



## **PHASE 4**

**RC8:**

# **Software Test Case Execution Document**

## **1.0 Introduction**

The primary purpose of this document is to define the conditions and specifications required to verify system integrity. Through targeted test cases, we evaluate core functions, use cases, and risk factors to determine how consistently the application performs against these benchmarks. The test cases in this document are referring to the Forunium Website and the database used, which is MySQL Database.

## **2.0 The Functions for Functionality of the Mobile Application are as follows:**

### **2.1 Main page**

- Verify that the main screen is displayed.
- Verify that all buttons, which are member sign-in button, member log in button, New Discussion button, search button, refresh button, filter button, notification button, sort button and mark all read button are present and functional

### **2.2 Member Signup**

- Verify that the member signup screen is displayed.
- Verify that the textbox can receive input.
- Ensure the data collected can be stored in the database upon pressing the “Sign Up” button.
- Verify that the “Registration Successful” is displayed when the user entered a non-existence combination of email and password and confirmation email sent alert is displayed.
- Verify that Email is send and resend button functions
- Verify that the “The email address already been taken” is displayed when the user entered an existing combination of email and password.

### **2.3 Member Login**

- Check for the valid email and password combination for member.
- Verify that the “The password is invalid” is displayed when the user entered wrong combination of email and password.
- Verify that the “Login Successful” is displayed when the user entered correct combination of email and password.
- Verify that the user can request a password change upon pressing “Forgot Password” button and “Email Sent” is displayed.

### **2.4 Admin Login**

- Check for the valid ID and password combination for admin.
- Verify that the “Login Failed” is displayed when the admin entered wrong combination of email and password.
- Verify that the “Login Successful” is displayed when the admin entered correct combination of email and password.

### **2.5 Member Home Menu**

- Verify that the “Profile” page is displayed upon pressing the “Profile” button in the member menu.

- Verify that by going to the “Profile” page, the user can see that their profile picture, post, mention and likes are displayed correctly.
- Verify that “Change Password” button functions properly
- Verify that the “Logout” button is working properly in the “Profile” page.
- Verify that the “All Discussion” page is displayed and pressing the “Start a Discussion” button in the member menu creates new discussion.
- Verify that by going to the “All Discussion” page, the user can see the latest news or events related to the faculty of engineering
- Verify that the “Following” page is displayed and pressing the “Following ” button in the member menu let people see their followed people announcements .
- Verify that by going to the “Tags” page, the user can see the latest news or events related to the faculty of engineering that has been tag by anyone.
- Verify that the “Tick All” button page is displayed upon pressing the “Tick All” button in the member menu, it marks all announcement read.
- Verify that the “All Discussion” page is displayed and pressing the the “Refresh” button in the member menu it refresh to display the latest news.
- Verify that by going to the “All Discussion” page, the user “filter” can see the latest news or events related to the faculty of engineering and filter by time.
- Verify that the “All Discussion” page is displayed and pressing the announcement button in the member menu opens the discussions.
- Verify that by going to the “All Discussion” page, the user can see the latest news or events related to the faculty of engineering and comment, follow the announcer, and like the announcement.
- Verify that the “Reply” button is displayed upon pressing “Reply” button in the member menu, user can write a reply and post.
- Verify that the user can search the news or the announcer with ease.
- Verify that the user can scroll through the directory with ease.

## **2.6 Admin Home Menu**

- Verify that the “Profile” page is displayed upon pressing the “Profile” button in the member menu.
- Verify that by going to the “Profile” page, the user can see that their profile picture, post, mention and likes are displayed correctly.
- Verify that the “Logout” button is working properly in the “Profile” page.
- Verify that the “All Discussion” page is displayed and pressing the “Start a Discussion” button in the member menu creates new discussion.
- Verify that by going to the “All Discussion” page, the user can see the latest news or events related to the faculty of engineering
- Verify that the “Following” page is displayed and pressing the “Following ” button in the member menu let people see their followed people announcements .
- Verify that by going to the “Tags” page, the user can see the latest news or events related to the faculty of engineering that has been tag by anyone.
- Verify that the “Tick All” button page is displayed upon pressing the “Tick All” button in the member menu, it marks all announcement read.
- Verify that the “All Discussion” page is displayed and pressing the the “Refresh” button in the member menu it refresh to display the latest news.
- Verify that by going to the “All Discussion” page, the user “filter” can see the latest news or events related to the faculty of engineering and filter by time.
- Verify that the “All Discussion” page is displayed and pressing the announcement button in the member menu opens the discussions.

- Verify that by going to the “All Discussion” page, the user can see the latest news or events related to the faculty of engineering and comment, follow the announcer, and like the announcement.
- Verify that the “Reply” button is displayed upon pressing “Reply” button in the member menu, user can write a reply and post.
- Verify that the user can search the news or the announcer with ease.
- Verify that the user can scroll through the directory with ease.
- Verify that the admin can suspend a user by clicking on a profile and clicking controls.

### 3.0 Function Test Case Dependencies/Assumptions/Limitations

#### 3.1 Limitations

- **Administrative Access:** Designed for a single backend user to maintain simplicity for small organizations.
- **Validation Scope:** Error messaging focuses on high-probability invalid inputs rather than an exhaustive list of all possible entry errors.

#### 3.2 Assumptions

- **Concurrency:** The system is designed for single-session administrative access, assuming only one administrator is logged in at any given time.
- **Input Reliability:** System testing and functionality assume that users provide valid data within all designated input fields.
- **Data Accuracy:** The application operates on the premise that all entered records are accurate; the current architecture does not include specific contingencies for human data-entry errors.

### 4.0 Test Case

#### 4.1 Main Page

Test ID	Test Definition	Expected Output	Status	Remark
TC1	Verify that the main screen is successfully displayed upon application launch.	The main dashboard/home screen loads fully without errors and all UI elements are visible.	PASS	
TC2	Verify that the <b>Member Sign-In</b> button is present and redirects to the correct registration page.	The button is visible and clicking it opens the Member Sign-In/Registration interface.	PASS	
TC3	Verify that the <b>Member Login</b> button is present and functional.	The button is visible and clicking it opens the Login credentials window.	PASS	

Test ID	Test Definition	Expected Output	Status	Remark
TC4	Verify that the <b>New Discussion</b> button is present and functional.	The button is visible and clicking it opens the interface to create a new discussion thread.	PASS	
TC5	Verify that the <b>Search</b> button is present and triggers the search input or query.	The button is visible and clicking it activates the search function or displays the search bar.	PASS	
TC6	Verify that the <b>Refresh</b> button is present and updates the screen content.	The button is visible and clicking it successfully reloads/refreshes the current data view.	PASS	
TC7	Verify that the <b>Filter</b> button is present and opens the filtering options.	The button is visible and clicking it displays the category/criteria filter menu.	PASS	
TC8	Verify that the <b>Notification</b> button is present and functional.	The button is visible and clicking it opens the notifications panel or alerts list.	PASS	
TC9	Verify that the <b>Sort</b> button is present and provides sorting configurations.	The button is visible and clicking it opens the options to reorder list items (e.g., A-Z, Date).	PASS	
TC10	Verify that the <b>Mark All Read</b> button is present and functional.	The button is visible and clicking it updates the status of all unread items to "read."	PASS	

## 4.2 Member Sign Up

Test ID	Test Definition	Expected Output	Status	Remark
TC11	Verify that the <b>Member Signup</b> screen is correctly displayed.	The signup page loads with all necessary fields (Name, Email, Password, etc.) visible and accessible.	PASS	
TC12	Verify that all registration textboxes can receive character input.	Users are able to type and edit text within all provided input fields.	PASS	
TC13	Ensure data is successfully stored in the database upon clicking the <b>"Sign Up"</b> button.	A new record is created in the backend database corresponding to the details entered by the user.	PASS	
TC14	Verify that <b>"Registration Successful"</b> and the confirmation email alert are displayed for new/unique credentials.	The system displays a success message and an alert confirming that a verification email has been sent.	PASS	
TC15	Verify that the confirmation <b>Email is sent</b> and the <b>Resend</b> button triggers a new email delivery.	The user receives the email, and the "Resend" button successfully re-initiates the mailing process.	FAIL	Manual admin activation required
TC16	Verify that the message <b>"The email address already been taken"</b> is displayed for existing account credentials.	The system identifies the duplicate email and prevents registration with the specified error message.	PASS	

#### 4.3 Member Log In

Test ID	Test Definition	Expected Output	Status	Remark
TC17	Verify that the system validates the combination of member email and password.	The system cross-references credentials with the database to permit or deny access.	PASS	
TC18	Verify that the message <b>"The password is invalid"</b> is displayed for an incorrect email/password combination.	Access is denied and the specific error message appears when credentials do not match records.	PASS	
TC19	Verify that <b>"Login Successful"</b> is displayed when a user enters correct credentials.	The user is granted access and redirected to the member dashboard.	PASS	
TC20	Verify that the <b>"Forgot Password"</b> button triggers a password change request.	Clicking the button opens the recovery interface or prompts for the recovery email address.	PASS	
TC21	Verify that the <b>"Email Sent"</b> alert is displayed after submitting a password reset request.	The system confirms the dispatch of the reset link via a visible success notification.	FAIL	Manual change by admin required

#### 4.4 Admin Log In

Test ID	Test Definition	Expected Output	Status	Remark
TC22	Verify that the system validates the specific ID and password combination for Administrative access.	The system checks the admin credentials against the backend database for authorization.	PASS	
TC23	Verify that <b>"Login Failed"</b> is displayed when an administrator enters an incorrect ID/password combination.	Access to the admin panel is denied and the error message is clearly visible.	PASS	

Test ID	Test Definition	Expected Output	Status	Remark
TC24	Verify that " <b>Login Successful</b> " is displayed when the administrator enters the correct credentials.	The administrator is successfully redirected to the backend administration page.	PASS	

#### 4.5 Member Homepage

Test ID	Test Definition	Expected Output	Status	Remark
TC25	Verify that the <b>Profile</b> page is displayed upon selecting it from the member menu.	The Profile interface loads correctly with the user's specific information.	PASS	
TC26	Verify the visibility of user-specific data on the Profile page.	Profile picture, posts, mentions, and likes are accurately displayed.	PASS	
TC27	Verify that the <b>Change Password</b> button on the Profile page functions properly.	Clicking the button opens the password update interface or prompt.	PASS	
TC28	Verify that the <b>Logout</b> button on the Profile page terminates the session.	The user is logged out and redirected to the login or home screen.	PASS	
TC29	Verify that the <b>Start a Discussion</b> button correctly initiates a new thread.	A new discussion entry is created and visible on the "All Discussion" page.	PASS	
TC30	Verify that the <b>All Discussion</b> page displays news/events for the Faculty of Engineering.	The feed correctly populates with relevant faculty-related content and updates.	PASS	



Test ID	Test Definition	Expected Output	Status	Remark
TC31	Verify that the <b>Following</b> page displays announcements from followed users.	The page filters content to show only updates from people the user follows.	PASS	
TC32	Verify that the <b>Tags</b> page displays tagged faculty news and events.	Content tagged by any user appears correctly within the Tags directory.	PASS	
TC33	Verify that the <b>Tick All</b> button marks all announcements as read.	All unread notifications/announcements update to a "read" status simultaneously.	PASS	
TC34	Verify that the <b>Refresh</b> button on the All Discussion page updates the feed.	The page reloads to show the most recent news or posts.	PASS	
TC35	Verify the <b>Filter</b> functionality on the All Discussion page.	Users can successfully filter faculty news/events by time/date.	PASS	
TC36	Verify that selecting an announcement opens the full discussion view.	Clicking an announcement expands the content to show full details and comments.	PASS	
TC37	Verify interactive features: <b>Comment, Follow, and Like</b> on announcements.	Users can successfully post comments, follow announcers, and register likes.	PASS	

Test ID	Test Definition	Expected Output	Status	Remark
TC38	Verify that the <b>Reply</b> button allows users to write and post responses.	The reply interface opens, accepts text, and successfully publishes the post.	PASS	
TC39	Verify the <b>Search</b> functionality for finding news or specific announcers.	The search results accurately return relevant posts or user profiles.	PASS	
TC40	Verify that the <b>Directory</b> is easily navigable via scrolling.	The user can scroll through the list of entries smoothly without technical lag.	PASS	

#### 4.6 Admin Homepage

Test ID	Test Definition	Expected Output	Status	Remark
TC41	Verify that the admin can suspend a user by navigating to a profile and accessing the <b>Controls</b> menu.	The user account is successfully restricted/suspended from the system after the admin confirms the action.	PASS	