Software Requirements Specification

For

‹STUDYHUB›

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1. Introduction

1.1 Purpose

This document provides the guidelines and specifications for the StudyHub app. The app is designed to support students in their academic journey by offering tools for collaboration, study management, and content sharing. With features such as study groups, messages, posts, self-assessment quizzes, timer. StudyHub aims to enhance the learning experience, helping students stay organized and connected.

1.2 Project Scope

The system captures all significant aspects of student collaboration and study management, including file sharing, study group formation, task management, and notifications. The app is designed to improve students' academic productivity by creating a secure, efficient, and user-friendly platform that supports both online and offline functionalities.

1.3 Intended Audience

The primary audience for the StudyHub app is university students who seek an organized platform for collaboration, sharing educational materials, and managing their study tasks. The app is specifically designed to enhance the learning experience and provide academic support tailored to students' needs.

2. System Features

2.1 Course Selection

2.1.1 Description and priority

Before engaging with other features of StudyHub, students must first choose their course.

Priority: This feature is **High Priority,** as it personalizes the user experience and ensures that all features are tailored to the selected course.
Benefit: Helps organize the system by ensuring all tools and resources are course-specific.
Penalty: Without course selection, the system cannot provide relevant content or study groups.

2.1.2 Functionl Requirements

Req.1: Allow students to select their course from a list of available courses.
Req.2: Display course-specific information and relevant study resources after selection.

2.2 Collaboration and Content Sharing

2.2.1 Description and priority

The collaboration tools allow students to post questions, create study groups, and interact with peers.

Priority: It is of **High Priority** since student interaction is central to the app's functionality.
Benefit: Encourages peer-to-peer interaction and academic support.
Penalty: Without this feature, students will lack a platform for academic collaboration.

2.2.2 Functionl Requirements

Req.1: Allow students to post academic-related questions and answers.
Req.2: Enable students to create, join, and manage study groups for specific courses.

2.3 Learning and Content Sharing Tools

2.3.1   Description and priority

After selecting their course, students can access learning tools like self-assessment quizzes, study resources, and file-sharing options that are tailored to their course content.

Priority: It is High Priority, as these tools are critical for students to assess their progress, access study material, and share resources that enhance their learning experience.
Benefit: Provides students with resources and tools to assess and improve their knowledge of their course material.
Penalty: Without this feature, students cannot easily assess their learning or access course-specific study resources.

2.3.2   Functional Requirements

Req.1: Allow students to select their course from a list of available courses.
Req.2: Display course-specific information and relevant study resources after selection.

2.4 Timer and Notifications

2.4.1   Description and priority

The timer and notifications feature will help students manage their study time and stay informed about upcoming tasks, quizzes, study group activities, and course events. These features will ensure that students can stay on track and receive timely reminders.
Priority: It is Medium Priority, as these features support student organization and time management, though they are secondary to the core learning a collaboration features.
Benefit: Helps students manage their study schedules, stay updated on important events, and never miss crucial deadlines or activities.
Penalty: Without these features, students may struggle with managing time effectively or miss important updates related to their courses.

2.4.2   Functionl Requirements

Req.1: Provide a study timer to help students track their study sessions.
Req.2: Send notifications for new posts, quizzes, study group activities, and upcoming events.

3. NonFunctional Requirement

3.1 Performance Requirements

Ensure the app can handle a high number of students selecting courses and interacting with the system simultaneously without performance issues.

3.2 Safety Requirements Data

backup mechanisms should be in place to ensure the safety and integrity of student data.

3.3 Security Requirements

Implement encryption and multi-factor authentication to ensure the security of student data and course materials.
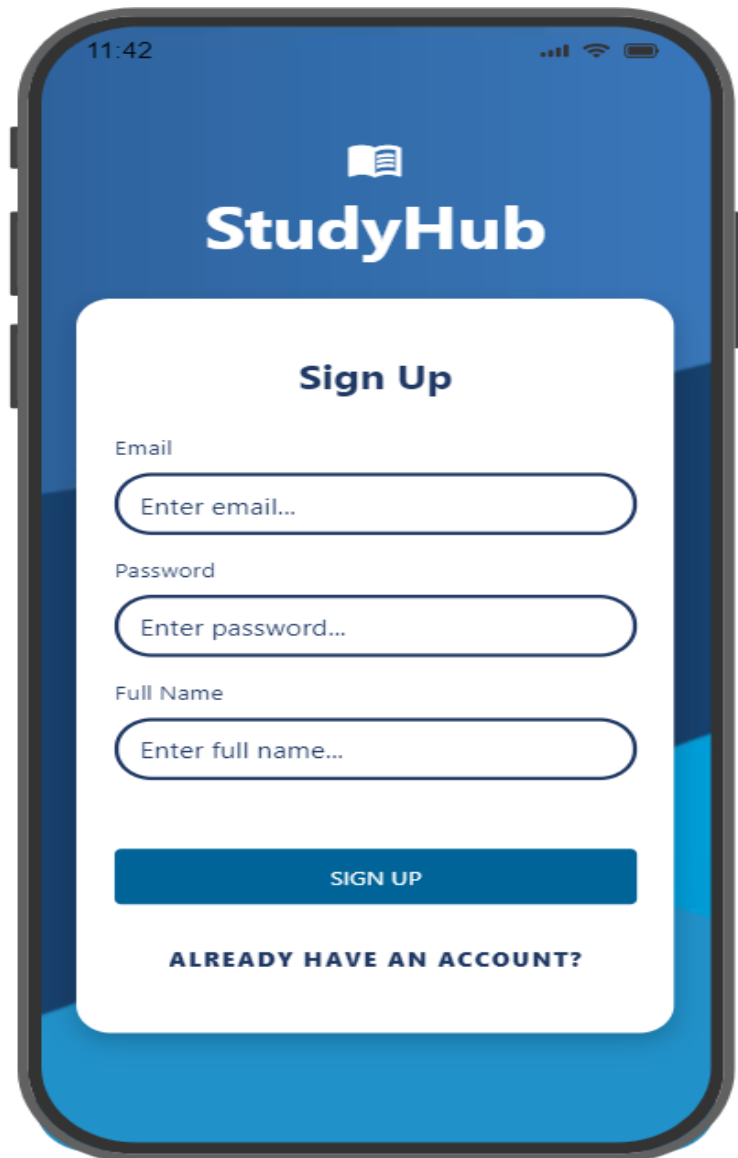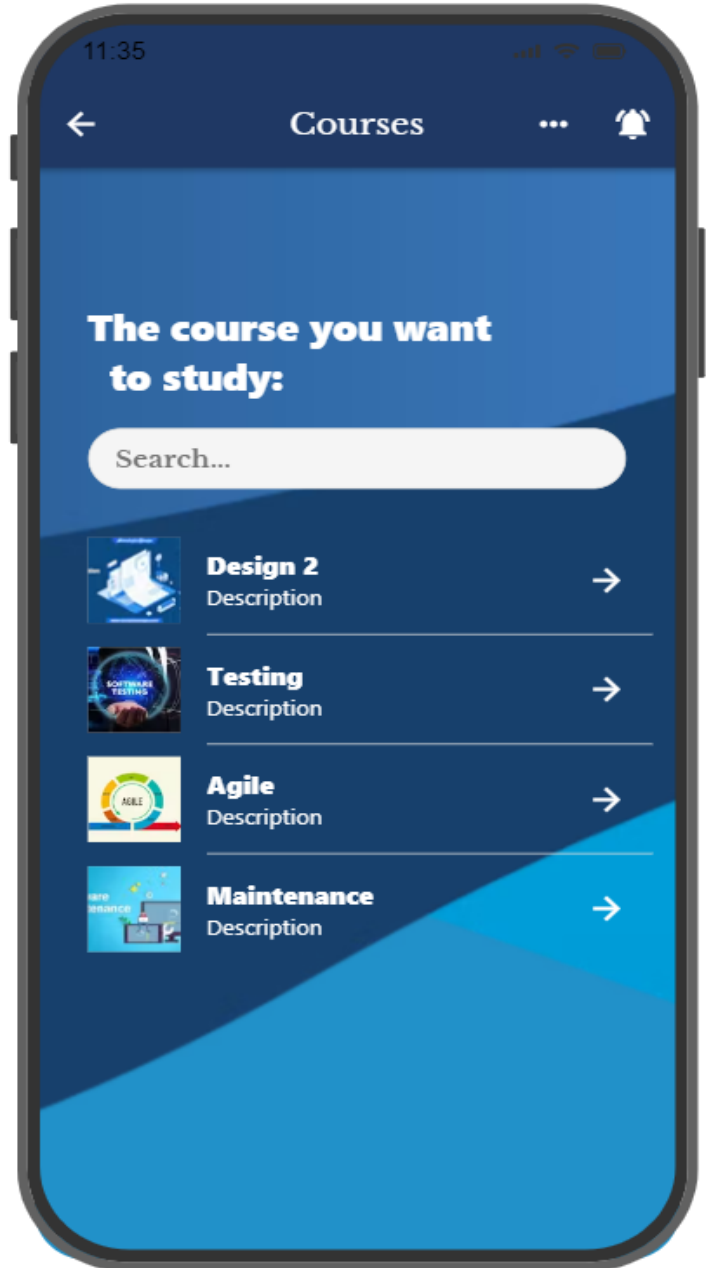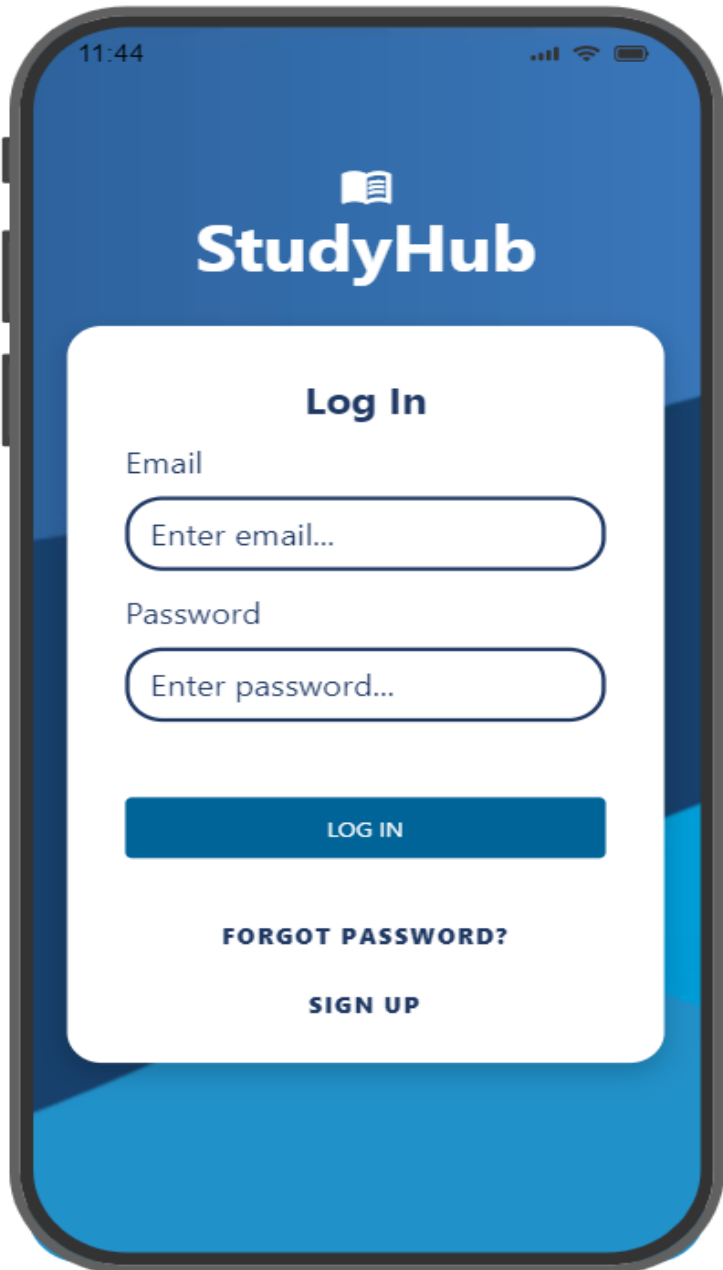
3.4 Accessibility Requirements

The system should be accessible to all students, including those with disabilities, and work seamlessly across devices.

4. External Interface Requirements

4.1 User Interfaces

The system will have a simple and intuitive user interface to allow easy navigation and interaction.

Dashboard

- 👥 StudyGroups
- 📄 Files/Slides Sharing
- 📝 Posts
- ✅ Tasks
- ✏️ Self-Quizzes
- 💬 Messages
- 🕐 Timer
- ❗ Suggestions

StudyGroups

Group 1

🔍 Search...

- Mais Omar
- Zaid Anas
- Huda Ahmad
- Khalid Ayman
- Haya Odai
- Laith Othman
- Qais Firas
- Tala Omar
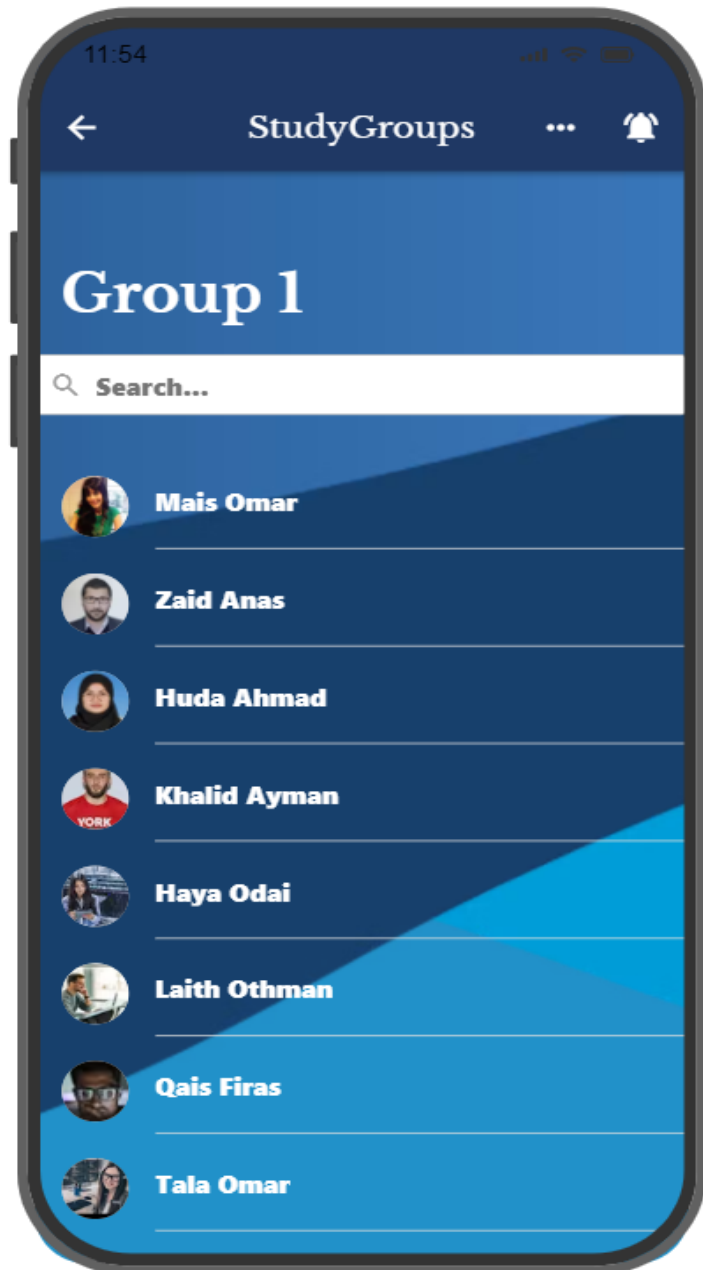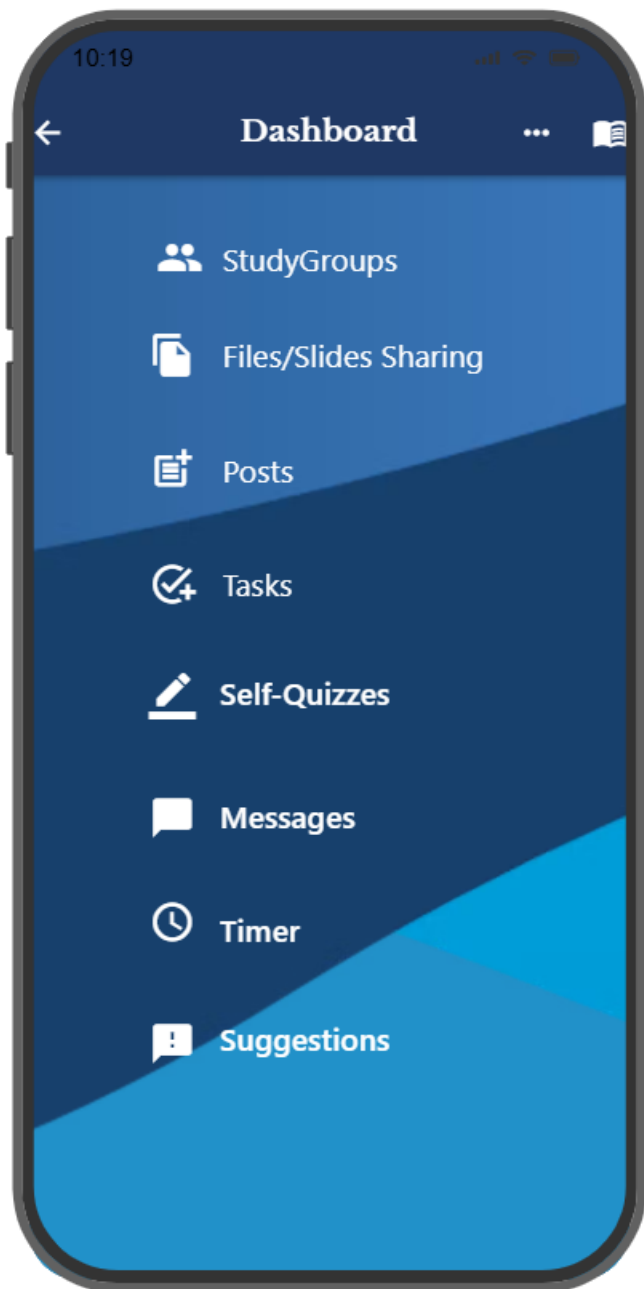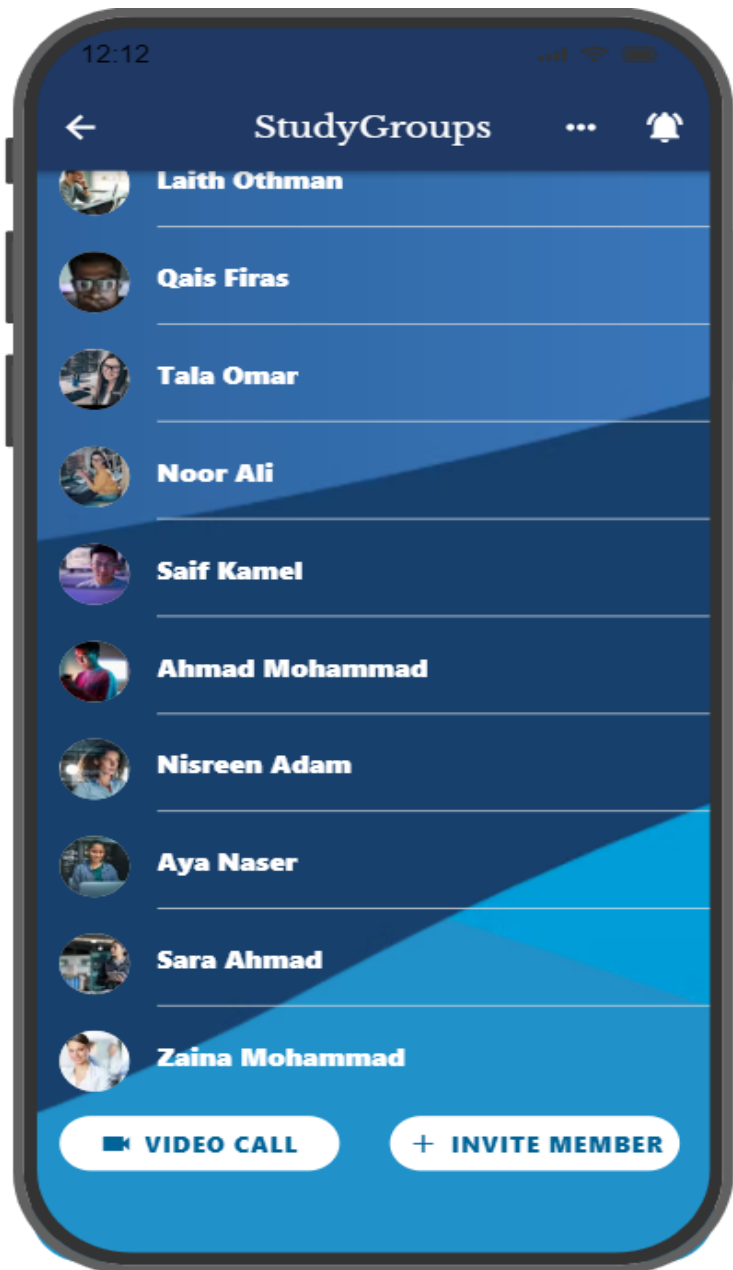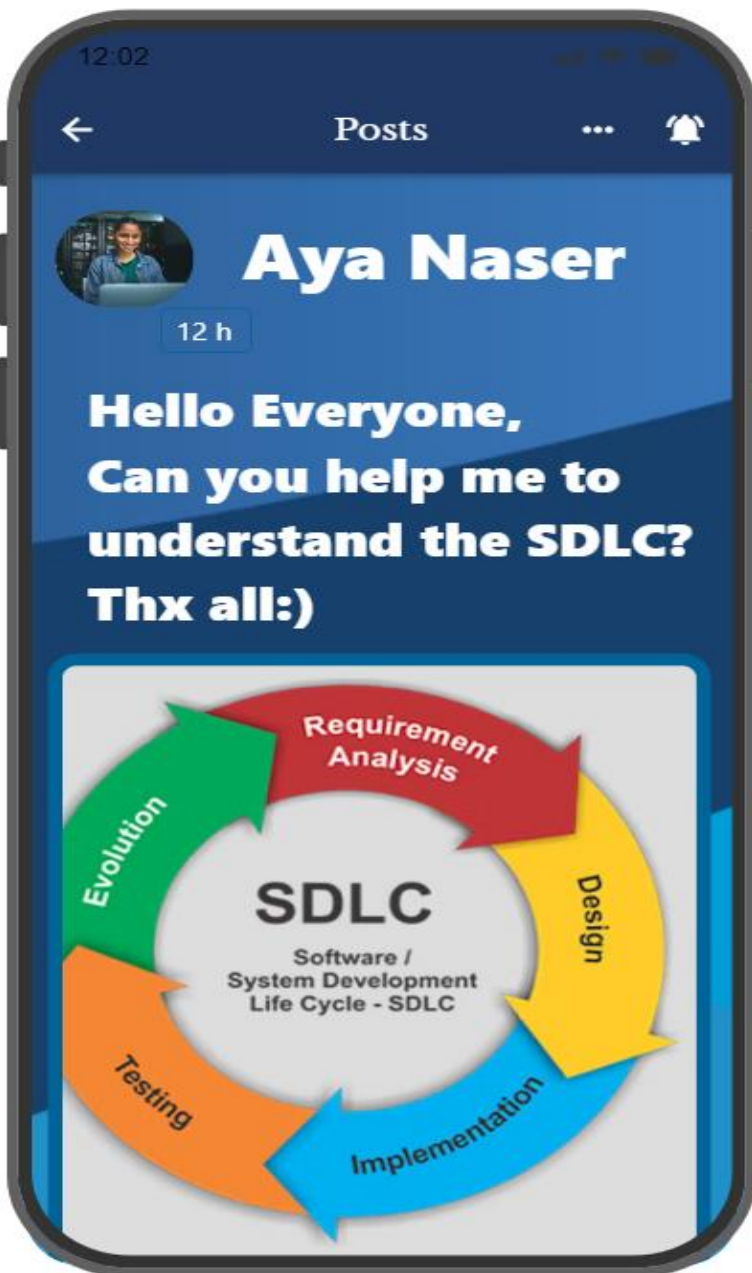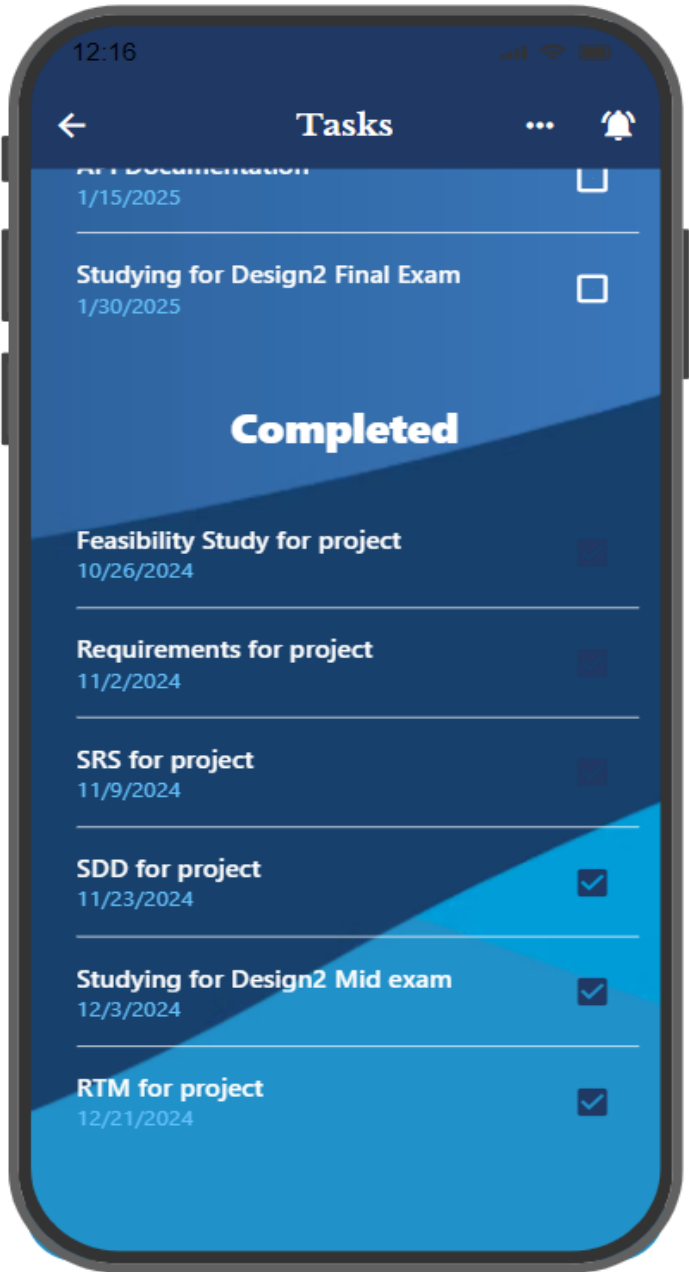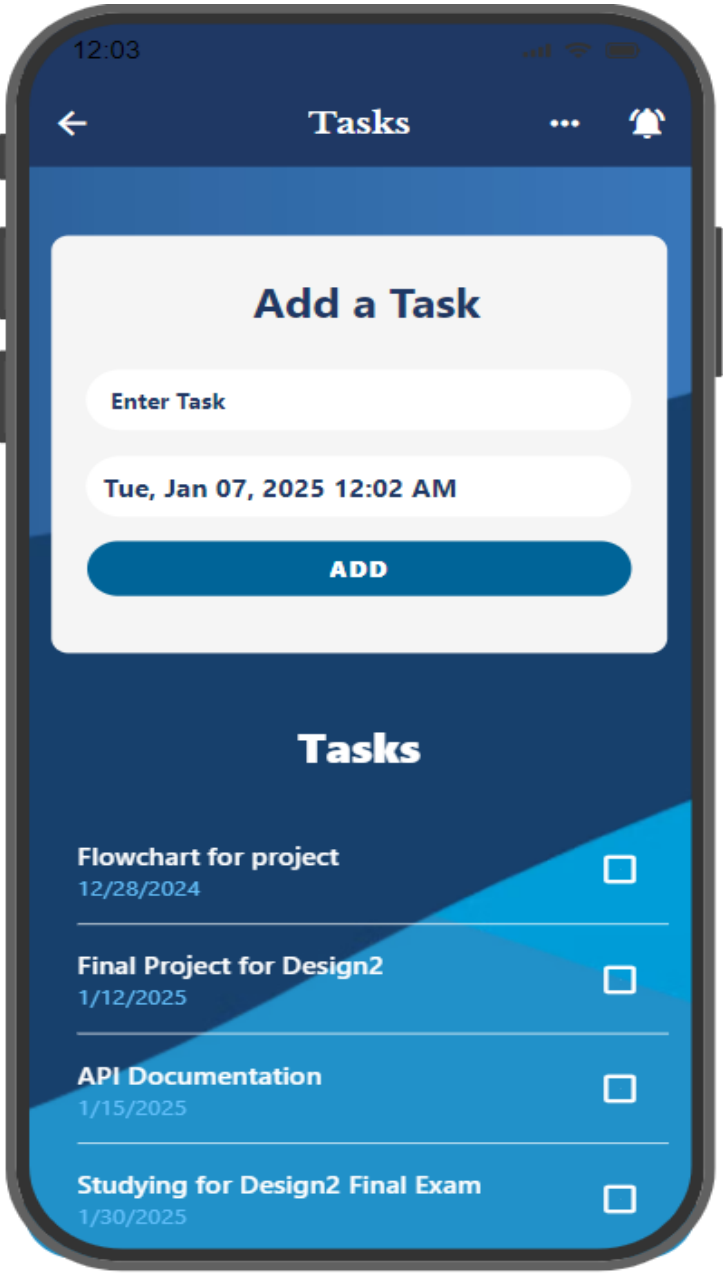
Self-Quizzes

Q1: SDLC stands for?

Enter the answer

Q2: SRS stands for? **Q3: What is Testing?**

Enter the answer   Enter the answer

Q4: Types of Testing?

Select...

Q5 : Last Stage of SDLC?

Select...

Q6 : Discuss the SDLC with Details?

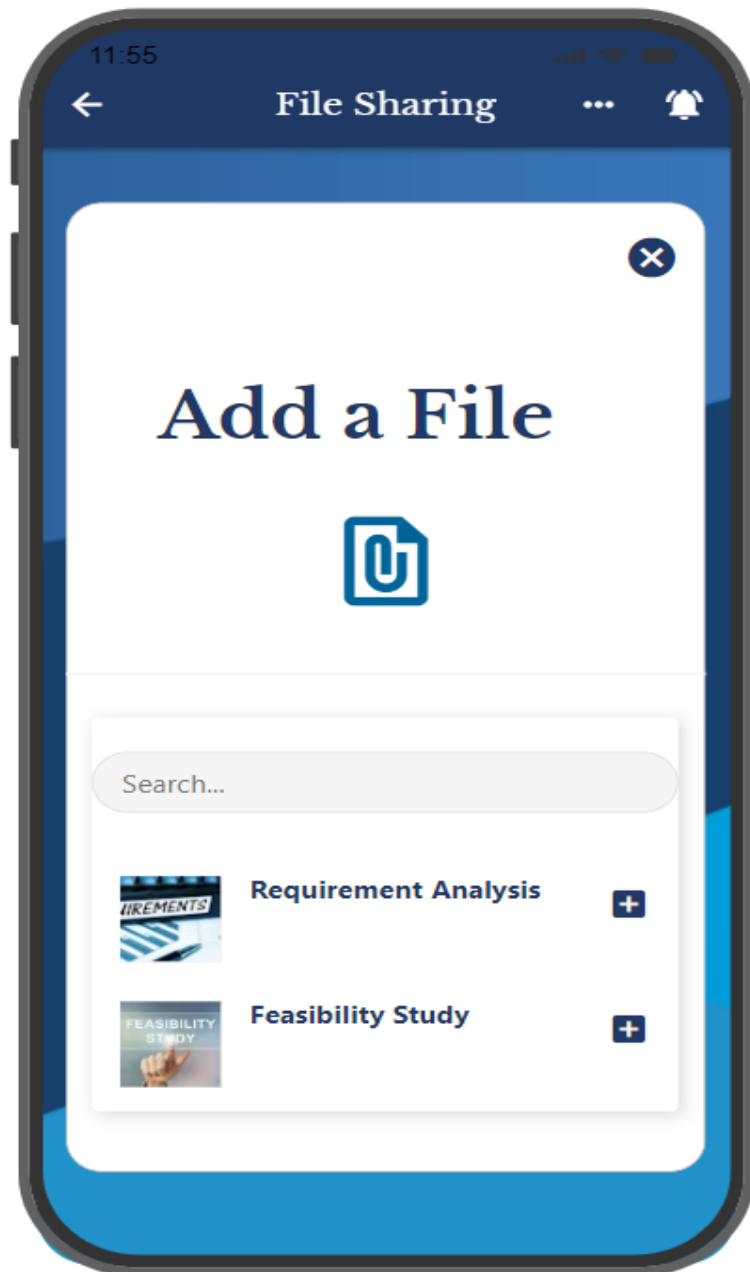Enter the answer

CHECK ANSWERS

Check Answers

Q1 : Software Development Lifecycle.

Q2 : Software Requirement Specification.

Q3 : Testing means validating the system.

Q4 : All of them.

Q5 : Evolution.

Q6 :
1. Requirement Analysis
2. Design
3. Implementation
4. Testing
5. Evolution

*The Adalo Preview Link for StudyHub:

StudyHub

5. Requirement Traceability Matrix

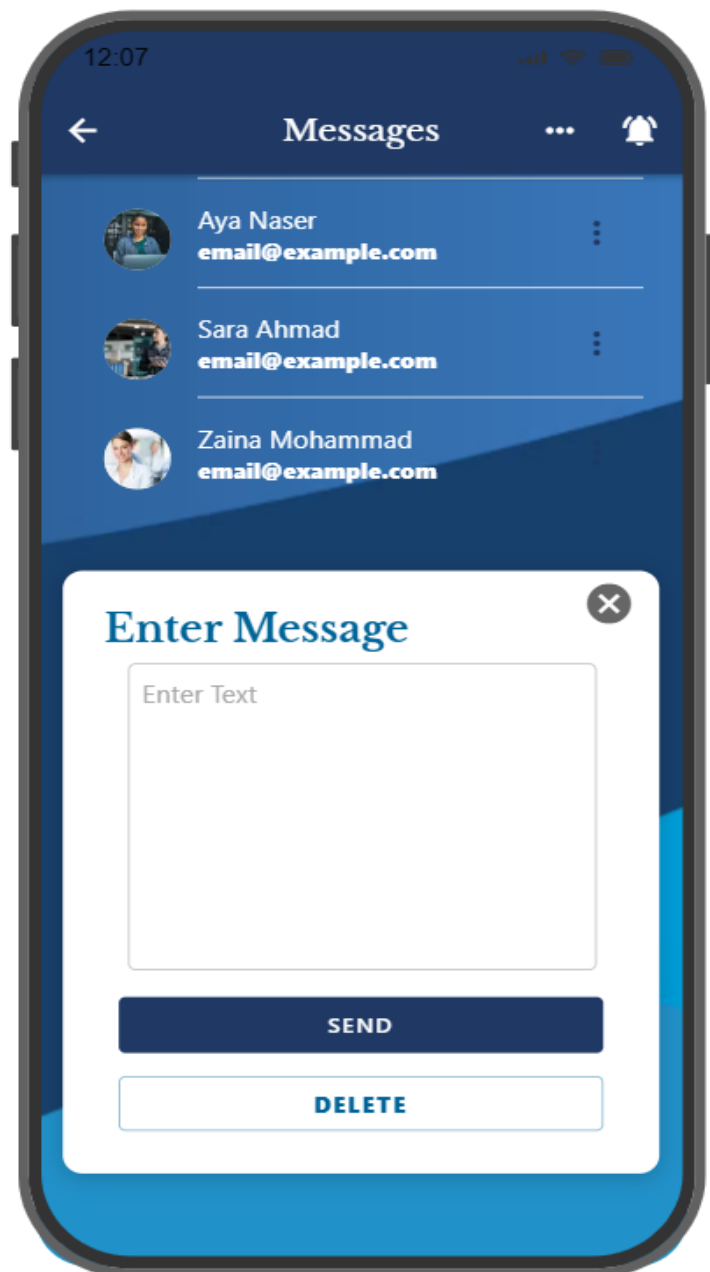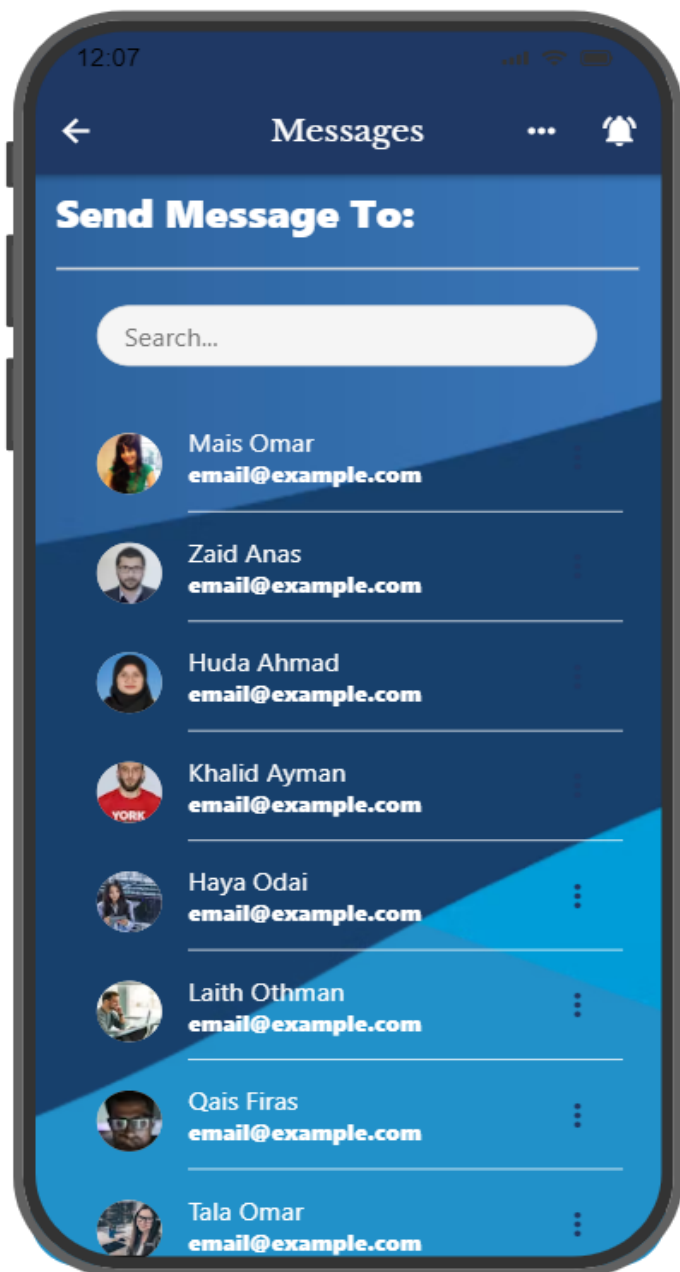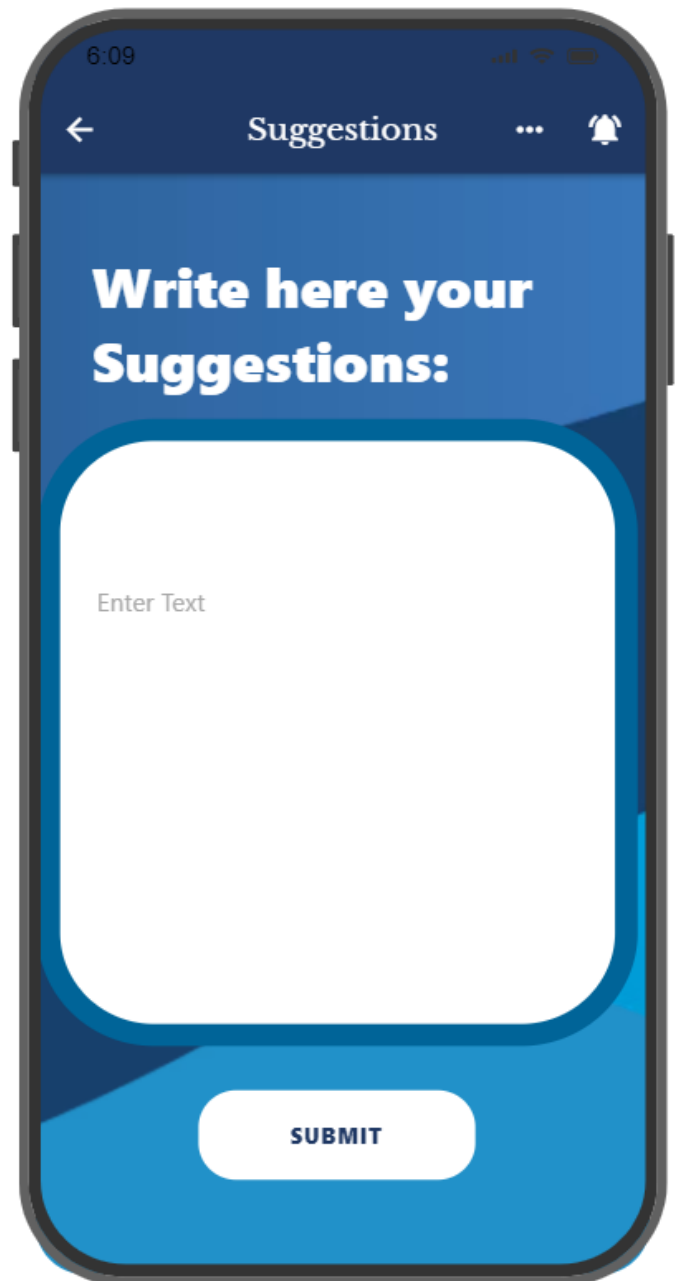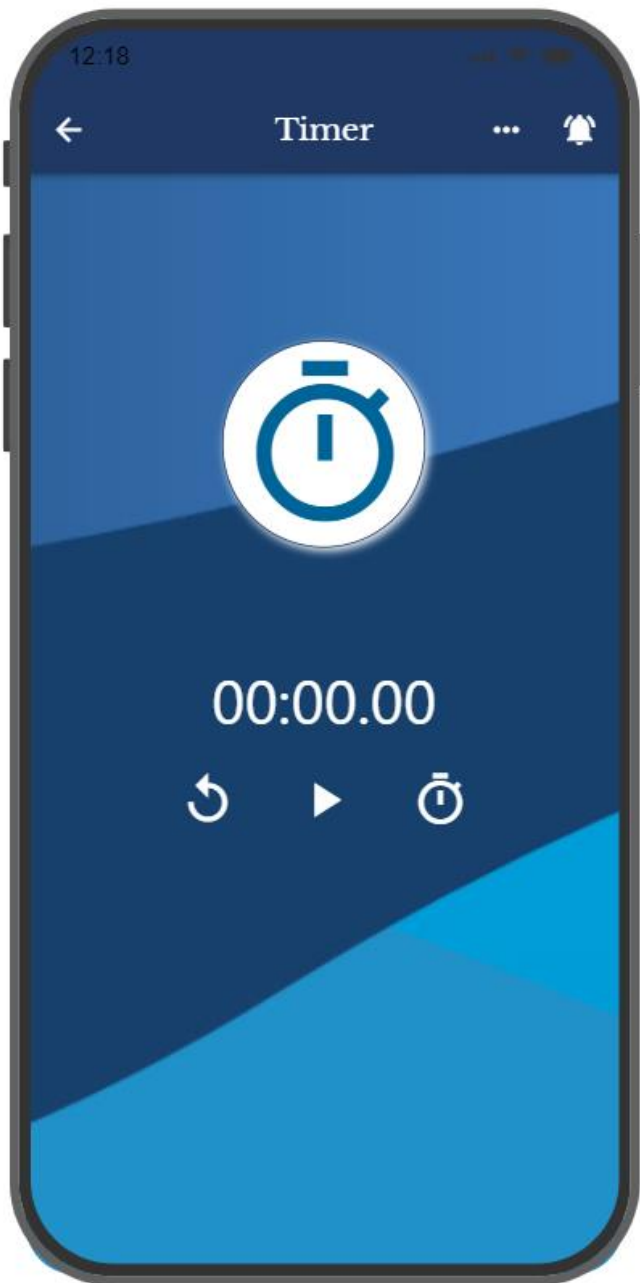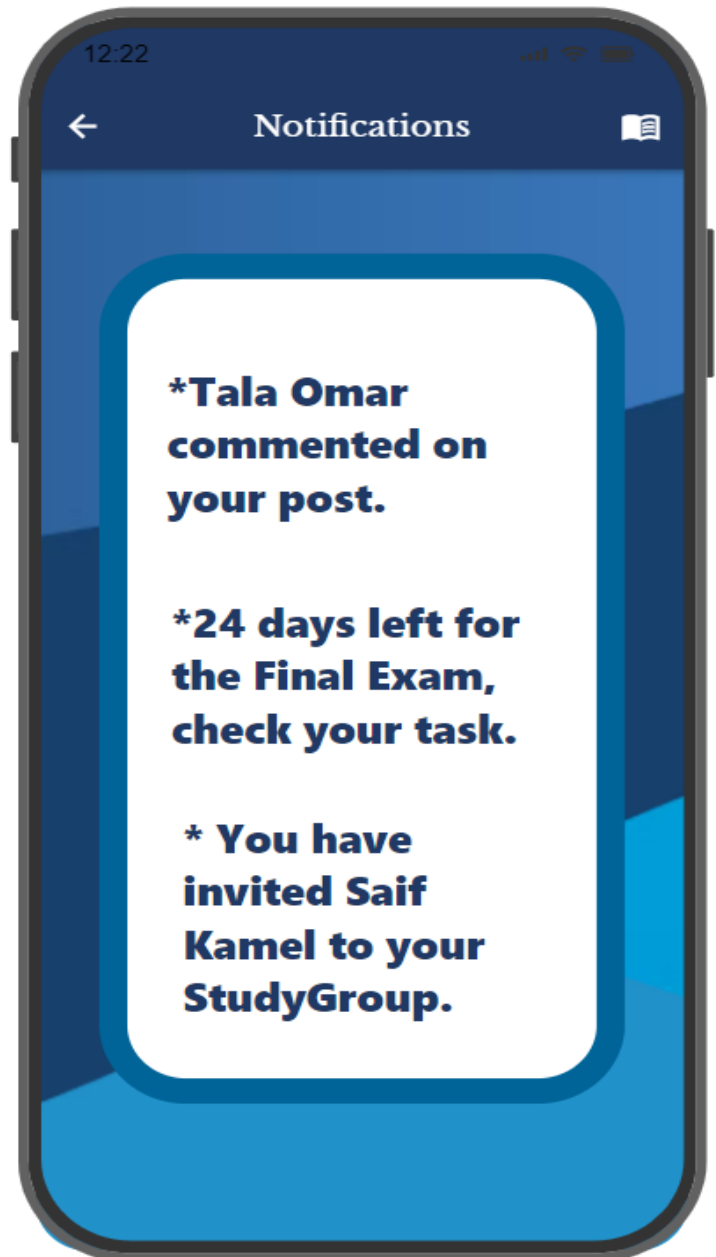| Requirement	Description	Test Case Number	Test Case	Status	Complete	Status Update
"SIGN UP" button in Welcome page	Users click the "SIGN UP" button to go to the Sign Up page.	-	-	Pass	-	-
"Already have an account? "button in Welcome page	Users click the "Already have an account? " button to go to the Log In page.	-	-	Pass	-	-
Sign Up	Users register with Email, Password and Full Name.	Tc#1	Email Valid Password Valid Full Name Valid	Pass	-	-
		Tc#2	Email Invalid Password Valid Full Name Valid	Fail	Yes	Email validation failure checked.
		Tc#3	Email Valid Password Invalid Full Name Valid	Fail	Yes	Password validation failure checked.
		Tc#4	Email Valid Password Valid Full Name Invalid	Fail	Yes	Full Name validation failure checked.
		Tc#5	Email Invalid Password Invalid Full Name Valid	Fail	Yes	Email &Password validation failure checked.
		Tc#6	Email Invalid Password Valid Full Name Invalid	Fail	Yes	Email &Full Name validation failure checked.
		Tc#7	Email Valid Password Invalid Full Name Invalid	Fail	Yes	Password &Full Name validation failure checked.
		Tc#8	Email Invalid Password Invalid Full Name Invalid	Fail	Yes	Email &Password &Full Name validation failure checked.
"SIGN UP" button in Sign Up page	Users click the "SIGN UP" button to go to the Courses page.	-	-	Pass	-	-
"Already have an account? "button in Sign up page	Users click the "Already have an account? " button to go to the Log In page.	-	-	Pass	-	-
Log In	Users log in using their Email and password.	Tc#1	Email Pass Password Pass	Pass	-	-
		Tc#2	Email Fail Password Pass	Fail	Yes	Email validation failure verified.
		Tc#3	Email Pass Password Fail	Fail	Yes	Password validation failure verified.
		Tc#4	Email Fail Password Fail	Fail	Yes	Email & Password validation failure verified.
"LOG IN" button in Log In page	Users click the "LOG IN" button to go to the Courses page.	-	-	Pass	-	-
"FORGOT PASSWORD?" button in Log In page	Users enter their email address to reset teir password.	-	-	Pass	-	-
"SIGN UP" button in Log In page	Users click the "SIGN UP" button to go to the Sign Up page.	-	-	Pass	-	-
"arrow_forward" icon in Courses page	Users click the "arrow_forward" icon to go to the Homepage.	-	-	Pass	-	-

22	"keyboard_control" icon in Courses page	Users click the "keyboard_control" icon in the App Bar Navigation to go to the Settings page.	-	-	Pass	-	-
23	"notifications_active" icon in Courses page	Users click the "notifications_active" icon in the App Bar Navigation to go to the Notifications page.	-	-	Pass	-	-
24	"arrow_back" icon in Courses page	Users click the "arrow_back" icon in the App Bar Navigation to go back to the previous page.	-	-	Pass	-	-
25	"group" icon in Homepage	Users Click the "group" icon to go to the StudyGroups page.	-	-	Pass	-	-
26	"file_copy" icon in Homepage	Users Click the "file_copy" icon to go to the File Sharing page.	-	-	Pass	-	-
27	"post_add" icon in Homepage	Users Click the "post_add" icon to go to the Posts page.	-	-	Pass	-	-
28	"add_task" icon in Homepage	Users Click the "add_task" icon to go to the Tasks page.	-	-	Pass	-	-
29	"border_color" icon in Homepage	Users Click the "border_color" icon to go to the Self Quizzes page.	-	-	Pass	-	-
30	"messenger" icon in Homepage	Users Click the "messenger" icon to go to the Messages page.	-	-	Pass	-	-
31	"access_time" icon in Homepage	Users Click the "access_time" icon to go to the Timer page.	-	-	Pass	-	-
32	"feedback" icon in Homepage	Users Click the "feedback" icon to go to the Suggestions page.	-	-	Pass	-	-
33	""keyboard_control" icon in Homepage	Users click the "keyboard_control" icon in the App Bar Navigation to go to the Settings page.	-	-	Pass	-	-
34	"arrow_back" icon in Homepage	Users click the "arrow_back" icon in the App Bar Navigation to go back to the previous page.	-	-	Pass	-	-
35	"keyboard_control" icon in StudyGroups page	Users click the "keyboard_control" icon in the App Bar Navigation to go to the Settings page.	-	-	Pass	-	-
36	"notifications_active" icon in StudyGroups page	Users click the "notifications_active" icon in the App Bar Navigation to go to the Notifications page.	-	-	Pass	-	-
37	"arrow_back" icon in StudyGroups page	Users click the "arrow_back" icon in the App Bar Navigation to go back to the previous page.	-	-	Pass	-	-
38	"keyboard_control" icon in File Sharing page	Users click the "keyboard_control" icon in the App Bar Navigation to go to the Settings page.	-	-	Pass	-	-
39	"notifications_active" icon in File Sharing page	Users click the "notifications_active" icon in the App Bar Navigation to go to the Notifications page.	-	-	Pass	-	-

40	"arrow_back" icon in File Sharing page	Users click the "arrow_back" icon in the App Bar Navigation to go back to the previous page.	-	-	Pass	-	-
41	"keyboard_control" icon in Posts page	Users click the "keyboard_control" icon in the App Bar Navigation to go to the Settings page.	-	-	Pass	-	-
42	"notifications_active" icon in Posts page	Users click the "notifications_active" icon in the App Bar Navigation to go to the Notifications page.	-	-	Pass	-	-
43	"arrow_back" icon in Posts page	Users click the "arrow_back" icon in the App Bar Navigation to go back to the previous page.	-	-	Pass	-	-
44	"add" button in Tasks page	Users click the "add" button to create a task.	-	-	Pass	-	-
45	"check_box" icon in Tasks page	Users click the "check_box" icon when complete the task.	-	-	Pass	-	-
46	"arrow_back" icon in Tasks page	Users click the "arrow_back" icon in the App Bar Navigation to go back to the previous page.	-	-	Pass	-	-
47	"keyboard_control" icon in Tasks page	Users click the "keyboard_control" icon in the App Bar Navigation to go to the Settings page.	-	-	Pass	-	-
48	"notifications_active" icon in Tasks page	Users click the "notifications_active" icon in the App Bar Navigation to go to the Notifications page.	-	-	Pass	-	-
49	"CHECK ANSWERS" button in Self Quizzes page	Users click the "CHECK ANSWERS" button to go to Check Answers page.	-	-	Pass	-	-
50	"arrow_back" icon in Self Quizzes page	Users click the "arrow_back" icon in the App Bar Navigation to go back to the previous page.	-	-	Pass	-	-
51	"keyboard_control" icon in Self Quizzes page	Users click the "keyboard_control" icon in the App Bar Navigation to go to the Settings page.	-	-	Pass	-	-
52	"notifications_active" icon in Self Quizzes page	Users click the "notifications_active" icon in the App Bar Navigation to go to the Notifications page.	-	-	Pass	-	-
53	"arrow_back" icon in Messages page	Users click the "arrow_back" icon in the App Bar Navigation to go back to the previous page.	-	-	Pass	-	-
54	"keyboard_control" icon in Messages page	Users click the "keyboard_control" icon in the App Bar Navigation to go to the Settings page.	-	-	Pass	-	-
55	"notifications_active" icon in Messages page	Users click the "notifications_active" icon in the App Bar Navigation to go to the Notifications page.	-	-	Pass	-	-
56	"play_arrow" button in Timer page	Users click the "play_arrow" button to start timer.	-	-	Pass	-	-
57	"pause" button in Timer page	Users click the "pause" button to stop timer.	-	-	Pass	-	-

58	"reset" button in Timer page	Users click the "reset" button to replay timer.	-	-	Pass	-	-
59	"timer" button in Timer page	Users click the "timer" button to calculate lap time.	-	-	Pass	-	-
60	"arrow_back" icon in Timer page	Users click the "arrow_back" icon in the App Bar Navigation to go back to the previous page.	-	-	Pass	-	-
61	"keyboard_control" icon in Timer page	Users click the "keyboard_control" icon in the App Bar Navigation to go to the Settings page.	-	-	Pass	-	-
62	"notifications_active" icon in Timer page	Users click the "notifications_active" icon in the App Bar Navigation to go to the Notifications page.	-	-	Pass	-	-
63	"arrow_back" icon in Suggestions page	Users click the "arrow_back" icon in the App Bar Navigation to go back to the previous page.	-	-	Pass	-	-
64	"keyboard_control" icon in Suggestions page	Users click the "keyboard_control" icon in the App Bar Navigation to go to the Settings page.	-	-	Pass	-	-
65	"notifications_active" icon in Suggestions page	Users click the "notifications_active" icon in the App Bar Navigation to go to the Notifications page.	-	-	Pass	-	-
66	"arrow_back" icon in Notifications page	Users click the "arrow_back" icon in the App Bar Navigation to go back to the previous page.	-	-	Pass	-	-
67	"Save" button for Password in Settings page	Users click "save" button after updating Password.	-	-	Pass	-	-
68	"Save" button for Name in Settings page	Users click "save" button after updating Name.	-	-	Pass	-	-
69	"Save" button for Email in Settings page	Users click "save" button after updating Email.	-	-	Pass	-	-
70	"SIGN OUT " button in Settings page	Users click the "SIGN OUT" button to sign out from the System.	-	-	Pass	-	-
71	"DELETE ACCOUNT " button in Settings page	Users click the "DELETE ACCOUNT" button to delete the account.	-	-	Pass	-	-
72	"arrow_back" icon in Settings page	Users click the "arrow_back" icon in the App Bar Navigation to go back to the previous page.	-	-	Pass	-	-
73	"notifications_active" icon in Settings page	Users click the "notifications_active" icon in the App Bar Navigation to go to the Notifications page.	-	-	Pass	-	-