

# Ticket 6 Test Case

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03/01/2024

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# 1 Introduction

The test cases outlined are designed to ensure the robustness and reliability of the User Authentication and Authorization functionalities in the Capstone Management System. These test cases are meticulously crafted to cover various scenarios, including successful user registration and login, handling of incorrect login details, registration with duplicate email, and the forgotten password process. Additionally, they emphasize the importance of role-based access control, ensuring users can only access features relevant to their assigned roles. This comprehensive testing strategy is aimed at validating the system's security mechanisms, user experience, and overall functionality, forming a critical component of the system's development lifecycle to guarantee a secure and user-friendly platform.

## 2 Test Cases

### 2.1 Successful Registration

Test that a new user can register successfully by providing all required information, including verifying their email.

**Test Cases:**

1. Navigate to the registration page
2. Fill in all required fields (name, email, password)
3. Click the registration button
4. Check email for the verification link
5. Click the verification link in the email
6. Ensure the system confirms successful registration and email verification
7. Failed Registration Due to Missing Information
8. Duplicate Email Handling
9. Incorrect password
10. Inactive account login attempt
11. forgotten password

#### 2.1.1 TC 001- Navigate to the registration page

**Expected Result :** The user is successfully directed to the registration page of the system without any errors or redirection issues. The page should load completely and display all necessary fields and information required for registration, such as name, email, and password input fields, in a user-friendly and accessible manner.

**Test Environment:**

1. Web Browser: A modern web browser such as Chrome, Firefox, Safari, or Edge.

2. Device: The device being used to perform the test, which could be a desktop, laptop, tablet, or smartphone.
3. Operating System: The operating system of the device (e.g., Windows, macOS, Android, iOS).
4. Internet Connectivity: An active internet connection to access the registration page.
5. Screen Resolution: The resolution settings on the device to ensure the page is displayed correctly across different devices and screen sizes.
6. URL of Registration Page: The exact URL that needs to be navigated to in order to reach the registration page.

**Notes:**

Verify the URL directs to the correct registration page without errors or unnecessary redirects. Check the page's load time and ensure it is acceptable across different devices and internet speeds. Note any SSL certificate warnings or security alerts that may affect user trust.

**2.1.2 TC 002- Fill in all required fields (name, email, password).****Input Data:**

Name: A valid format name that the system should accept. This could be a name like "Jane Doe."

Email: A valid and unused email address, like "janedoe@example.com."

Password: A strong password that meets the system's requirements, such as "P@ssw0rd123!"

**Expected Result:**

system accepts the input without errors, indicating the user has successfully provided all necessary information. The system should then be ready to proceed to the next step in the registration process, typically submitting the registration form for processing. This step verifies that the form's validation mechanisms are working correctly, ensuring that the data entered meets the system's requirements for format and completeness.

**Test Environment:**

1. Web Browser: A modern web browser such as Chrome, Firefox, Safari, or Edge.
2. Device: The device being used to perform the test, which could be a desktop, laptop, tablet, or smartphone.
3. Operating System: The operating system of the device (e.g., Windows, macOS, Android, iOS).
4. Internet Connectivity: An active internet connection to access the registration page.
5. Screen Resolution: The resolution settings on the device to ensure the page is displayed correctly across different devices and screen sizes.
6. URL of Registration Page: The exact URL that needs to be navigated to in order to reach the registration page.

**Note:**

Ensure the data entered for name, email, and password adheres to the system's validation rules (e.g., email format, password complexity). Consider edge cases, such as using special characters in the name, or extremely long or minimal input values, to test the robustness of the form's validation mechanisms. **Input Data:** N/A **Expected Result:** system accepts the input without errors, indicating the user has successfully provided all necessary information. The system should then be ready to proceed to the next step in the registration process, typically submitting the registration form for processing. This step verifies that the form's validation mechanisms are working correctly, ensuring that the data entered meets the system's requirements for format and completeness.

**Test Environment:**

1. Web Browser: A modern web browser such as Chrome, Firefox, Safari, or Edge.
2. Device: The device being used to perform the test, which could be a desktop, laptop, tablet, or smartphone.
3. Operating System: The operating system of the device (e.g., Windows, macOS, Android, iOS).
4. Internet Connectivity: An active internet connection to access the registration page.
5. Screen Resolution: The resolution settings on the device to ensure the page is displayed correctly across different devices and screen sizes.
6. URL of Registration Page: The exact URL that needs to be navigated to in order to reach the registration page.

**Note:****2.1.3 TC 003- Click the registration button.**

**Input Data:** N/A

**Expected Result:** The expected result is that the system should acknowledge the action by either navigating to a new page, showing a loading symbol, or displaying a message indicating that the registration is being processed.

**Test environment:**

Web Browser: A modern web browser where the action is performed (e.g., Chrome, Firefox, Safari).

Registration Page URL: The specific URL where the registration form is located.

Network Connectivity: An active internet connection to ensure the button click can initiate the form submission process.

Device: A computer or mobile device to replicate the user's likely environment.

**Note:** Verify that clicking the button triggers the expected action immediately, without any undue delay. Note if the button becomes disabled upon clicking to prevent multiple submissions. Also, observe any feedback provided to the user, such as a loading indicator, to ensure clarity in the registration process.

#### 2.1.4 TC 004- Check email for the verification link

**Input Data:**

Email Address: The same email address that was used during the registration process (e.g., janedoe@example.com).

Email Access Credentials: If needed for the test, this might include a username and password for the email account or the necessary access for a test email system.

**Expected Result:**

tester will receive a verification email from the system, which contains a verification link that the user must click to verify their account.

**Test Environment:**

Email Client: The software or web service used to access the email (e.g., Gmail, Outlook).

Device: The device being used to access the email, such as a laptop, desktop, tablet, or smartphone.

Operating System: The operating system of the device (e.g., Windows, macOS, Android, iOS).

Internet Connectivity: An active connection to ensure the email client can retrieve new emails.

Test Email Account: A test or dummy email account set up specifically for testing purposes, to avoid using personal or real user data.

**Note:**

Ensure the verification email arrives within a reasonable timeframe and does not get flagged as spam. Verify the link is clearly visible and identifiable as part of the email content, and that there are no issues with email formatting that could make the link unusable.

#### 2.1.5 TC 005- Click the verification link in the email

**Input Data:**

Verification Link: The actual URL provided in the verification email that the user is expected to click.

**Expected Result:**

Account Activation Confirmation: Upon clicking the link, the user should be redirected to a confirmation page or receive a notification indicating that their email address has been successfully verified and their account is now active.

**Test Environment:**

Email Client: The application or web service used to open the email, such as Gmail, Outlook, etc.

Web Browser: A web browser to open the verification link, such as Chrome, Firefox, Safari, etc.

Device: The device being used to perform the test, which could be a desktop, laptop, tablet, or smartphone.

Operating System: The operating system on which the email client and web browser are running (e.g., Windows, macOS, Android, iOS).

Internet Connectivity: An active internet connection to ensure the link can be accessed and the server can respond to the verification request.

Security Settings: Proper configuration to allow the verification link to be accessed without being blocked by firewalls or security software.

**Note:**

Confirm that the link leads to the correct verification page and results in a successful confirmation message. Check that there are no broken links or error pages encountered and that the process completes in a timely manner. Additionally, ensure the link is a secure HTTPS connection and that it is unique to each user or registration attempt.

### **2.1.6 TC 006- Ensure the system confirms successful registration and email verification.**

#### **Input Data:**

The user should be on the page that they were directed to after clicking the verification link in their email.

#### **Expected Result:**

The system displays a confirmation message or page indicating that the registration and email verification have been successfully completed. This message might read something like "Your email has been verified and registration is complete" or "Thank you for verifying your email address. Your registration is now complete."

Test Environment:

Web Browser: A current version of a common web browser like Chrome, Firefox, or Safari.

Verification Page: The specific URL or landing page the user is directed to after clicking the email verification link.

Server Environment: The backend system must be set up to process the verification and trigger the

confirmation of registration. This could be a staging or a QA environment that simulates the live server.

Internet Connectivity: An active internet connection to ensure communication between the client and server.

Database Access: The system's database should be accessible to record the verification status.

#### **Note:**

Check for a clear confirmation message that indicates the user's registration and email verification have been successful. This could be in the form of a message on the website, an additional confirmation email, or a status update on the user's account page. Ensure that the confirmation cannot be bypassed or triggered without the actual completion of the email verification step.

## **2.2 Successful Login**

1. Attempt to log in with the new credentials
2. Verify access is granted to the user's dashboard

### **2.2.1 TC 007-Attempt to log in with the new credentials**

#### **Input Data:**

Username/Email: The email address used during the registration process.

Password: The password created during the registration process.

#### **Expected Result:**

The system allows the user to log in successfully with the new credentials, leading to

access to the user's dashboard or home page within the application. The system should not show any error messages related to incorrect credentials or unauthorized access.

**Note:**

Check that the login function accepts the new credentials without error and that the user is redirected to the appropriate page based on their role. Monitor for any unexpected delays or error messages, and verify that the 'forgot password' and 'create new account' functions remain accessible in case of login issues

### 2.2.2 TC 008-Verify access is granted to the user's dashboard

**Input Data:**

Confirmation that the user has logged in using their valid credentials (username/email and password).

**Expected Result:**

The user should be directed to their dashboard or home page specific to their role (e.g., student, faculty, admin) after login. The dashboard should display relevant information and options available to the user, confirming that access has been correctly granted based on the user's role and that the system recognizes the user's authenticated state.

**Test Environment:**

Web Browser: The browser through which the user will access their dashboard (e.g., Chrome, Firefox, Safari).

Authenticated Session: Access to the system post-login where the user has been authenticated.

User Role: The specific role of the user (e.g., student, faculty) to verify that the dashboard access aligns with role-based permissions.

Device: The hardware used for the test, such as a desktop computer, laptop, tablet, or smartphone.

Operating System: The operating system of the device (e.g., Windows, macOS, Android, iOS).

Internet Connectivity: A stable internet connection to ensure the user can access their dashboard without any interruptions.

Screen Resolution: The display settings to ensure the dashboard is rendered correctly across different devices and screen sizes.

**Note:**

Ensure that upon successful login, the user is directed to their respective dashboard. The dashboard should display all relevant widgets, links, and information expected for the user's role. Additionally, confirm that no access is given to areas that should be restricted based on the user's permissions.

## 2.3 Failed Registration

### Failed Registration Due to Missing Information

1. Navigate to Registration Page.
2. Enter Partial Information.
3. Attempt to Submit Form.
4. Verify Error Message.
5. Check Form Retention



### 2.3.1 TC 009-Failed Registration Due to Missing Information

**Input Data:**

Partial user details (e.g., name filled, email and password left blank).

**Expected Result:**

An error message is displayed indicating missing information. Previously entered data remains filled in the form.

**Test Environment:**

Web Browser: A modern web browser where the registration page is accessed (e.g., Chrome, Firefox, Safari).

Test Server: An instance of the application running on a test server, separate from the production environment, to simulate real-user scenarios without affecting live data.

Network Connection: To ensure that the registration process can be completed as it involves sending data to the server.

Test Data: Pre-defined valid and invalid inputs for name, email, and password to test various scenarios including form validations.

**Note:**

Ensure error messages are specific to the missing information.

## 2.4 Duplicate Email Handling:

### 2.4.1 TC 010-Duplicate Email Handling:

**Input Data:**

First Registration Attempt: Use a valid email address to complete and submit the registration form successfully.

Second Registration Attempt: Attempt to register again using the same email address but with different or the same user details for other fields (name,password). The goal is to verify the system's ability to recognize and block the registration of a new account using an email address that is already associated with an existing account.

**Expected Result:**

Error Message Display: Upon attempting the second registration with the same email, the system should display an error message.

Registration Prevention: The system prevents the second registration attempt from proceeding.

Clarification: The error message clearly indicates that the email address is already in use by another account.

**Test Environment:**

Web Browser: A modern browser like Chrome, Firefox, Safari, or Edge to access the registration form.

Registration Page URL: The specific URL where users can register their accounts.

Network Connectivity: An active internet connection to submit registration forms.

Device: A desktop, laptop, tablet, or smartphone to ensure the system's response is consistent across different platforms.

Email Service: Access to an email account to receive any potential notifications or error messages related to duplicate email usage.

**Note:**

Ensure the error message for a duplicate email is user-friendly and provides guidance on how to recover or access the existing account. This could include a link to the login page

or password recovery. Testing should also verify that the system does not reveal whether an email is associated with an active account for security purposes.

## 2.5 Successful Login

1. Attempt to log in with the new credentials
2. Verify access is granted to the user's dashboard

## 2.6 Failed Login

1. Incorrect Password
2. Inactive Account
3. Forgotten password

### 2.6.1 TC011-Incorrect Password:

**Input Data:**

Username/Email: Valid user email. Password: Incorrect password.

**Expected Result:**

The system should display an error message indicating the password is incorrect. The user should not be logged in.

**Test Environment :**

Web browser, login page URL, internet connectivity.

**Note:**

Test with various incorrect password formats to ensure error handling is consistent.

### 2.6.2 TC012-Inactive Account:

**Input Data:**

Username and password of an account that has been marked as inactive.

**Expected Result:**

The system should display a message indicating the account is inactive and provide next steps for reactivation if applicable.

**Test Environment:**

Web browser, login page URL, internet connectivity.

**Note:**

Test with accounts in various stages of inactivity to ensure consistent behavior.

### 2.6.3 Forgotten Password

Forgotten Password Test Cases:

1. Navigate to the login page.
2. Click on the "Forgot Password" link.
3. Enter the email address associated with the account.
4. Submit the password reset request.

**Input Data:**

User Email Address

**Expected Result:**

The system sends a password reset email to the provided address, with instructions to reset the password

**Test Environment:**

Web browser, login page URL, internet connectivity.

**Note:**

Ensure the reset link or code expires after a reasonable period for security.

**2.6.4 TC014-Role Based Access Control**

Test Case for Access Control Based on Role

1. Log in with credentials specific to a user role (e.g., Student, Faculty, Admin).
2. Attempt to access features and data exclusive to that role.
3. Try to access features and data not allowed for that role)

**InputData:**

Username and password for accounts of different role.

**Expected Result:**

The system allows access to features and data appropriate for each specific role and denies access to unauthorized areas.

**Test Environment:**

Web browser, application URL, role-specific accounts , internet connectivity.

**Note:**

Test for multiple roles to ensure proper access control across the system.

### 3 Summary

Based on the Ticket 4 detailing a Use Case for User Authentication and Authorization in the Capstone Management System, here are some test cases that could be designed to validate the functionalities described:

**User Registration Test Case:****Test Case for Successful Registration:**

Objective: Verify that a new user can successfully register by providing all required details.

Steps: Navigate to the registration page, enter all mandatory fields including name, email, and role-specific information, and submit.

Expected Result: The user receives a verification email, and upon email verification, the system confirms account activation.

**Test Case for Registration with Missing Details**

Objective: Ensure the system prompts for missing details during registration.

Steps: Attempt to register without filling out all mandatory fields.

Expected Result: The system displays an error message indicating the missing details.

**Test Case for Duplicate Email Registration**

Objective: Verify the system prevents registration with an email that's already in use.

Steps: Attempt to register using an email address already associated with an existing account.

Expected Result: The system displays an error message about the email already being in use.

**User Login Test Cases:**

**Test Case for Successful Login**

Objective: Verify that a user can log in with correct credentials.

Steps: Navigate to the login page, enter valid username/email and password, and submit.

Expected Result: The user is authenticated and granted access based on their role.

**Test Case for Incorrect Password**

Objective: Ensure the system handles incorrect password entries appropriately.

Steps: Attempt to log in with a valid username but incorrect password.

Expected Result: The system displays a warning and allows the user to try again.

**Test Case for Inactive Account Login Attempt**

Objective: Verify the system does not allow login for accounts that haven't been activated via email verification.

Steps: Attempt to log in with an account that hasn't been verified through email.

Expected Result: The system notifies the user to verify their email first.

**Forgotten Password Test Cases****Test Case for Password Reset**

Objective: Verify that users can reset their password if forgotten.

Steps: Select the "Forgot Password" option, provide the email address associated with the account, use the password reset link sent to the email to set a new password.

Expected Result: The user is able to successfully reset their password and log in with the new credentials.

**Role-Based Access Control Test Cases****Test Case for Access Control Based on Role**

Objective: Verify that the system grants or denies access to features based on the user's role.

Steps: Log in with accounts of different roles (e.g., Student, Faculty) and attempt to access features specific to each role.

Expected Result: Users can access features pertinent to their roles while access to other role-specific features is denied. Each test case includes steps for execution and the expected result, ensuring a thorough validation of the user authentication and authorization processes described in the document.

4 Use Case Table

Project Name	Capstone Management System	Test Case Author	Ferial Najiantabriz
Priority	High	Test Case reviewer	Ferial Najiantabriz
Description	Ensure that new users can register successfully.	Test case version	
Test Objective	Verify that the registration process is intuitive, secure, and results in a verified active user account.	Test Execution Date	

Test Case ID	Test Steps	Input Data	Expected Result	Actual Results	Test Environment	Execution Status	Bug Severity	Bug Priority	Notes
TC 001	Navigate to the registration page	N/A	The user is successfully directed to the registration page of the system without any errors or redirection issues. The page should load completely and display all necessary fields and information required for registration, such as name, email, and password input fields, in a user-friendly and accessible manner.	To be filled post-execution	<b>Web Browser:</b> A modern web browser such as Chrome, Firefox, Safari, or Edge. <b>Device:</b> The device being used to perform the test, which could be a desktop, laptop, tablet, or smartphone. <b>Operating System:</b> The operating system of the device (e.g., Windows, macOS, Android, iOS). <b>Internet Connectivity:</b> An active internet connection to access the registration page. <b>Screen Resolution:</b> The resolution settings on the device to ensure the page is displayed correctly across different devices and screen sizes. <b>URL of Registration Page:</b> The exact URL that needs to be navigated to in order to reach the registration page.	To be filled post-execution	To be filled if a bug is found	To be filled if a bug is found	Verify the URL directs to the correct registration page without errors or unnecessary redirects. Check the page's load time and ensure it is acceptable across different devices and internet speeds. Note any SSL certificate warnings or security alerts that may affect user trust.
TC 002	Fill in all required fields (name, email, password)	Name: A valid format name that the system should accept. This could be a name like "Jane Doe". Email: A valid and unused email address, like "jane.doe@example.com". Password: A strong password that meets the system's requirements, such as "P@ssw0rd123!".	system accepts the input without errors, indicating the user has successfully provided all necessary information. The system should then be ready to proceed to the next step in the registration process, typically submitting the registration form for processing. This step verifies that the form's validation mechanisms are working correctly, ensuring that the data entered meets the system's requirements for format and completeness.	To be filled post-execution	<b>Web Browser:</b> A modern web browser where the registration page is accessed (e.g., Chrome, Firefox, Safari). <b>Test Server:</b> An instance of the application running on a test server, separate from the production environment, to simulate real user scenarios without affecting live data. <b>Network Connection:</b> To ensure that the registration process can be completed as it involves sending data to the server. <b>Test Data:</b> Pre-defined valid and invalid inputs for name, email, and password to test various scenarios including form validations.	To be filled post-execution	To be filled if a bug is found	To be filled if a bug is found	Ensure the data entered for name, email, and password adheres to the system's validation rules (e.g., email format, password complexity). Consider edge cases, such as using special characters in the name, or extremely long or minimal input values, to test the robustness of the form's validation mechanisms.

TC003	Click the registration button.	N/A	the expected result is that the system should acknowledge the action by either navigating to a new page, showing a loading symbol, or displaying a message indicating that the registration is being processed.	To be filled post-execution	<b>Web Browser:</b> A modern web browser where the action is performed (e.g., Chrome, Firefox, Safari). <b>Registration Page URL:</b> The specific URL where the registration form is located. <b>Network Connectivity:</b> An active internet connection to ensure the form submission process. <b>Device:</b> A computer or mobile device to replicate the user's likely environment.	To be filled post-execution	To be filled if a bug is found	To be filled if a bug is found	Verify that clicking the button triggers the expected action immediately, without any undue delay. Note if the button becomes disabled upon clicking to prevent multiple submissions. Also, observe any feedback provided to the user, such as a loading indicator, to ensure clarity in the registration process.
TC004	Check email for the verification link	<b>Email Address:</b> The same email address that was used during the registration process (e.g., jane.doe@example.com). <b>Email Access Credentials:</b> If needed for the test, this might include a username and password for the email account or the necessary access for a test email system.	tester will receive a verification email from the system, which contains a verification link that the user must click to verify their account.	To be filled post-execution	<b>Email Client:</b> The software or web service used to access the email (e.g., Gmail, Outlook). <b>Device:</b> The device being used to access the email, such as a laptop, desktop, tablet, or smartphone. <b>Operating System:</b> The operating system of the device (e.g., Windows, macOS, Android, iOS). <b>Internet Connectivity:</b> An active connection to ensure the email client can retrieve new emails. <b>Test Email Account:</b> A test or dummy email account set up specifically for testing purposes, to avoid using personal or real user data.	To be filled post-execution	To be filled if a bug is found	To be filled if a bug is found	Ensure the verification email arrives within a reasonable timeframe and does not get flagged as spam. Verify the link is clearly visible and identifiable as part of the email content, and that there are no issues with email formatting that could make the link unusable.

TC005	Click the verification link in the email	<b>Verification Link:</b> The actual URL provided in the verification email that the user is expected to click.	<b>Account Activation Confirmation:</b> Upon clicking the link, the user should be redirected to a confirmation page or receive a notification indicating that their email address has been successfully verified and their account is now active.	To be filled post-execution	<b>Email Client:</b> The application or web service used to open the email, such as Gmail, Outlook, etc. <b>Web Browser:</b> A web browser to open the verification link, such as Chrome, Firefox, Safari, etc. <b>Device:</b> The device being used to perform the test, which could be a desktop, laptop, tablet, or smartphone. <b>Operating System:</b> The operating system on which the email client and web browser are running (e.g., Windows, macOS, Android, iOS). <b>Internet Connectivity:</b> An active internet connection to ensure the link can be accessed and the server can respond to the verification request. <b>Security Settings:</b> Proper configuration to allow the verification link to be accessed without being blocked by firewalls or security software.	To be filled post-execution	To be filled if a bug is found	To be filled if a bug is found	Confirm that the link leads to the correct verification page and results in a successful confirmation message. Check that there are no broken links or error pages encountered and that the process completes in a timely manner. Additionally, ensure the link is a secure HTTPS connection and that it is unique to each user or registration attempt.
TC006	Ensure the system confirms successful registration and email verification.	The user should be on the page that they were directed to after clicking the verification link in their email.	The system displays a confirmation message or page indicating that the registration and email verification have been successfully completed. This message might read something like "Your email has been verified and registration is complete" or "Thank you for verifying your email address. Your registration is now complete."	To be filled post-execution	<b>Web Browser:</b> A current version of a common web browser like Chrome, Firefox, or Safari. <b>Verification Page:</b> The specific URL or landing page the user is directed to after clicking the email verification link. <b>Server Environment:</b> The backend system must be set up to process the verification and trigger the confirmation of registration. This could be a staging or a QA environment that simulates the live server. <b>Internet Connectivity:</b> An active internet connection to ensure communication between the client and server. <b>Database Access:</b> The system's database should be accessible to record the verification status.	To be filled post-execution	To be filled if a bug is found	To be filled if a bug is found	Check for a clear confirmation message that indicates the user's registration and email verification have been successful. This could be in the form of a message on the website, an additional confirmation email, or a status update on the user's account page. Ensure that the confirmation cannot be bypassed or triggered without the actual completion of the email verification step.

TC007	Attempt to log in with the new credentials	<b>Username/Email:</b> The email address used during the registration process. <b>Password:</b> The password created during the registration process.	The system allows the user to log in successfully with the new credentials, leading to access to the user's dashboard or home page within the application. The system should not show any error messages related to incorrect credentials or unauthorized access.	To be filled post-execution	<b>Web Browser:</b> The browser used to access the login page (e.g., Chrome, Firefox, Safari). <b>Login Page URL:</b> The specific URL where users are expected to input their credentials to log in. <b>Device:</b> The hardware used for the test, such as a desktop computer, laptop, tablet, or smartphone. <b>Operating System:</b> The operating system of the device (e.g., Windows, macOS, Android, iOS). <b>Internet Connectivity:</b> A reliable internet connection to ensure uninterrupted access to the login page. <b>Screen Resolution:</b> The resolution settings on the device to ensure the page is displayed correctly across different devices and screen sizes. <b>Test Credentials:</b> The username and password established during the registration process that are now being tested for login functionality.	To be filled post-execution	To be filled if a bug is found	To be filled if a bug is found	Check that the login function accepts the new credentials without error and that the user is redirected to the appropriate page based on their role. Monitor for any unexpected delays or error messages, and verify that the 'forgot password' and 'create new account' functions remain accessible in case of login issues.
TC008	Verify access is granted to the user's dashboard	Confirmation that the user has logged in using their valid credentials (username/email and password).	The user should be directed to their dashboard or home page specific to their role (e.g., student, faculty, admin) after login. The dashboard should display relevant information and options available to the user, confirming that access has been correctly granted based on the user's role and that the system recognizes the user's authenticated state.	To be filled post-execution	<b>Web Browser:</b> The browser through which the user will access their dashboard (e.g., Chrome, Firefox, Safari). <b>Authenticated Session:</b> Access to the system post login where the user has been authenticated. <b>User Role:</b> The specific role of the user (e.g., student, faculty) to verify that the dashboard access aligns with role-based permissions. <b>Device:</b> The hardware used for the test, such as a desktop computer, laptop, tablet, or smartphone. <b>Operating System:</b> The operating system of the device (e.g., Windows, macOS, Android, iOS). <b>Internet Connectivity:</b> A stable internet connection to ensure the user can access their dashboard without any interruptions. <b>Screen Resolution:</b> The display settings to ensure the dashboard is rendered correctly across different devices and screen sizes.	To be filled post-execution	To be filled if a bug is found	To be filled if a bug is found	Ensure that upon successful login, the user is directed to their respective dashboard. The dashboard should display all relevant widgets, links, and information expected for the user's role. Additionally, confirm that no access is given to areas that should be restricted based on the user's permissions.

TC009	Failed Registration Due to Missing Information (1. Navigate to Registration Page. 2. Enter Partial Information. 3. Attempt to Submit Form. 4. Verify Error Message. 5. Check Form Retention)	Partial user details (e.g., name filled, email and password left blank).	An error message is displayed indicating missing information. Previously entered data remains filled in the form.	To be filled post-execution	<b>Web Browser:</b> A modern web browser where the registration page is accessed (e.g., Chrome, Firefox, Safari). <b>Test Server:</b> An instance of the application running on a test server, separate from the production environment, to simulate real-user scenarios without affecting live data. <b>Network Connection:</b> To ensure that the registration process can be completed as it involves sending data to the server. <b>Test Data:</b> Pre-defined valid and invalid inputs for name, email, and password to test various scenarios including form validations.	To be filled post-execution	To be filled if a bug is found	To be filled if a bug is found	Ensure error messages are specific to the missing information.
TC010	Duplicate Email Handling	<b>First Registration Attempt:</b> Use a valid email address to complete and submit the registration form successfully. <b>Second Registration Attempt:</b> Attempt to register again using the same email address but with different or the same user details for other fields (name, password). <b>The goal is to verify the system's ability to recognize and block the registration of a new account using an email address that is already associated with an existing account.</b>	<b>Error Message Display:</b> Upon attempting the second registration with the same email, the system should display an error message. <b>Registration Prevention:</b> The system prevents the second registration attempt from proceeding. <b>Clarification:</b> The error message clearly indicates that the email address is already in use by another account.	To be filled post-execution	<b>Web Browser:</b> A modern browser like Chrome, Firefox, Safari, or Edge to access the registration form. <b>Registration Page URL:</b> The specific URL where users can register their accounts. <b>Network Connectivity:</b> An active internet connection to submit registration forms. <b>Device:</b> A desktop, laptop, tablet, or smartphone to ensure the system's response is consistent across different platforms. <b>Email Server:</b> Access to an email account to receive any potential notifications or error messages related to duplicate email usage.	To be filled post-execution	To be filled post-execution	To be filled if a bug is found	Ensure the error message for a duplicate email is user-friendly and provides guidance on how to recover or access the existing account. This could include a link to the login page or password recovery. Testing should also verify that the system does not reveal whether an email is associated with an active account for security purposes.

TC011	Incorrect Password (1. Navigate to the login page. 2. Enter a valid username/email. 3. Enter an incorrect password. 4. Click the login button.)	Username/Email: Valid user email. Password: Incorrect password.	The system should display an error message indicating the password is incorrect. The user should not be logged in.	To be filled post-execution	Web browser, login page URL, internet connectivity.	To be filled post-execution	To be filled post-execution	To be filled if a bug is found	Test with various incorrect password formats to ensure error handling is consistent.
TC012	Test Case for Inactive Account Login Attempt 1. Navigate to the login page. 2. Enter the credentials of an inactive account. 3. Attempt to log in.	Username and password of an account that has been marked as inactive.	The system should display a message indicating the account is inactive and provide next steps for reactivation if applicable	To be filled post-execution	Web browser, login page URL, internet connectivity.	To be filled post-execution	To be filled post-execution	To be filled if a bug is found	Test with accounts in various stages of inactivity to ensure consistent behavior.
TC013	Forgotten Password Test Cases 1. Navigate to the login page. 2. Click on the "Forgot Password" link. 3. Enter the email address associated with the account. 4. Submit the password reset request.	User Email Address	The system sends a password reset email to the provided address, with instructions to reset the password	To be filled post-execution	Web browser, login page URL, internet connectivity.	To be filled post-execution	To be filled post-execution	To be filled if a bug is found	Ensure the reset link or code expires after a reasonable period for security.
TC014	Test Case for Access Control Based on Role 1. Log in with credentials specific to a user role (e.g., Student, Faculty, Admin). 2. Attempt to access features and data exclusive to that role. 3. Try to access features and data not allowed for that role)	Username and password for accounts of different roles.	The system allows access to features and data appropriate for each specific role and denies access to unauthorized areas.	To be filled post-execution	Web browser, application URL, role-specific accounts, internet connectivity.	To be filled post-execution	To be filled post-execution	To be filled if a bug is found	Test for multiple roles to ensure proper access control across the system.

## 5 References

-[https://katalon.com/resources-center/blog/test-case-template-examples-113591021\(FerialNajiantabriz\)-Ticket4-CS5213Spring2024 -1.pdf](https://katalon.com/resources-center/blog/test-case-template-examples-113591021(FerialNajiantabriz)-Ticket4-CS5213Spring2024-1.pdf)