **Actual Results** | **Status (Pass/Fail)** |
| 1. Go to the website 2. Login section 3. Login as a company 4. Go view jobs 5. Edit and Update | Username: sakib12 Email: sakibkst3811@gmail.com Password: Sakib@@@ | Company get the message  “Update Successfully  ” | | As expected | Pass |
| **Post Condition:** Company successfully Edit and update. | | | | | |

**Test Module 05: Job Search and Apply**

****

**Test: Job Search and Apply**

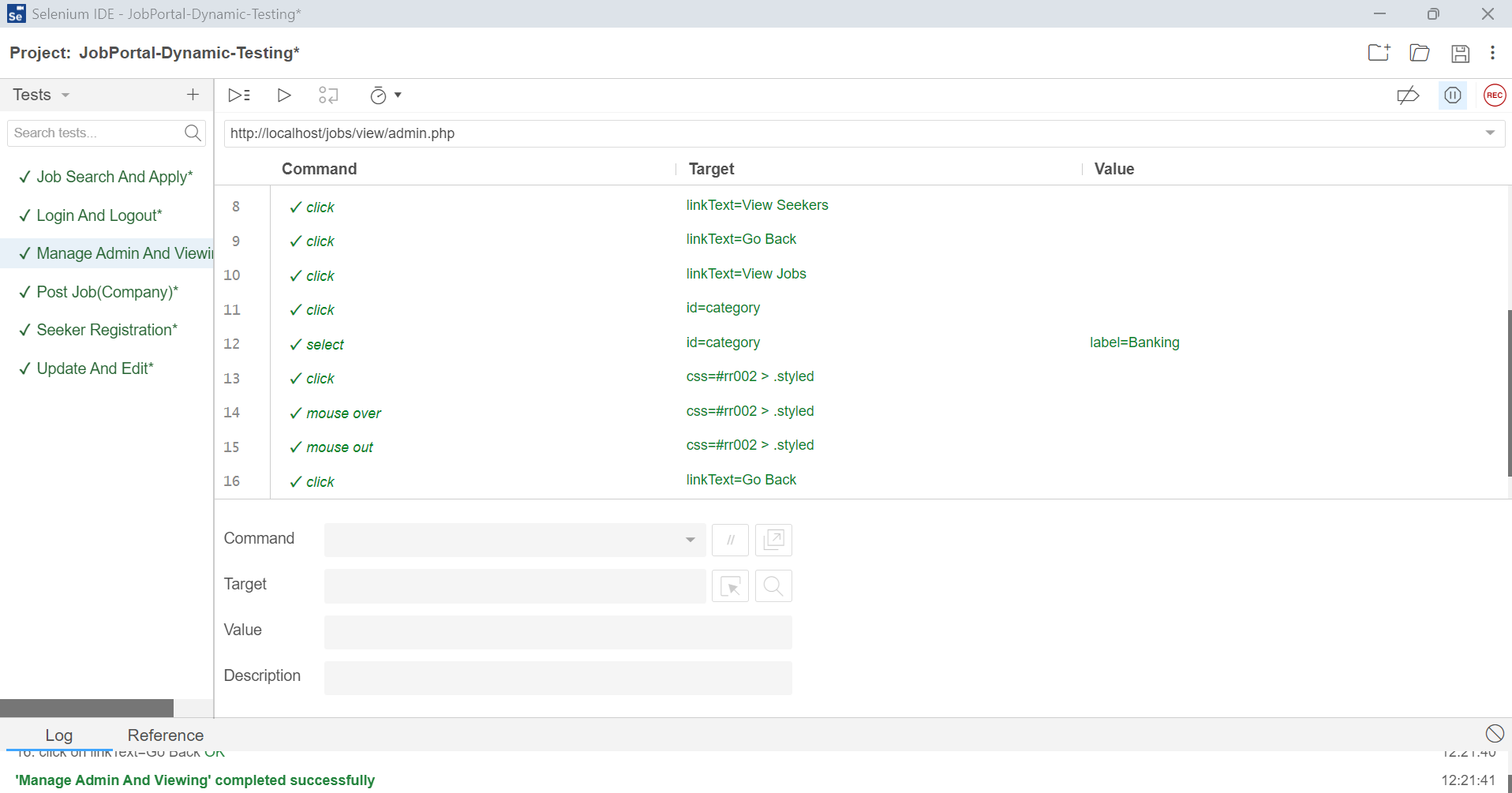
****

**Figure 05: Snapshots of test module 05**

**Test Case**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Project Name:** Job Portal management system | | | **Test Designed by:** Ashfat Ahmed Medul | | |
| **Test Case ID: FR\_5** | | | **Test Designed date:** 20-3-2024 | | |
| **Test Priority (Low, Medium, High):** High | | | **Test Executed by:** Md. Al Faiaz Rahman Fahim | | |
| **Module Name: Job Search Section** | | | **Test Execution date:** 21-3-2024 | | |
| **Test Title: Check the Job Search Function** | | |  | | |
| **Description:** User can search the jobs and also apply . | | |  | | |
| **Precondition: N/A** | | | | | |
| **Test Steps** | **Test Data** | **Expected Results** | | **Actual Results** | **Status (Pass/Fail)** |
| 1. Go to the website 2. Login section 3. Login as a user 4. Go to job Search 5. Search The job | Username: sakib11 Email: sakibkst3811@gmail.com Password: Sakib@@@@@ | User get the all job post results | | As expected | Pass |
| **Post Condition:** User successfully see search related job post. | | | | | |

**Test Module 06: Manage Admin and Viewing**

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**Test: Manage Admin and Viewing**

**A screenshot of a computer

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Description automatically generated**

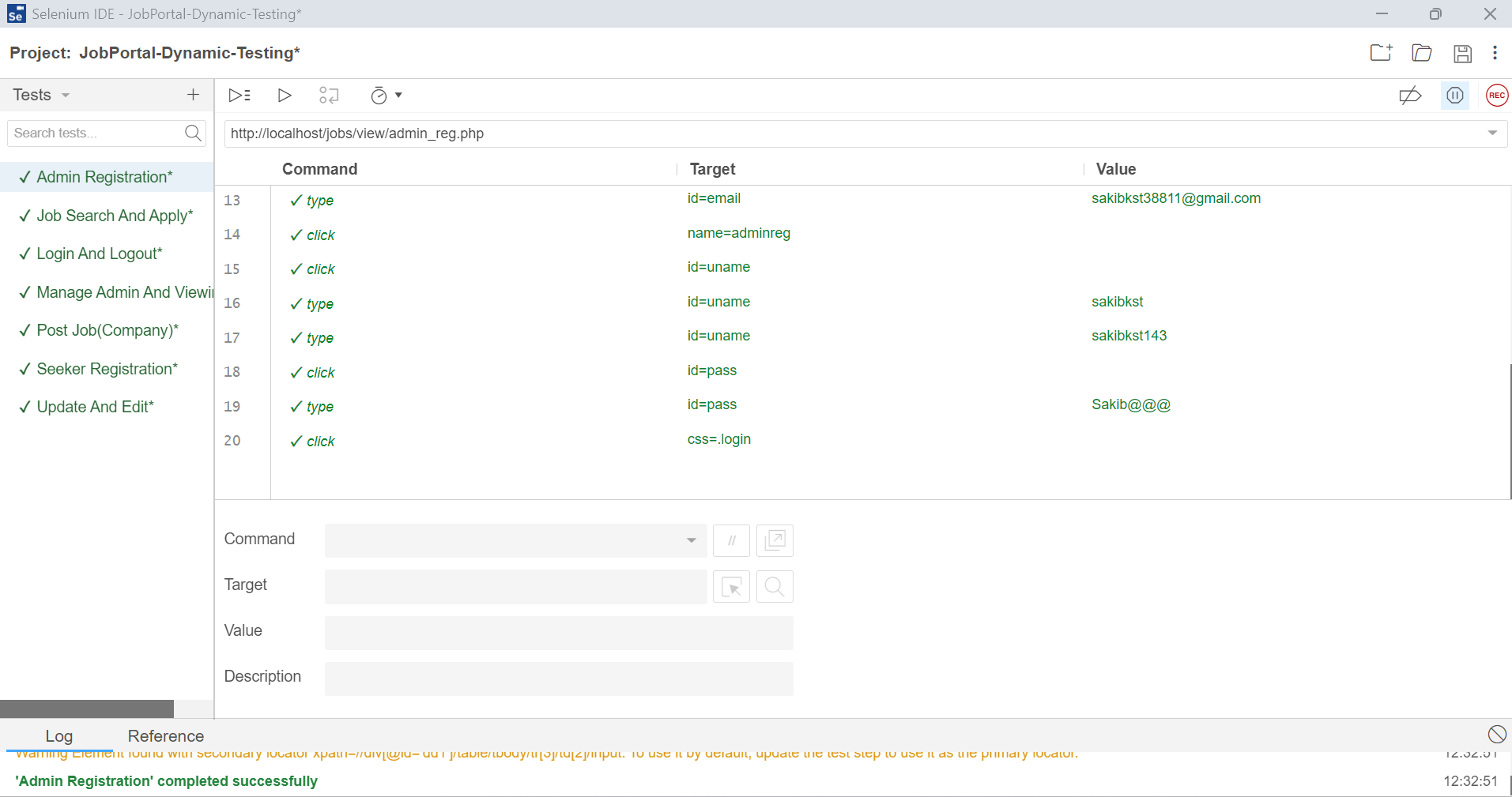
**.**

**Figure 06: Snapshots of test module 06**

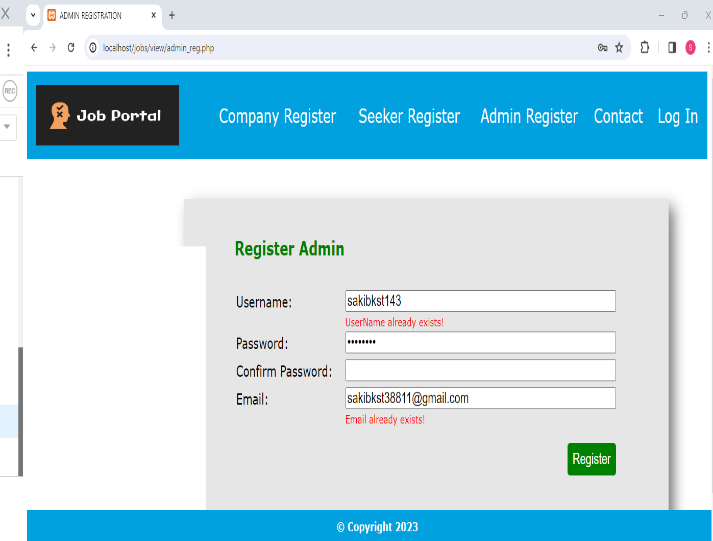
**Test Case**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Project Name:** Job Portal management system | | | **Test Designed by:** Md. Omar Faruk Sakib | | |
| **Test Case ID: FR\_6** | | | **Test Designed date:** 20-3-2024 | | |
| **Test Priority (Low, Medium, High):** High | | | **Test Executed by:** Ashfat Ahmed Medul | | |
| **Module Name: Manage Admin Section** | | | **Test Execution date:** 21-3-2024 | | |
| **Test Title: Check the properly manage in admin section** | | |  | | |
| **Description:** Admin can manage the admin features and approve | | |  | | |
| **Precondition: N/A** | | | | | |
| **Test Steps** | **Test Data** | **Expected Results** | | **Actual Results** | **Status (Pass/Fail)** |
| 1. Go to the website 2. Login section 3. Login as a admin 4. Manage admin feature | Username: sakib1 Email: sakibkst3811@gmail.com Password: Sakib@@@@@ | Admin can successfully manage and view | | As expected | Pass |
| **Post Condition:** Admin can approve all request. | | | | | |

**Test Module 07: Admin Registration**

****

**Test: Admin Registration**

**A screenshot of a computer

Description automatically generated**

**Figure 07: Snapshots of test module 07**

**Test Case**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Project Name:** Job Portal management system | | | **Test Designed by:** Md. Al Faiaz Rahman Fahim | | |
| **Test Case ID: FR\_7** | | | **Test Designed date:** 20-3-2024 | | |
| **Test Priority (Low, Medium, High):** High | | | **Test Executed by:** Md. Abu Hojifa | | |
| **Module Name: Admin Registration Section** | | | **Test Execution date:** 21-3-2024 | | |
| **Test Title: Verify registration field providing credentials** | | |  | | |
| **Description:** Test admin registration page | | |  | | |
| **Precondition: N/A** | | | | | |
| **Test Steps** | **Test Data** | **Expected Results** | | **Actual Results** | **Status (Pass/Fail)** |
| 1. Go to the website 2. Registration section 3. Click admin register | Username: sakib111 Email: sakibkst3811@gmail.com Password: Sakib@@@@@ | Admin get the message  “Registration Successful” | | As expected | Pass |
| **Post Condition:** Admin is validated with database and successfully login to account. The account session details are logged in the database | | | | | |

**Conclusion:**

In conclusion, this document has meticulously guided readers through the installation of Selenium and the creation of a project, showcasing the comprehensive capabilities of Selenium for automating web application testing. Through the detailed exploration of testing seven distinct modules, we've demonstrated Selenium's versatility and effectiveness in ensuring the reliability, functionality, and performance of web applications across different environments. By leveraging Selenium, particularly the intuitive Selenium IDE as a browser extension for Chrome and Firefox, users from a wide range of expertise levels—from beginners to seasoned developers—can efficiently create and execute automated tests. This process not only streamlines the testing workflow but also significantly enhances the quality assurance measures for web applications. As we've shown, Selenium's accessible tools and user-friendly interface make it an invaluable asset in the development and maintenance of robust web applications, ensuring that they meet the high standards required in today's digital landscape.