Test Plan Documentation for

Campus Collab

Student Material Management System

Login Form

This section covers the testing of the login functionality for the CampusCollab platform. It includes test cases to validate the system's behavior when users enter valid credentials, invalid credentials, or leave fields empty during the login process. The expected results ensure that the system correctly authenticates users and denies access for unauthorized attempts.

SL. No.	Test Case	Expected Result	Test Result
1	Enter valid email and password, click Login	System should display the main dashboard	Successful
2	Enter invalid email and/or password	System should display an error message	Successful
3	Leave email or password field empty, click Login	System should display an error message	Successful
4	Attempt to login as an unauthorized user	System should deny access and display an error	Successful

User Registration

The user registration section focuses on testing the account creation process. It verifies that users can successfully register by providing all required information, and checks the system's response to incomplete registrations, duplicate email addresses, and invalid data formats. These test cases help ensure the integrity and security of the user account management system.

SL. No.	Test Case	Expected Result	Test Result
1	Fill in all required registration fields correctly, click Register	System should create a new user account and redirect to login page	Successful
2	Leave any required registration field empty, click Register	System should display an error message asking to fill in all fields	Successful
3	Enter an email address that is already registered	System should display an error message indicating the email is already in use	Successful
4	Enter invalid data formats (e.g., non-numeric for phone number)	System should display an error message asking for valid input	Successful

Search and Browse Materials

This section examines the platform's search and browsing functionality. The test cases cover searching for materials by various filters, applying sorting and filtering options, handling scenarios where no results are found, and validating the display of search results.

SL. No.	Test Case	Expected Result	Test Result
1	Search for materials by university, semester, course, and file type	System should display relevant search results with options to preview and download	Success ful
2	Apply sorting and filtering options (e.g., by upload date, rating, popularity)	System should update the search results based on the selected sorting and filtering	Success ful
3	Attempt to search with no filters applied	System should display a comprehensive list of all available materials	Success ful
4	Search for a material that does not exist in the database	System should display a message indicating no results found	Success ful

Material Upload

The material upload section tests the system's ability to handle file uploads by users. It verifies the successful addition of new materials to the database, validates the system.

Sl No.	Test Case	Expected Result	Test Result
1	Fill in all required upload fields correctly, attach a file, click Upload	System should add the new material to the database and update the user's upload history	Successful
2	Leave any required upload field empty, click Upload	System should display an error message asking to fill in all fields	Successful
3	Upload a file that exceeds the maximum allowed size	System should display an error message indicating the file size limit has been exceeded	Successful
4	Upload a file with an unsupported format	System should display an error message listing the supported file formats	Successful
5	Attempt to upload a duplicate material (same course, semester, and file type)	System should display a warning message and ask the user to confirm the upload	Successful

Material Download

This section focuses on testing the download process for educational materials. The test cases cover initiating downloads, handling offline scenarios, and verifying the availability of downloaded materials. It also includes tests for the user's download history feature.

SL. No.	Test Case	Expected Result	Test Result
1	Click the download button for a material	System should initiate the download of the material in its original format	Successful
2	Download a material while offline	System should display an error message indicating the need for an internet connection	Successful
3	Download a material that has been removed by an administrator	System should display a message stating that the material is no longer available	Successful
4	View the user's download history	System should display a list of all materials downloaded by the user	Successful

User Profile Management

The user profile management section validates the system's ability to allow users to update their personal information, view their uploaded materials and download history, and manage their account settings. These test cases ensure the platform provides users with the necessary tools to control and maintain their profile data.

SL. No.	Test Case	Expected Result	Test Result
1	Update user profile information (e.g., name, email, password)	System should update the user's profile and display a success message	Successful
2	Attempt to update the profile with invalid data (e.g., non-unique email)	System should display an error message indicating the issue	Successful
3	View the user's uploaded materials and download history	System should display the relevant information in the user's profile	Successful
4	Deactivate or delete the user account	System should remove the user's access and data from the platform	Successful

Community Features

This section tests the platform's community-based features, such as material rating, feedback, bookmarking, and discussion forums. The test cases cover the functionality, user interactions, and data integrity of these collaborative elements within the CampusCollab system.

SL. No.	Test Case	Expected Result	Test Result
1	Rate a material and provide feedback	System should update the material's rating and display the feedback	Successful
2	View the ratings and feedback for a material	System should display the aggregated ratings and user comments	Successful
3	Bookmark or "like" a material	System should update the user's profile with the bookmarked/liked materials	Successful
4	Participate in the discussion forum	System should allow the user to post, reply, and view forum discussions	Successful

Accessibility and Responsiveness

The accessibility and responsiveness section ensures the platform meets web accessibility standards and provides a consistent user experience across various devices and input methods. These test cases cover responsive layout, keyboard navigation, screen reader compatibility, and color contrast compliance.

SL. No.	Test Case	Expected Result	Test Result
1	Access the platform using various devices and screen sizes	System should maintain a consistent and responsive layout across devices	Successful
2	Navigate the platform using only the keyboard	System should allow full functionality without the need for a mouse	Successful
3	Use the platform with a screen reader	System should provide proper ARIA labels and descriptions for screen reader compatibility	Successful
4	Ensure the platform meets WCAG guidelines for color contrast and accessibility	System should pass accessibility testing and provide a high-contrast mode	Successful

Administrative Features

The administrative features section focuses on testing the system's management capabilities for platform administrators. It includes test cases for logging in as an admin, moderating user-uploaded content, generating reports, managing user accounts, and integrating the platform with external systems.

SL. No.	Test Case	Expected Result	Test Result
1	Log in as an administrator and access the admin dashboard	System should display the admin dashboard with all administrative tools	Successful
2	Moderate user-uploaded materials (e.g., remove inappropriate content)	System should allow administrators to review and remove materials as needed	Successful
3	Generate reports on platform usage, user activity, and content trends	System should provide downloadable reports in various formats (e.g., PDF, CSV)	Successful
4	Manage user accounts (e.g., create, update, deactivate)	System should allow administrators to perform user management tasks	Successful
5	Integrate the platform with external systems (e.g., university databases)	System should support integration with educational platforms and APIs	Successful