

Automation Testing for SubExpert

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28 June 2024

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# Introduction to the Module

## ****Login and Authorization Module****

The Login and Authorization module is a critical component of any application, providing a secure entry point for users to access their accounts. This module ensures that only authenticated users can log in and access authorized features based on their roles and permissions. The module typically includes functionality for user login, logout, password recovery, and session management. Effective testing of this module is essential to ensure the security and usability of the application.

# Link for Video Presentation

https://drive.google.com/file/d/1L5\_t86S9qwrzZEBHlOVYBHdtgHkpo31u/view?usp=drive\_link

# Test Cases for Login and Authorization Module

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| TC\_ID | Name | Description | Input | Precondition | Expected Outcome |
| 1 | Valid Login | Test login with valid credentials | Username: validUser<br>Password: validPass | User is registered and active | User is logged in successfully |
| 2 | Invalid Login | Test login with invalid credentials | Username: validUser<br>Password: invalidPass | User is registered and active | Error message "Invalid credentials" is displayed |
| 3 | Blank Username | Test login with blank username | Username: ""<br>Password: validPass | - | Error message "Username is required" is displayed |
| 4 | Blank Password | Test login with blank password | Username: validUser<br>Password: "" | - | Error message "Password is required" is displayed |
| 5 | SQL Injection | Test login with SQL injection attempt | Username: ' OR '1'='1<br>Password: ' OR '1'='1 | - | Error message "Invalid credentials" is displayed |
| 6 | Cross-Site Scripting (XSS) | Test login with XSS attack attempt | Username: <script>alert('xss')</script><br>Password: anyPass | - | Input is sanitized and error message "Invalid credentials" is displayed |
| 7 | Password Recovery | Test password recovery process | Email: registeredUserEmail | User has a registered email address | Password recovery email is sent to the registered email address |
| 8 | Logout | Test user logout functionality | - | User is logged in | User is logged out and redirected to the login page |
| 9 | Session Timeout | Test automatic session timeout after inactivity | - | User is logged in | User is logged out automatically after a period of inactivity |
| 10 | Role-Based Access | Test access control based on user roles | Username: adminUser<br>Password: adminPass | User has admin role | User can access admin functionalities |
| 11 | Brute Force Protection | Test protection against brute force attacks | Multiple invalid login attempts with valid username | - | Account is locked after a certain number of failed attempts |
| 12 | Valid Signup | Test user registration with valid details | Username: newUser.  Password: newPass,  Email: newUser@example.com | - | User is registered successfully and can log in |
| 13 | Invalid Email Signup | Test signup with invalid email format | Username: newUser<br>Password: newPass<br>Email: invalidEmail | - | Error message "Invalid email format" is displayed |
| 14 | Blank Username Signup | Test signup with blank username | Username: ""<br>Password: newPass<br>Email: newUser@example.com | - | Error message “Username is required” is displayed |
| 15 | Blank Password Signup | Test signup with blank password | Username: newUser<br>Password: ""<br>Email: newUser@example.com | - | Error message "Password is required" is displayed |
| 16 | Duplicate Username Signup | Test signup with an already existing username | Username: existingUser<br>Password: newPass<br>Email: newUser@example.com | - | Error message "Username already exists" is displayed |
|  | Duplicate Email Signup | Test signup with an already existing email | Username: newUser<br>Password: newPass<br>Email: existingUser@example.com | - | Error message "Email already exists" is displayed |