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Introduction

First of all welcome to the Simple Quiz App, a simple and easy to use interface designed for delivering, managing, and taking quizzes. It is suitable for education, knowledge assessments. With its user-friendly interface and simple design, the app provides a good impression for both quiz providers and participants. It offers a variety of features-including customizable quiz formats, question types, and scoring systems, making it suitable for everyone also allowing quiz providers to update content to their choice of needs. This app is intended to provide a comprehensive guide for all, from kids to olds, covering the app's functionality, setup and configuration. Moreover this guide will help anyone to use and utilize the App effectively.

Objective

The primary objective of the Simple quiz app is to provide comprehensive guidance and offer detailed instructions and explanations to help users understand the features and functionalities of the Simple Quiz App. By integrating key functionalities, the system aims to optimize the entire app lifecycle, From student & teacher both registration and course enrollment to take quiz, while maintaining a strong focus on assisting users in navigating the app efficiently, optimizing its features for both quiz creators and participants.

Key Features

- **User Registration and Login:** The system facilitates a straightforward registration process for users, ensuring secure access through robust authentication mechanisms. Password recovery options further enhance user convenience.
- **Profile Management:** Users can easily create and update their profiles, allowing for personalized experiences. This feature ensures that the teacher/admin can tailor services to meet individual preferences and needs.

- **Course Enrolment:** This app provides a specific course to enroll with each one's choice of interest, showing all the available courses. For which students can easily select their specific courses.
- **Automated Scoring System:** Automatically grade quizzes based on scoring rules, ensuring consistent and accurate evaluation.
- **Analytics and Reporting:** Generate detailed reports and analytics on quiz performance, including scores, time taken, question difficulty, and participant progress. These will identify the areas for improvement.
- **Multi-Device Compatibility:** Access the app on any device, smartphones (IOS & android), and tablets providing flexibility and convenience for users.
- **Leaderboard:** Improve competition among the students. Display top quiz scorers of a specific course to motivate them.
- **Notifications and Reminders:** Set up automated notifications and reminders for quiz deadlines, new quiz availability, and other relevant updates.
- **Real-Time Feedback:** Provide instant feedback to quiz takers with explanations for correct and incorrect answers, enhancing the learning experience.
- **Security Measures:** Ensure data security and privacy with robust authentication, data encryption, and secure storage of user data and quiz results.

Moreover, this feature is to enhance the versatility & usability of a simple quiz app which is going to impact education, training and knowledge assessment.

Scenario Writing

Scenario writing involves describing specific situations or use cases that illustrate how the Simple Quiz App will be used by its users. These scenarios help to better

understand the app's functionalities, interactions, and outcomes. In the context of the Simple Quiz App, here are some scenarios that marked typical user interactions:

Scenario-1: Add Profile

Scenario Description:

- Teacher and Student can add profile
- Provides required information
- Submit for add profile
- Confirmation message: Profile added successfully

Scenario-2: Create Quiz

Scenario Description:

- Teacher requests to create a quiz
- Teacher provides quiz title, questions, and options
- Submit the quiz for creation
- Confirmation message: Quiz created successfully

Scenario-3: Quiz Participation

Scenario Description:

- Student can participate in a quiz
- Selects the available quiz
- Submits the quiz
- Confirmation message: Quiz submitted successfully

Scenario-4: View Quiz Results

Scenario Description:

- Student requests to view results
- Displays score and correct/incorrect answers

- Confirmation message: Results displayed

Scenario-5: Course Enrollment

Scenario Description:

- Student requests to enroll in a course
- The System displays available courses
- The system verifies eligibility for the course
- Enrollment is confirmed and the course is added to the student's profile
- Confirmation message: Enrollment successful

Scenario-6: Leaderboard

Scenario Description:

- The system displays a ranking of students based on their quiz performance.
- Users can filter or sort the leaderboard by different criteria.

These scenarios offer practical examples of how different users interact with the Simple Quiz App and how the system responds to their actions. They help stakeholders gain insight into the system's functionality and can be utilized for testing, validation, and improving the software to better meet user needs.

Stakeholder

The key stakeholders involved in this Simple Quiz App are:

- 1. Teacher:** They use the system to Create and manage quizzes and view student performance.
- 2. Student:** They interact with the system to participate in quiz and view results etc.
- 3. Admin:** Oversee system functionality. Monitor quiz creation, participation, and results.

User Profile

User Profile-01: Teacher

User Class	Notes on Characteristic	Requirement Implied
Type of User	Teacher	Verification
Age Range	25-50	Verification
Frequency of Use	Set quizzes and track progress.	Performance, Operation, Acceptance
Mandatory	Yes	
Computer Experience	Experienced	Documentation
Education	B. Sc	
Goals	Provide quizzes and assess student knowledge.	Resource, Performance, Security, Acceptance, Operation
Language Skills	Bangla, English	
Number of Users	15-20	Performance, Operation, Acceptance, Portability
Training	May accept some training	Documentation
Other System Used	No	
Ways of Working	Full support from the system	Acceptance, Safety, Security, Operation, Maintenance, Portability

User Profile-02: Student

User Class	Notes on Characteristic	Requirement Implied
Type of User	Student	Verification
Age Range	16-30	Verification
Frequency of Use	Students are likely to use the Simple quiz app frequently as part of their learning and engagement process.	Performance, Operation, Acceptance
Mandatory	Yes	
Computer Experience	Basic	
Goals	Improve knowledge, To complete quizzes, get engaged in learning.	Resource, Performance, Security, Acceptance, Operation
Language Skills	Bangla, English	
Number of Users	45-50	Performance, Operation, Acceptance, Portability
Training	No	
Other System Used	No	
Ways of Working	Sometime	Acceptance, Safety, Security, Operation, Maintenance, Portability

User Profile-03: Admin

User Class	Notes on Characteristic	Requirement Implied
Type of User	Admin	Verification
Age Range	29-35	Verification
Frequency of Use	Most of the time per day	Performance, Operation, Acceptance
Mandatory	Yes	
Computer Experience	Experienced	Documentation
Education	B. Sc	
Goals	Make the system easy and user friendly	Resource, Performance, Security, Acceptance, Operation
Language Skills	Bangla, English, and Computer Language	
Number of Users	8-10	Performance, Operation, Acceptance, Portability
Training	May accept some training, but be unwilling to repeat it	Documentation
Other System Used	No	
Ways of Working	Full support from the system	Acceptance, Safety, Security, Operation, Maintenance, Portability

Scope

1. User Registration and Login:

- a. Objective:** To allow users to register and login to access the app.
- b. Functionality:** Users will provide necessary details for registration. Secure authentication and password recovery options will be implemented.

2. Add Profile and Update Profile:

- a. Objective:** Enable Users to create and update their profiles in the App.
- b. Functionality:** Users can input and store personal details. Update profile information such as name, Institute name etc.

3. Create Courses and Quiz:

- a. Objective:** Enable Teachers to create courses and quiz.
- b. Functionality:** Teachers can upload their courses via app and after that they can add quiz schedules.

4. Course enrollment & Searching:

- a. Objective:** Students can search for courses and enroll in courses with an enrollment key.
- b. Functionality:** Students can search for their desired courses. When their teacher will provide the enrollment key then they can easily join the course.

5. Participate in Quiz:

- a. Objective:** Students can participate in quizzes on various Courses.
- b. Functionality:** Students will select a Course and if there is a quiz for Participating then he/she can start a quiz.

6. View Results:

- a. Objective:** Provide Students with detailed results on their quiz performance.
- b. Functionality:** Users can view their results over time, with options to revisit quiz questions and see correct answers.

7. Leaderboard:

- a. Objective:** Improve competition among the students.

- b. Functionality:** Display top quiz scorers of a specific course to motivate them.

8. Notification & Remainder:

- a. Objective:** Keep both the teacher and student informed at every moment.
- b. Functionality:** Automated notifications for Quiz schedule, Quiz update, Question feedback etc.

9. Feedback:

- a. Objective:** Offer 24/7 Users support within the app.
- b. Functionality:** Provide a feedback feature for users to seek assistance. Also provide quick feedback for the question asked by the student.

10. Security Measures:

- a. Objective:** Ensure the security of user data.
- b. Functionality:** Secure user authentication and authorization. Regularly update and patch system vulnerabilities.

Feasibility Study

The Simple Quiz App offers a complete solution to meet the needs of users who want to test their knowledge in an engaging way. This feasibility study will assess the app's potential by analyzing its technical, operational and scheduling aspects.

1. Technical Feasibility:

- a. Hardware Compatibility:** The simple Quiz App should be compatible with existing Octa Core processor smartphones. A review of current systems and potential upgrades will be conducted.
- b. Software Compatibility:** Ensure that the system integrates seamlessly with other software used on smartphones. Compatibility with operating systems, databases, and third-party services will be evaluated.
- c. Technical Expertise:** To operate and maintain the app, we will assess if there are enough skilled personnel available. If there are not enough skilled people, we will arrange training to ensure the team can effectively manage and update the app.

2. Operational Feasibility:

- a. User Acceptance:** Gather feedback from teachers and students, to ensure the system aligns with their needs and expectations.
- b. Impact on Current Operations:** Analyze how the implementation of the Simple quiz app will affect current System operations. We will identify ways to handle any possible disruptions. These strategies will help reduce delays and keep the project on track.

3. Economic Feasibility:

- a. Cost-Benefit Analysis:** Conduct a thorough analysis of the costs associated with developing, implementing, and maintaining the Simple quiz app against the expected benefits such as increased efficiency, improved users satisfaction.
- b. Return on Investment (ROI):** We will calculate the expected return on investment (ROI) over a set time. Although the app is free to use, the ROI will focus on non-measurable benefits like increased user engagement, improved learning outcomes, and the positive impact on education. The success will be measured by user satisfaction, app usage, and the value it brings to the learning community.

4. Scheduling Feasibility:

- a. Project Timeline:** Develop a realistic timeline for the different phases of the Simple quiz app implementation, taking into account potential delays, testing periods, and teachers training.
- b. Dependencies:** Identify dependencies on external factors, such as third-party integrations or regulatory approvals that may impact the project schedule.

The feasibility study concludes that the Simple Quiz App is technically, operationally and scheduling-wise viable. The benefits of increased user engagement, improved learning experiences. Recommendations to reduce risks and maximize benefits will be included in the project plan to ensure the successful launch of the app.

Project Block Diagram

Block Diagram-1: Student

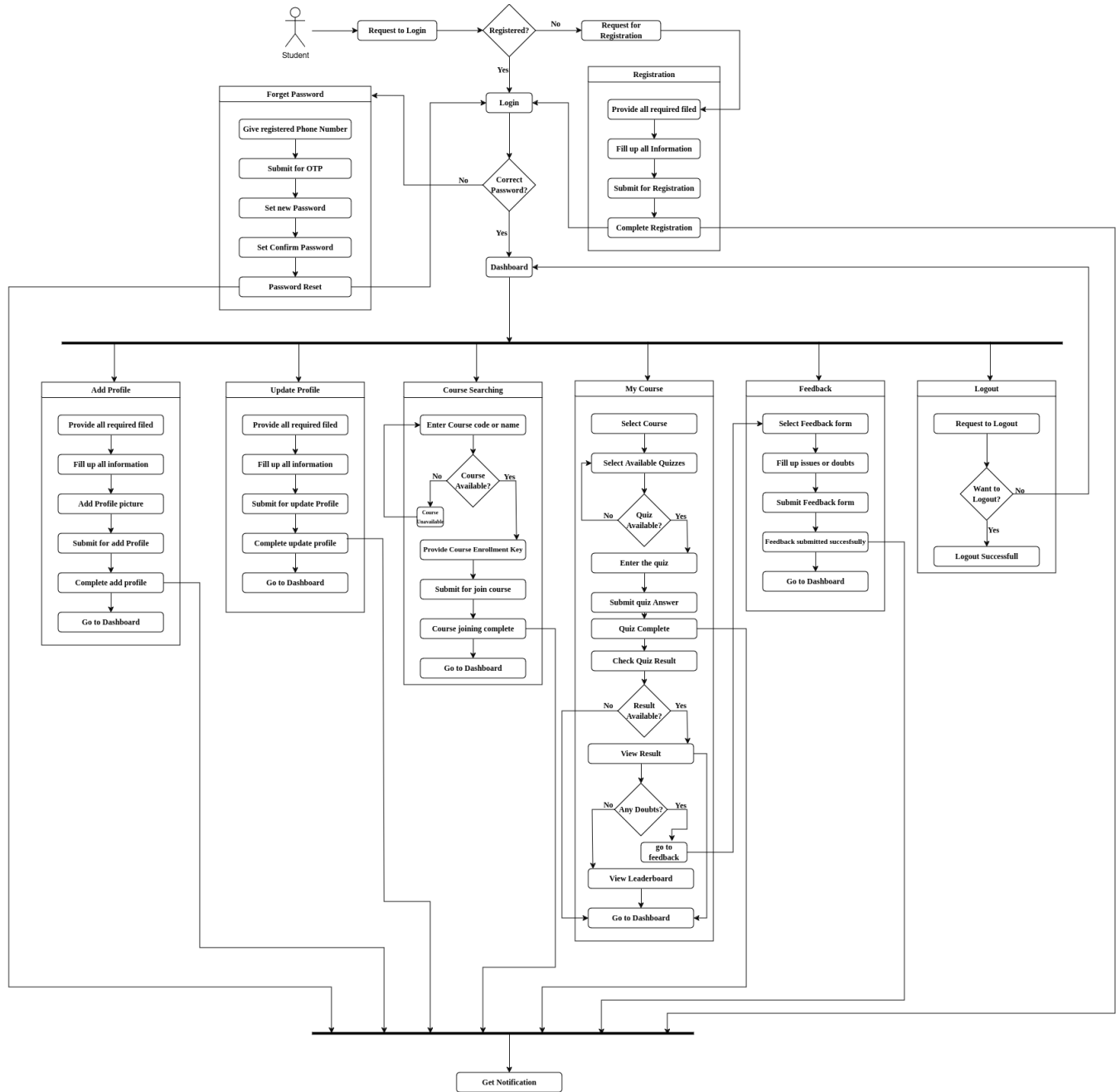


Figure-1: Block Diagram for Student

Block Diagram-2: Teacher

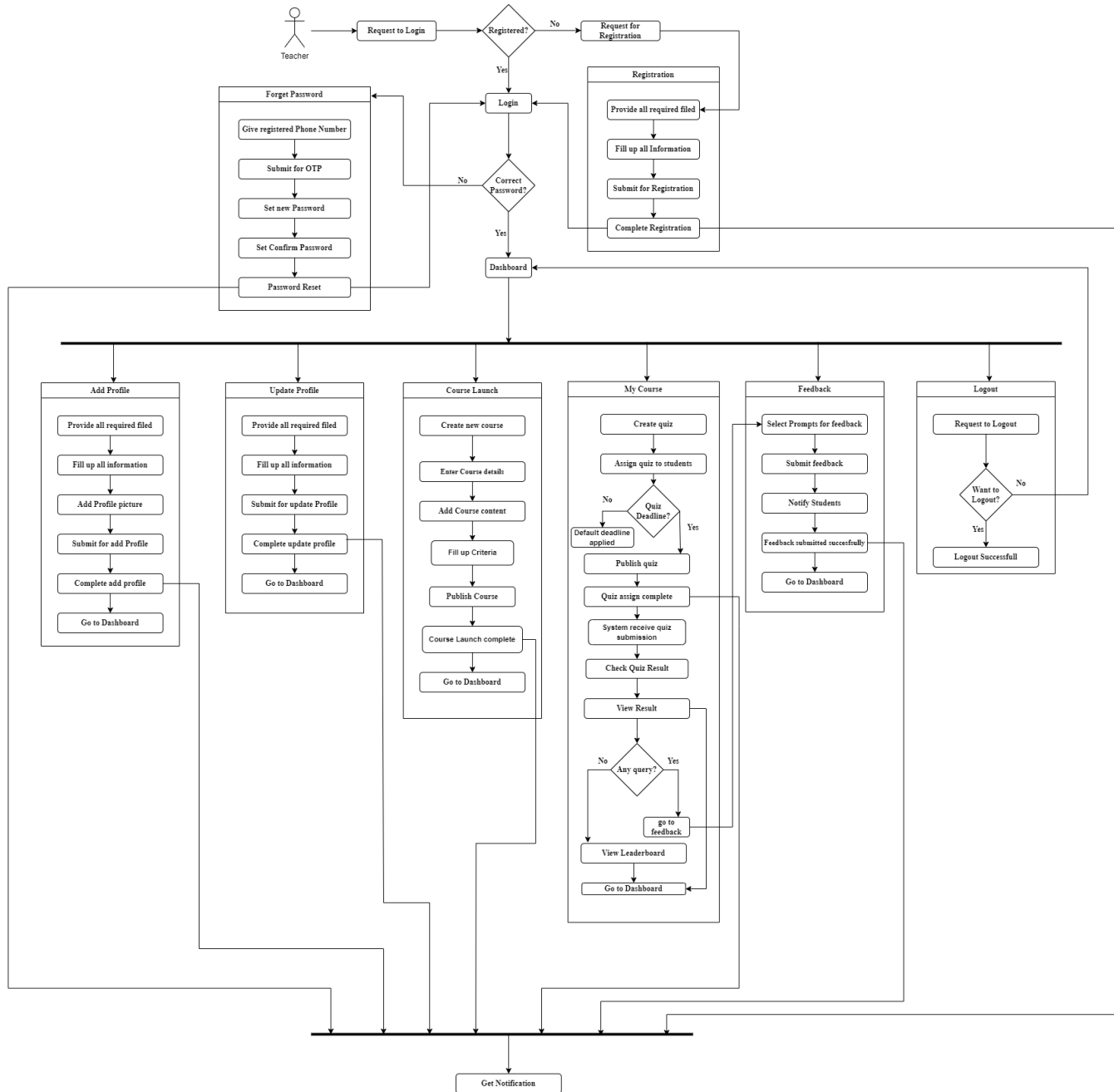


Figure-2: Block Diagram for Teacher

Block Diagram-3: Admin

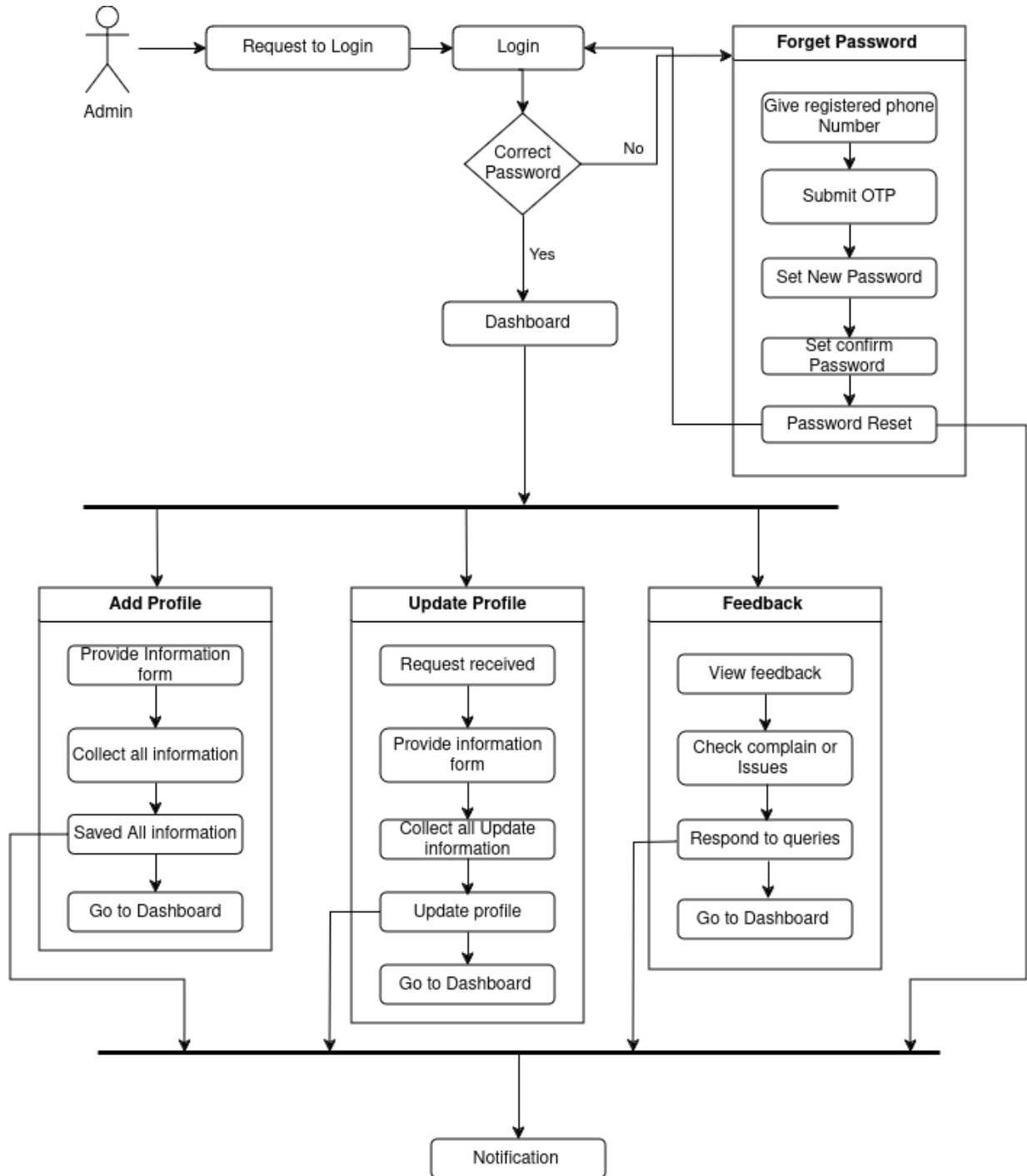


Figure-3: Block Diagram for Admin

Software Requirement Specification

SRS

FR001	Registration
Description	Before using the simple quiz app teacher and student must be registered first
Stakeholder	Teacher , Student

FR002	Login
Description	Teachers and Students must login before using the Simple Quiz App
Stakeholder	Teacher , Student , Admin

FR003	Add Profile Info
Description	Teacher and Student can add their info into the app
Stakeholder	Teacher , Student

FR004	Update Profile Info
Description	Teacher and Student can update their info into the app
Stakeholder	Teacher , Student

FR005	Course Enrollment
Description	Student can add Specific course for quiz through enrollment key, which will be provided by the teacher
Stakeholder	Student

FR006	Course Launch
Description	Teacher can add their Specific course on their App
Stakeholder	Teacher

FR007	Course search
Description	Student can search for the desired course via search option
Stakeholder	Student

FR008	Quiz Assigning
Description	Teacher can assign quiz for student
Stakeholder	Teacher

FR009	Quiz Participation
Description	Student can participate in quizzes if he/she is enrolled in that course
Stakeholder	Student

FR010	Automated Result
Description	Teacher will provide the answers for quizzes and student will get automated result from it
Stakeholder	Teacher

FR011	View Result
Description	Student can see their result after participating in the quiz teacher can also see the enrolled student result
Stakeholder	Teacher , Student

FR012	Leaderboard
Description	Teacher and Enrolled Student can see the leaderboard for each courses
Stakeholder	Teacher , Student

FR013	Notification & Reminders
Description	Enrolled Student will get notification for quizzes
Stakeholder	Student

FR014	Feedback
Description	Students can ask questions if they have any doubt after checking the quiz result, Teacher Can Feedback and solving quiz questions. Also Student and teacher can report any issues to admin
Stakeholder	Teacher , Student , Admin

FR015	Forget password
Description	If any user forget their password then they can easily recover password
Stakeholder	Teacher , Student, Admin

FR016	Logout
Description	Users can log out of this system by using this option. The login will be saved if the user wants to save their account.
Stakeholder	Teacher , Student ,Admin

User Case Diagram



Figure-4: User Case Diagram for Simple Quiz App

User Case Description

Case Description-01: Registration

Use Case	Registration																				
Goal	Users can register to sign-in into the system.																				
Precondition	Users must install the Simple Quiz App for registration.																				
Success End Condition	Notification: “Successfully Registered”																				
Failed End Condition	Notification: “Submission Not Submitted!”																				
Primary Actors	Student, Teacher																				
Secondary Actors	Admin																				
Trigger	User clicks "Register" button																				
Description / Main Success Scenario	<table border="1"> <tr><td>1.</td><td>Press “Registration” Button</td></tr> <tr><td>2.</td><td>Provide registration form</td></tr> <tr><td>3.</td><td>Enter Information</td></tr> <tr><td>4.</td><td>Press “Submit” Button.</td></tr> <tr><td>5.</td><td>Information saved</td></tr> <tr><td>6.</td><td>The system saves the details and shows them !!!Successfully Registered!!! Notify</td></tr> </table>	1.	Press “Registration” Button	2.	Provide registration form	3.	Enter Information	4.	Press “Submit” Button.	5.	Information saved	6.	The system saves the details and shows them !!!Successfully Registered!!! Notify								
1.	Press “Registration” Button																				
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3.	Enter Information																				
4.	Press “Submit” Button.																				
5.	Information saved																				
6.	The system saves the details and shows them !!!Successfully Registered!!! Notify																				
Alternative Flows	<table border="1"> <tr><td>1.1</td><td>System Error</td></tr> <tr><td></td><td>1.1.a. Try Again!!</td></tr> <tr><td>2.1</td><td>System Doesn't work.</td></tr> <tr><td></td><td>2.1.a. Try Again Later!</td></tr> <tr><td>4.1</td><td>The user Did not fill up the details!</td></tr> <tr><td></td><td>4.1.a. Checked By the system & Notify by “Please! Fill Up the Box”.</td></tr> <tr><td>5.1</td><td>The system did not respond</td></tr> <tr><td></td><td>5.1.a. Show Error Message.</td></tr> <tr><td>6.1</td><td>The system Doesn't save the details.</td></tr> <tr><td></td><td>6.1.a. Notification: “Details did not Save”</td></tr> </table>	1.1	System Error		1.1.a. Try Again!!	2.1	System Doesn't work.		2.1.a. Try Again Later!	4.1	The user Did not fill up the details!		4.1.a. Checked By the system & Notify by “Please! Fill Up the Box”.	5.1	The system did not respond		5.1.a. Show Error Message.	6.1	The system Doesn't save the details.		6.1.a. Notification: “Details did not Save”
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5.1	The system did not respond																				
	5.1.a. Show Error Message.																				
6.1	The system Doesn't save the details.																				
	6.1.a. Notification: “Details did not Save”																				
Quality Requirements	Users fill up the login information within 10 minutes.																				

Case Description-02: Login

Use Case	Login																
Goal	Users can enter the system by login.																
Precondition	Users have to be registered First.																
Success End Condition	Notification: "Login Successful"																
Failed End Condition	Notification: "Login Failed!!"																
Primary Actors	Student, Teacher																
Secondary Actors	Admin																
Trigger	User clicks "Login" button																
Description / Main Success Scenario	<table> <tr><td>1.</td><td>Press "Login" Button</td></tr> <tr><td>2.</td><td>Provide login interface</td></tr> <tr><td>3.</td><td>Enter user-id and password.</td></tr> <tr><td>4.</td><td>Press "Login" Button.</td></tr> <tr><td>5.</td><td>Verified and login</td></tr> <tr><td>6.</td><td>Notification: "Login Successful"</td></tr> </table>	1.	Press "Login" Button	2.	Provide login interface	3.	Enter user-id and password.	4.	Press "Login" Button.	5.	Verified and login	6.	Notification: "Login Successful"				
1.	Press "Login" Button																
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4.	Press "Login" Button.																
5.	Verified and login																
6.	Notification: "Login Successful"																
Alternative Flows	<table> <tr><td>1.1</td><td>System Error</td></tr> <tr><td></td><td>1.1.a. Try Again!!</td></tr> <tr><td>2.1</td><td>Server Not Found</td></tr> <tr><td></td><td>2.1.a. Try Again Later!</td></tr> <tr><td>4.1</td><td>The system Did not respond.</td></tr> <tr><td></td><td>4.1.a. Show error message.</td></tr> <tr><td>5.1</td><td>Information Error!!</td></tr> <tr><td></td><td>5.1.a. Notification: "Enter the correct User ID and Password."</td></tr> </table>	1.1	System Error		1.1.a. Try Again!!	2.1	Server Not Found		2.1.a. Try Again Later!	4.1	The system Did not respond.		4.1.a. Show error message.	5.1	Information Error!!		5.1.a. Notification: "Enter the correct User ID and Password."
1.1	System Error																
	1.1.a. Try Again!!																
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	2.1.a. Try Again Later!																
4.1	The system Did not respond.																
	4.1.a. Show error message.																
5.1	Information Error!!																
	5.1.a. Notification: "Enter the correct User ID and Password."																
Quality Requirements	The user Will fill up all the details in 30 minutes.																

Case Description-03: Add Profile

Use Case	Add Profile Information																
Goal	Create a new user account in the system.																
Precondition	The user must login into the system.																
Success End Condition	Notification: "Information added Successfully"																
Failed End Condition	Notifications: "An Error occurred"																
Primary Actors	Student, Teacher																
Secondary Actors	Admin																
Trigger	User clicks "Add Profile" button																
Description / Main Success Scenario	<table border="1"> <tr><td>1.</td><td>Visit Dashboard</td></tr> <tr><td>2.</td><td>Press "Added Profile Info"</td></tr> <tr><td>3.</td><td>Provide information field</td></tr> <tr><td>4.</td><td>Fill up information</td></tr> <tr><td>5.</td><td>User press "Submit" button</td></tr> <tr><td>6.</td><td>Profile information saved</td></tr> </table>	1.	Visit Dashboard	2.	Press "Added Profile Info"	3.	Provide information field	4.	Fill up information	5.	User press "Submit" button	6.	Profile information saved				
1.	Visit Dashboard																
2.	Press "Added Profile Info"																
3.	Provide information field																
4.	Fill up information																
5.	User press "Submit" button																
6.	Profile information saved																
Alternative Flows	<table border="1"> <tr><td>2.1</td><td>System Error</td></tr> <tr><td></td><td>2.1.a. Try Again!!</td></tr> <tr><td>3.1</td><td>Not responding</td></tr> <tr><td></td><td>3.1.a Try later</td></tr> <tr><td>4.1</td><td>Check the empty field.</td></tr> <tr><td></td><td>4.1.a. Field up required information</td></tr> <tr><td>5.1</td><td>Info not saved</td></tr> <tr><td></td><td>5.1.a Notification: "Information Not saved"</td></tr> </table>	2.1	System Error		2.1.a. Try Again!!	3.1	Not responding		3.1.a Try later	4.1	Check the empty field.		4.1.a. Field up required information	5.1	Info not saved		5.1.a Notification: "Information Not saved"
2.1	System Error																
	2.1.a. Try Again!!																
3.1	Not responding																
	3.1.a Try later																
4.1	Check the empty field.																
	4.1.a. Field up required information																
5.1	Info not saved																
	5.1.a Notification: "Information Not saved"																
Quality Requirements	Users have 30 minutes to fill up																

Case Description-04: Update Profile

Use Case	Update Profile Information												
Goal	Modify an existing user profile.												
Precondition	Users must be logged in and have an existing profile.												
Success End Condition	Notification “Profile Information Updated”												
Failed End Condition	Notification “Update Profile Failed”.												
Primary Actors	Student, Teacher												
Secondary Actors	Admin												
Trigger	User clicks "Update Profile" button												
Description / Main Success Scenario	<table border="1"> <tr><td>1.</td><td>Visit Dashboard</td></tr> <tr><td>2.</td><td>Press “Update Profile Info”</td></tr> <tr><td>3.</td><td>Provide information field</td></tr> <tr><td>4.</td><td>Edit information</td></tr> <tr><td>5.</td><td>User press “Submit” button</td></tr> <tr><td>6.</td><td>Profile information updated</td></tr> </table>	1.	Visit Dashboard	2.	Press “Update Profile Info”	3.	Provide information field	4.	Edit information	5.	User press “Submit” button	6.	Profile information updated
1.	Visit Dashboard												
2.	Press “Update Profile Info”												
3.	Provide information field												
4.	Edit information												
5.	User press “Submit” button												
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2.1	System Error												
	2.1.a. Try Again!												
3.1	Not responding												
	3.1.a Try later												
5.1	Information not updated												
	5.1.a Notification: “Information Not Updated”												
Quality Requirements	Users will get 30 minutes to edit information												

Case Description-05: Course Enrolment

Use Case	Course Enrolment																													
Goal	Student will enroll in their chosen course																													
Precondition	Must Visit the course enrolment option on the dashboard																													
Success End Condition	Notification “Course Enrolled Successfully”																													
Failed End Condition	Notification “Course Enrolled Failed”																													
Primary Actors	Student																													
Secondary Actors	Teacher																													
Trigger	Users request to enroll in a course																													
Description / Main Success Scenario	<table><tr><td>1.</td><td>Visit Dashboard.</td></tr><tr><td>2.</td><td>Select “Course Enrolment” option.</td></tr><tr><td>3.</td><td>Choose the desired course from the list.</td></tr><tr><td>4.</td><td>Check course availability.</td></tr><tr><td>5.</td><td>Enter required details.</td></tr><tr><td>6.</td><td>Review course prerequisites and details.</td></tr><tr><td>7.</td><td>Provide necessary documents.</td></tr><tr><td>8.</td><td>Confirm enrollment details.</td></tr><tr><td>9.</td><td>Press the “Submit” button.</td></tr><tr><td>10.</td><td>Enrolment information saved.</td></tr><tr><td>11.</td><td>Notification: “Course Enrolled Successfully”</td></tr></table>		1.	Visit Dashboard.	2.	Select “Course Enrolment” option.	3.	Choose the desired course from the list.	4.	Check course availability.	5.	Enter required details.	6.	Review course prerequisites and details.	7.	Provide necessary documents.	8.	Confirm enrollment details.	9.	Press the “Submit” button.	10.	Enrolment information saved.	11.	Notification: “Course Enrolled Successfully”						
1.	Visit Dashboard.																													
2.	Select “Course Enrolment” option.																													
3.	Choose the desired course from the list.																													
4.	Check course availability.																													
5.	Enter required details.																													
6.	Review course prerequisites and details.																													
7.	Provide necessary documents.																													
8.	Confirm enrollment details.																													
9.	Press the “Submit” button.																													
10.	Enrolment information saved.																													
11.	Notification: “Course Enrolled Successfully”																													
Alternative Flows	<table><tr><td>2.1</td><td>System did not respond</td></tr><tr><td></td><td>2.1.a Try again</td></tr><tr><td>3.1</td><td>System error</td></tr><tr><td></td><td>3.1.a try again later</td></tr><tr><td>4.1</td><td>Course is full or not available</td></tr><tr><td></td><td>4.1.a Select another course</td></tr><tr><td>5.1</td><td>Select course start date</td></tr><tr><td></td><td>5.1.a Must be valid date</td></tr><tr><td>6.1</td><td>Select course duration</td></tr><tr><td></td><td>6.1.a Must be valid duration</td></tr><tr><td>7.1</td><td>Required fields not filled</td></tr><tr><td></td><td>7.1.a Fill up required fields</td></tr><tr><td>10.1</td><td>Information did not save</td></tr><tr><td></td><td>10.1.a Try again</td></tr></table>		2.1	System did not respond		2.1.a Try again	3.1	System error		3.1.a try again later	4.1	Course is full or not available		4.1.a Select another course	5.1	Select course start date		5.1.a Must be valid date	6.1	Select course duration		6.1.a Must be valid duration	7.1	Required fields not filled		7.1.a Fill up required fields	10.1	Information did not save		10.1.a Try again
2.1	System did not respond																													
	2.1.a Try again																													
3.1	System error																													
	3.1.a try again later																													
4.1	Course is full or not available																													
	4.1.a Select another course																													
5.1	Select course start date																													
	5.1.a Must be valid date																													
6.1	Select course duration																													
	6.1.a Must be valid duration																													
7.1	Required fields not filled																													
	7.1.a Fill up required fields																													
10.1	Information did not save																													
	10.1.a Try again																													
Quality Requirements	Student enroll course with enrollment key																													

Case Description-06: Course Launch

Use Case	Course Launch																												
Goal	Teachers will launch a new course for enrolment																												
Precondition	Must Visit the course management section on the dashboard																												
Success End Condition	Notification “Course Launched Successfully”																												
Failed End Condition	Notification “Course Not Launched”																												
Primary Actors	Teacher																												
Secondary Actors																													
Trigger	Teacher initiates the process to launch a new course																												
Description / Main Success Scenario	<table border="1"> <tr><td>1.</td><td>Visit Dashboard.</td></tr> <tr><td>2.</td><td>Select the “Course Management” option.</td></tr> <tr><td>3.</td><td>Choose the “Launch new course” option.</td></tr> <tr><td>4.</td><td>Enter course title and description.</td></tr> <tr><td>5.</td><td>Set a course schedule.</td></tr> <tr><td>6.</td><td>Define prerequisites.</td></tr> <tr><td>7.</td><td>Upload course materials.</td></tr> <tr><td>8.</td><td>Set enrollment capacity.</td></tr> <tr><td>9.</td><td>Assign course teacher.</td></tr> <tr><td>10.</td><td>Review course details for accuracy.</td></tr> <tr><td>11.</td><td>Press the “Launch” button.</td></tr> <tr><td>12.</td><td>Information is saved.</td></tr> <tr><td>13.</td><td>Notification: “Course Launched Successfully”.</td></tr> </table>	1.	Visit Dashboard.	2.	Select the “Course Management” option.	3.	Choose the “Launch new course” option.	4.	Enter course title and description.	5.	Set a course schedule.	6.	Define prerequisites.	7.	Upload course materials.	8.	Set enrollment capacity.	9.	Assign course teacher.	10.	Review course details for accuracy.	11.	Press the “Launch” button.	12.	Information is saved.	13.	Notification: “Course Launched Successfully”.		
1.	Visit Dashboard.																												
2.	Select the “Course Management” option.																												
3.	Choose the “Launch new course” option.																												
4.	Enter course title and description.																												
5.	Set a course schedule.																												
6.	Define prerequisites.																												
7.	Upload course materials.																												
8.	Set enrollment capacity.																												
9.	Assign course teacher.																												
10.	Review course details for accuracy.																												
11.	Press the “Launch” button.																												
12.	Information is saved.																												
13.	Notification: “Course Launched Successfully”.																												
Alternative Flows	<table border="1"> <tr><td>2.1</td><td>System did not respond</td></tr> <tr><td></td><td>2.1.a Try again</td></tr> <tr><td>3.1</td><td>System error</td></tr> <tr><td></td><td>3.1.a try again later</td></tr> <tr><td>4.1</td><td>Course title missing</td></tr> <tr><td></td><td>4.1.a Enter course title</td></tr> <tr><td>5.1</td><td>Invalid date selected</td></tr> <tr><td></td><td>5.1.a Choose valid dates</td></tr> <tr><td>6.1</td><td>Prerequisites not defined but required</td></tr> <tr><td></td><td>6.1.a Define Prerequisites</td></tr> <tr><td>8.1</td><td>Enrolment capacity not set</td></tr> <tr><td></td><td>7.1.a Set enrolment capacity</td></tr> <tr><td>12.1</td><td>Information did not save</td></tr> <tr><td></td><td>12.1.a Try again</td></tr> </table>	2.1	System did not respond		2.1.a Try again	3.1	System error		3.1.a try again later	4.1	Course title missing		4.1.a Enter course title	5.1	Invalid date selected		5.1.a Choose valid dates	6.1	Prerequisites not defined but required		6.1.a Define Prerequisites	8.1	Enrolment capacity not set		7.1.a Set enrolment capacity	12.1	Information did not save		12.1.a Try again
2.1	System did not respond																												
	2.1.a Try again																												
3.1	System error																												
	3.1.a try again later																												
4.1	Course title missing																												
	4.1.a Enter course title																												
5.1	Invalid date selected																												
	5.1.a Choose valid dates																												
6.1	Prerequisites not defined but required																												
	6.1.a Define Prerequisites																												
8.1	Enrolment capacity not set																												
	7.1.a Set enrolment capacity																												
12.1	Information did not save																												
	12.1.a Try again																												
Quality Requirements	Teachers need to submit required data to launch the courses.																												

Case Description-07: Course Search

Use Case	Course search																					
Goal	Student will search for available courses																					
Precondition	Must Visit the course search option on the dashboard																					
Success End Condition	Courses matching the search criteria are displayed																					
Failed End Condition	Notification “No courses Found”																					
Primary Actors	Student																					
Secondary Actors																						
Trigger	Student request to search a course																					
Description / Main Success Scenario	<table><tr><td>1.</td><td>Visit Dashboard.</td></tr><tr><td>2.</td><td>Select the “Course Search” option.</td></tr><tr><td>3.</td><td>Enter search criteria.</td></tr><tr><td>4.</td><td>Choose additional filters.</td></tr><tr><td>5.</td><td>Click the “search” button.</td></tr><tr><td>6.</td><td>System retrieves courses based on the criteria.</td></tr><tr><td>7.</td><td>Display list of matching courses.</td></tr><tr><td>8.</td><td>User views course details.</td></tr><tr><td>9.</td><td>Save the courses to favorites or shortlist.</td></tr><tr><td>10.</td><td>Notification: “Courses found successfully”</td></tr></table>		1.	Visit Dashboard.	2.	Select the “Course Search” option.	3.	Enter search criteria.	4.	Choose additional filters.	5.	Click the “search” button.	6.	System retrieves courses based on the criteria.	7.	Display list of matching courses.	8.	User views course details.	9.	Save the courses to favorites or shortlist.	10.	Notification: “Courses found successfully”
1.	Visit Dashboard.																					
2.	Select the “Course Search” option.																					
3.	Enter search criteria.																					
4.	Choose additional filters.																					
5.	Click the “search” button.																					
6.	System retrieves courses based on the criteria.																					
7.	Display list of matching courses.																					
8.	User views course details.																					
9.	Save the courses to favorites or shortlist.																					
10.	Notification: “Courses found successfully”																					
Alternative Flows	<table><tr><td>2.1</td><td>System did not respond</td></tr><tr><td></td><td>2.1.a Try again</td></tr><tr><td>3.1</td><td>Search criteria field is empty</td></tr><tr><td></td><td>3.1.a Prompt user to enter criteria</td></tr><tr><td>4.1</td><td>Invalid filter selected</td></tr><tr><td></td><td>4.1.a choose valid filters</td></tr><tr><td>6.1</td><td>No courses match the criteria</td></tr><tr><td></td><td>6.1.a Notify user to modify search criteria</td></tr><tr><td>10.1</td><td>Information did not load</td></tr><tr><td></td><td>10.1.a Try again</td></tr></table>		2.1	System did not respond		2.1.a Try again	3.1	Search criteria field is empty		3.1.a Prompt user to enter criteria	4.1	Invalid filter selected		4.1.a choose valid filters	6.1	No courses match the criteria		6.1.a Notify user to modify search criteria	10.1	Information did not load		10.1.a Try again
2.1	System did not respond																					
	2.1.a Try again																					
3.1	Search criteria field is empty																					
	3.1.a Prompt user to enter criteria																					
4.1	Invalid filter selected																					
	4.1.a choose valid filters																					
6.1	No courses match the criteria																					
	6.1.a Notify user to modify search criteria																					
10.1	Information did not load																					
	10.1.a Try again																					
Quality Requirements	Users will get search results within 10 seconds of submission.																					

Case Description-08: Quiz Assigning

Use Case	Quiz assigning																									
Goal	Teacher will assign a quiz to a course																									
Precondition	Must Visit the Quiz Management section on the dashboard																									
Success End Condition	Notification “Quiz Assigned Successfully”																									
Failed End Condition	Notification “Quiz Not Assigned”																									
Primary Actors	Teacher																									
Secondary Actors																										
Trigger	Teacher initiates the process to assign a quiz to a course																									
Description / Main Success Scenario	<table><tr><td>1.</td><td>Visit Dashboard.</td></tr><tr><td>2.</td><td>Select the “Quiz Management” option.</td></tr><tr><td>3.</td><td>Choose the “Assign Quiz” option.</td></tr><tr><td>4.</td><td>Select the course.</td></tr><tr><td>5.</td><td>Choose the quiz from available quizzes.</td></tr><tr><td>6.</td><td>Set quiz details.</td></tr><tr><td>7.</td><td>Set quiz grading criteria.</td></tr><tr><td>8.</td><td>Review assignment details for accuracy.</td></tr><tr><td>9.</td><td>Press the “Assign” button.</td></tr><tr><td>10.</td><td>Information saved</td></tr><tr><td>11.</td><td>Notification: “Quiz Assigned Successfully”</td></tr></table>		1.	Visit Dashboard.	2.	Select the “Quiz Management” option.	3.	Choose the “Assign Quiz” option.	4.	Select the course.	5.	Choose the quiz from available quizzes.	6.	Set quiz details.	7.	Set quiz grading criteria.	8.	Review assignment details for accuracy.	9.	Press the “Assign” button.	10.	Information saved	11.	Notification: “Quiz Assigned Successfully”		
1.	Visit Dashboard.																									
2.	Select the “Quiz Management” option.																									
3.	Choose the “Assign Quiz” option.																									
4.	Select the course.																									
5.	Choose the quiz from available quizzes.																									
6.	Set quiz details.																									
7.	Set quiz grading criteria.																									
8.	Review assignment details for accuracy.																									
9.	Press the “Assign” button.																									
10.	Information saved																									
11.	Notification: “Quiz Assigned Successfully”																									
Alternative Flows	<table><tr><td>2.1</td><td>System did not respond</td></tr><tr><td></td><td>2.1.a Try again</td></tr><tr><td>3.1</td><td>System error</td></tr><tr><td></td><td>3.1.a Try again later</td></tr><tr><td>4.1</td><td>No course selected</td></tr><tr><td></td><td>4.1.a Prompt user to choose a quiz</td></tr><tr><td>5.1</td><td>Quiz not selected</td></tr><tr><td></td><td>5.1.a Prompt user to choose a quiz</td></tr><tr><td>6.1</td><td>Invalid date or duration set</td></tr><tr><td></td><td>6.1.a choose valid dates or duration</td></tr><tr><td>10.1</td><td>Information did not save</td></tr><tr><td></td><td>10.1.a Try again</td></tr></table>		2.1	System did not respond		2.1.a Try again	3.1	System error		3.1.a Try again later	4.1	No course selected		4.1.a Prompt user to choose a quiz	5.1	Quiz not selected		5.1.a Prompt user to choose a quiz	6.1	Invalid date or duration set		6.1.a choose valid dates or duration	10.1	Information did not save		10.1.a Try again
2.1	System did not respond																									
	2.1.a Try again																									
3.1	System error																									
	3.1.a Try again later																									
4.1	No course selected																									
	4.1.a Prompt user to choose a quiz																									
5.1	Quiz not selected																									
	5.1.a Prompt user to choose a quiz																									
6.1	Invalid date or duration set																									
	6.1.a choose valid dates or duration																									
10.1	Information did not save																									
	10.1.a Try again																									
Quality Requirements	Teacher will have 30 minutes to complete the quiz assigning process.																									

Case Description-09: Quiz Participation

Use Case	Course Participation																					
Goal	Student will participate in an assigned quiz																					
Precondition	The quiz must be assigned and available for the student																					
Success End Condition	Notification “Quiz submitted successfully”																					
Failed End Condition	Notification “Quiz submission Failed”																					
Primary Actors	Student																					
Secondary Actors																						
Trigger	Student starts the quiz																					
Description / Main Success Scenario	<table><tr><td>1.</td><td>Visit Dashboard.</td></tr><tr><td>2.</td><td>Select the “quizzes” option.</td></tr><tr><td>3.</td><td>Choose the quiz from the list of assigned quizzes.</td></tr><tr><td>4.</td><td>Review quiz instructions and time limit.</td></tr><tr><td>5.</td><td>Click the “Start Quiz” button.</td></tr><tr><td>6.</td><td>Complete the quiz by answering each question.</td></tr><tr><td>7.</td><td>Review answer if allowed.</td></tr><tr><td>8.</td><td>Press the “Submit” button.</td></tr><tr><td>9.</td><td>Quiz responses are saved.</td></tr><tr><td>10.</td><td>Notification: “Courses Submitted successfully”</td></tr></table>		1.	Visit Dashboard.	2.	Select the “quizzes” option.	3.	Choose the quiz from the list of assigned quizzes.	4.	Review quiz instructions and time limit.	5.	Click the “Start Quiz” button.	6.	Complete the quiz by answering each question.	7.	Review answer if allowed.	8.	Press the “Submit” button.	9.	Quiz responses are saved.	10.	Notification: “Courses Submitted successfully”
1.	Visit Dashboard.																					
2.	Select the “quizzes” option.																					
3.	Choose the quiz from the list of assigned quizzes.																					
4.	Review quiz instructions and time limit.																					
5.	Click the “Start Quiz” button.																					
6.	Complete the quiz by answering each question.																					
7.	Review answer if allowed.																					
8.	Press the “Submit” button.																					
9.	Quiz responses are saved.																					
10.	Notification: “Courses Submitted successfully”																					
Alternative Flows	<table><tr><td>2.1</td><td>System did not respond</td></tr><tr><td></td><td>2.1.a Try again</td></tr><tr><td>3.1</td><td>Quiz not available or expired</td></tr><tr><td></td><td>3.1.a Notify student to check availability</td></tr><tr><td>4.1</td><td>Instruction not loading</td></tr><tr><td></td><td>4.1.a Refresh the page or try again</td></tr><tr><td>6.1</td><td>Answer not selected for a question</td></tr><tr><td></td><td>6.1.a Prompt student to complete all questions</td></tr><tr><td>8.1</td><td>Submission Failed</td></tr><tr><td></td><td>8.1.a Retry submission</td></tr></table>		2.1	System did not respond		2.1.a Try again	3.1	Quiz not available or expired		3.1.a Notify student to check availability	4.1	Instruction not loading		4.1.a Refresh the page or try again	6.1	Answer not selected for a question		6.1.a Prompt student to complete all questions	8.1	Submission Failed		8.1.a Retry submission
2.1	System did not respond																					
	2.1.a Try again																					
3.1	Quiz not available or expired																					
	3.1.a Notify student to check availability																					
4.1	Instruction not loading																					
	4.1.a Refresh the page or try again																					
6.1	Answer not selected for a question																					
	6.1.a Prompt student to complete all questions																					
8.1	Submission Failed																					
	8.1.a Retry submission																					
Quality Requirements	Students must be able to complete and submit a quiz within the allocated time.																					

Case Description-10: Automated Result

Use Case	Automated Result																				
Goal	System will automatically calculate and release quiz result																				
Precondition	Quiz must be completed and submitted by student																				
Success End Condition	Notification “Results calculated and released successfully”																				
Failed End Condition	Notification “Result calculation Failed”																				
Primary Actors	Teacher																				
Secondary Actors																					
Trigger	Quiz submission deadline is reached or all students have submitted the quiz answers																				
Description / Main Success Scenario	<table border="1"> <tr><td>1.</td><td>System identifies quizzes with completed submissions.</td></tr> <tr><td>2.</td><td>Fetches student responses for each quiz.</td></tr> <tr><td>3.</td><td>Applies the answer key to calculate scores.</td></tr> <tr><td>4.</td><td>Applies the answer key to calculate scores.</td></tr> <tr><td>5.</td><td>Calculates overall performance metrics.</td></tr> <tr><td>6.</td><td>Records results in the database.</td></tr> <tr><td>7.</td><td>Notifies the instructor of result availability.</td></tr> <tr><td>8.</td><td>Releases results to students.</td></tr> <tr><td>9.</td><td>Quiz responses are saved.</td></tr> <tr><td>10.</td><td>Notification: “Results Calculated and Released Successfully.”</td></tr> </table>	1.	System identifies quizzes with completed submissions.	2.	Fetches student responses for each quiz.	3.	Applies the answer key to calculate scores.	4.	Applies the answer key to calculate scores.	5.	Calculates overall performance metrics.	6.	Records results in the database.	7.	Notifies the instructor of result availability.	8.	Releases results to students.	9.	Quiz responses are saved.	10.	Notification: “Results Calculated and Released Successfully.”
1.	System identifies quizzes with completed submissions.																				
2.	Fetches student responses for each quiz.																				
3.	Applies the answer key to calculate scores.																				
4.	Applies the answer key to calculate scores.																				
5.	Calculates overall performance metrics.																				
6.	Records results in the database.																				
7.	Notifies the instructor of result availability.																				
8.	Releases results to students.																				
9.	Quiz responses are saved.																				
10.	Notification: “Results Calculated and Released Successfully.”																				
Alternative Flows	<table border="1"> <tr><td>2.1</td><td>System error in fetching responses.</td></tr> <tr><td></td><td>2.1.a Try again or notify administrator</td></tr> <tr><td>3.1</td><td>Answer key missing or corrupted.</td></tr> <tr><td></td><td>3.1.a Notify instructor to upload correct answer key</td></tr> <tr><td>4.1</td><td>Calculation error.</td></tr> <tr><td></td><td>4.1.a Retry calculation.</td></tr> <tr><td>6.1</td><td>Result data not saved in the database.</td></tr> <tr><td></td><td>6.1.a Try saving again</td></tr> <tr><td>8.1</td><td>Result Notification not sent to students.</td></tr> <tr><td></td><td>8.1.a Resend notifications manually.</td></tr> </table>	2.1	System error in fetching responses.		2.1.a Try again or notify administrator	3.1	Answer key missing or corrupted.		3.1.a Notify instructor to upload correct answer key	4.1	Calculation error.		4.1.a Retry calculation.	6.1	Result data not saved in the database.		6.1.a Try saving again	8.1	Result Notification not sent to students.		8.1.a Resend notifications manually.
2.1	System error in fetching responses.																				
	2.1.a Try again or notify administrator																				
3.1	Answer key missing or corrupted.																				
	3.1.a Notify instructor to upload correct answer key																				
4.1	Calculation error.																				
	4.1.a Retry calculation.																				
6.1	Result data not saved in the database.																				
	6.1.a Try saving again																				
8.1	Result Notification not sent to students.																				
	8.1.a Resend notifications manually.																				
Quality Requirements	Results should be calculated and available to students within 1 hour of quiz completion or deadline.																				

Case Description-11: View Result

Use Case	View Result																
Goal	Student will view their quiz result																
Precondition	Quiz result must be calculated and released by the system																
Success End Condition	Quiz result is displayed to the student																
Failed End Condition	Notification “Result not available”																
Primary Actors	Student																
Secondary Actors	Teacher																
Trigger	Students wants to check their quiz result																
Description / Main Success Scenario	<table border="1"> <tr><td>1.</td><td>Visit Dashboard.</td></tr> <tr><td>2.</td><td>Select “Result” option</td></tr> <tr><td>3.</td><td>Choose the quiz from the list of completed quizzes</td></tr> <tr><td>4.</td><td>View result details, including score and feedback.</td></tr> <tr><td>5.</td><td>Review performance analytics.</td></tr> <tr><td>6.</td><td>Notification: “Result Displayed Successfully”</td></tr> </table>	1.	Visit Dashboard.	2.	Select “Result” option	3.	Choose the quiz from the list of completed quizzes	4.	View result details, including score and feedback.	5.	Review performance analytics.	6.	Notification: “Result Displayed Successfully”				
1.	Visit Dashboard.																
2.	Select “Result” option																
3.	Choose the quiz from the list of completed quizzes																
4.	View result details, including score and feedback.																
5.	Review performance analytics.																
6.	Notification: “Result Displayed Successfully”																
Alternative Flows	<table border="1"> <tr><td>2.1</td><td>System did not respond</td></tr> <tr><td></td><td>2.1.a Try again</td></tr> <tr><td>3.1</td><td>Quiz result not available</td></tr> <tr><td></td><td>3.1.a Notify student that result is not yet released</td></tr> <tr><td>4.1</td><td>Error loading result details</td></tr> <tr><td></td><td>4.1.a Retry loading or contact support</td></tr> <tr><td>5.1</td><td>Performance analytic not available</td></tr> <tr><td></td><td>5.1.a Notify student that analytics are not available for this quiz</td></tr> </table>	2.1	System did not respond		2.1.a Try again	3.1	Quiz result not available		3.1.a Notify student that result is not yet released	4.1	Error loading result details		4.1.a Retry loading or contact support	5.1	Performance analytic not available		5.1.a Notify student that analytics are not available for this quiz
2.1	System did not respond																
	2.1.a Try again																
3.1	Quiz result not available																
	3.1.a Notify student that result is not yet released																
4.1	Error loading result details																
	4.1.a Retry loading or contact support																
5.1	Performance analytic not available																
	5.1.a Notify student that analytics are not available for this quiz																
Quality Requirements	Result should load within 10 seconds upon the result.																

Case Description-12: LeaderBoard

Use Case	Leaderboard												
Goal	Teachers and students can view the leaderboard to see student rankings based on quiz performance.												
Precondition	Student must have completed Quiz and result available												
Success End Condition	Notification: Leaderboard displayed successfully												
Failed End Condition	Notification: Failed to load leaderboard												
Primary Actors	Student, Teacher												
Secondary Actors													
Trigger	User requests to view the leaderboard for a specific course												
Description / Main Success Scenario	<table border="1"> <tr> <td>1.</td><td>Visit Dashboard</td></tr> <tr> <td>2.</td><td>Select Leaderboard Option</td></tr> <tr> <td>3.</td><td>Displays the leaderboard, ranking students based on quiz scores</td></tr> <tr> <td>4.</td><td>Leaderboard displayed successfully</td></tr> </table>	1.	Visit Dashboard	2.	Select Leaderboard Option	3.	Displays the leaderboard, ranking students based on quiz scores	4.	Leaderboard displayed successfully				
1.	Visit Dashboard												
2.	Select Leaderboard Option												
3.	Displays the leaderboard, ranking students based on quiz scores												
4.	Leaderboard displayed successfully												
Alternative Flows	<table border="1"> <tr> <td>1.1</td><td>System Error</td></tr> <tr> <td></td><td>1.1.a. Try Again!!</td></tr> <tr> <td>2.1</td><td>No Quiz Data</td></tr> <tr> <td></td><td>2.1.a. Quiz data not available for this course</td></tr> <tr> <td>3.1</td><td>Not Responding</td></tr> <tr> <td></td><td>3.1.a. Reload</td></tr> </table>	1.1	System Error		1.1.a. Try Again!!	2.1	No Quiz Data		2.1.a. Quiz data not available for this course	3.1	Not Responding		3.1.a. Reload
1.1	System Error												
	1.1.a. Try Again!!												
2.1	No Quiz Data												
	2.1.a. Quiz data not available for this course												
3.1	Not Responding												
	3.1.a. Reload												
Quality Requirements	Rankings update when new quiz scores are added												

Case Description-13: Notification & Reminders

Use Case	Notification & Reminders									
Goal	Enrolled students receive notifications for upcoming quizzes.									
Precondition	The student must be enrolled in a course.									
Success End Condition	Notification: Reminder sent successfully									
Failed End Condition	Notification: Failed to send reminder									
Primary Actors	Student									
Secondary Actors	Teacher									
Trigger	System automatically sends a notification									
Description / Main Success Scenario	<table><tr><td>1.</td><td>System identifies an upcoming quiz</td></tr><tr><td>2.</td><td>System generates a notification or reminder for enrolled students</td></tr><tr><td>3.</td><td>Reminder sent successfully</td></tr></table>		1.	System identifies an upcoming quiz	2.	System generates a notification or reminder for enrolled students	3.	Reminder sent successfully		
1.	System identifies an upcoming quiz									
2.	System generates a notification or reminder for enrolled students									
3.	Reminder sent successfully									
Alternative Flows	<table><tr><td>1.1</td><td>System Error</td></tr><tr><td></td><td>1.1.a. Try sending the notification again later</td></tr><tr><td>2.1</td><td>Notification Settings Disabled</td></tr><tr><td></td><td>2.1.a. No notification is sent</td></tr></table>		1.1	System Error		1.1.a. Try sending the notification again later	2.1	Notification Settings Disabled		2.1.a. No notification is sent
1.1	System Error									
	1.1.a. Try sending the notification again later									
2.1	Notification Settings Disabled									
	2.1.a. No notification is sent									
Quality Requirements	Notifications sent at least 24 hours before the quiz.									

Case Description-14: Feedback

Use Case	Feedback														
Goal	Students can ask questions after reviewing their quiz results. Teachers can provide feedback and both students and teachers can report any issues to the admin.														
Precondition	Student must viewed their quiz results and feedback feature must be accessible														
Success End Condition	Notification: Feedback submitted successfully														
Failed End Condition	Notification: Failed to submit feedback														
Primary Actors	Student,Teacher														
Secondary Actors	Admin														
Trigger	Users fill-up feedback form and press “Submit” button														
Description / Main Success Scenario	<table border="1"> <tr><td>1.</td><td>Visit Dashboard.</td></tr> <tr><td>2.</td><td>Student views quiz results</td></tr> <tr><td>3.</td><td>Click feedback Option</td></tr> <tr><td>4.</td><td>Students submit feedback, and the system notifies the teacher.</td></tr> <tr><td>5.</td><td>Teacher provides a response.</td></tr> <tr><td>6.</td><td>System issue notifies the Admin</td></tr> <tr><td>7.</td><td>Feedback submitted successfully.</td></tr> </table>	1.	Visit Dashboard.	2.	Student views quiz results	3.	Click feedback Option	4.	Students submit feedback, and the system notifies the teacher.	5.	Teacher provides a response.	6.	System issue notifies the Admin	7.	Feedback submitted successfully.
1.	Visit Dashboard.														
2.	Student views quiz results														
3.	Click feedback Option														
4.	Students submit feedback, and the system notifies the teacher.														
5.	Teacher provides a response.														
6.	System issue notifies the Admin														
7.	Feedback submitted successfully.														
Alternative Flows	<table border="1"> <tr><td>1.1</td><td>System error</td></tr> <tr><td></td><td>1.1.a Try again later</td></tr> <tr><td>4.1</td><td>Incomplete Information</td></tr> <tr><td></td><td>4.1.a Notify the user: Please fill in all required fields</td></tr> </table>	1.1	System error		1.1.a Try again later	4.1	Incomplete Information		4.1.a Notify the user: Please fill in all required fields						
1.1	System error														
	1.1.a Try again later														
4.1	Incomplete Information														
	4.1.a Notify the user: Please fill in all required fields														
Quality Requirements	Teachers and Admin should respond to student queries within 24 hours.														

Case Description-15: Forget Password

Use Case	Forget Password																					
Goal	Allow users to recover their forgotten password.																					
Precondition	User has a registered account & login to the system.																					
Success End Condition	Notification: “Password Restored Successfully”.																					
Failed End Condition	Notification:“ Password Restored Failed.”																					
Primary Actors	Student, Teacher																					
Secondary Actors	Admin																					
Trigger	User clicks "Forgot Password" button																					
Description / Main Success Scenario	<table><tr><td>1.</td><td>Log in to the system.</td></tr><tr><td>2.</td><td>Select the “Forgot Password” Option.</td></tr><tr><td>3.</td><td>Enter the phone number or email</td></tr><tr><td>4.</td><td>Press the “Send Verification Code” Button.</td></tr><tr><td>5.</td><td>Enter the verification code</td></tr><tr><td>6.</td><td>Set new password</td></tr><tr><td>7.</td><td>Press the “Save” button.</td></tr></table>		1.	Log in to the system.	2.	Select the “Forgot Password” Option.	3.	Enter the phone number or email	4.	Press the “Send Verification Code” Button.	5.	Enter the verification code	6.	Set new password	7.	Press the “Save” button.						
1.	Log in to the system.																					
2.	Select the “Forgot Password” Option.																					
3.	Enter the phone number or email																					
4.	Press the “Send Verification Code” Button.																					
5.	Enter the verification code																					
6.	Set new password																					
7.	Press the “Save” button.																					
Alternative Flows	<table><tr><td>1.1</td><td>Server down</td></tr><tr><td></td><td>1.1.a try again</td></tr><tr><td>2.1</td><td>Not Responding</td></tr><tr><td></td><td>2.1.a Reload</td></tr><tr><td>3.1</td><td>Wrong phone number or email</td></tr><tr><td></td><td>3.1.a Notification: enter the Valid Phone Number or email</td></tr><tr><td>5.1</td><td>Wrong OTP Code</td></tr><tr><td></td><td>5.1.a Notification: enter the Valid OTP Code.</td></tr><tr><td>6.1</td><td>System Error</td></tr><tr><td></td><td>6.1.a. Try again</td></tr></table>		1.1	Server down		1.1.a try again	2.1	Not Responding		2.1.a Reload	3.1	Wrong phone number or email		3.1.a Notification: enter the Valid Phone Number or email	5.1	Wrong OTP Code		5.1.a Notification: enter the Valid OTP Code.	6.1	System Error		6.1.a. Try again
1.1	Server down																					
	1.1.a try again																					
2.1	Not Responding																					
	2.1.a Reload																					
3.1	Wrong phone number or email																					
	3.1.a Notification: enter the Valid Phone Number or email																					
5.1	Wrong OTP Code																					
	5.1.a Notification: enter the Valid OTP Code.																					
6.1	System Error																					
	6.1.a. Try again																					
Quality Requirements	Users will get 10 minutes to fill up new password																					

Case Description-16: Logout

Use Case	Logout													
Goal	Log the user out of the system.													
Precondition	User must logged in													
Success End Condition	Notification: “Logout Successful”.													
Failed End Condition	Notification: “System Error”.													
Primary Actors	Student, Teacher													
Secondary Actors	Admin													
Trigger	User clicks "Logout" button													
Description / Main Success Scenario	<table><tr><td>1.</td><td>Log in to the system.</td></tr><tr><td>2.</td><td>Select the “Logout” Option.</td></tr><tr><td>3.</td><td>Press the “Logout” Button.</td></tr><tr><td>4.</td><td>Logout successful</td></tr></table>		1.	Log in to the system.	2.	Select the “Logout” Option.	3.	Press the “Logout” Button.	4.	Logout successful				
1.	Log in to the system.													
2.	Select the “Logout” Option.													
3.	Press the “Logout” Button.													
4.	Logout successful													
Alternative Flows	<table><tr><td>1.1</td><td>Server down</td></tr><tr><td></td><td>1.1.a try again</td></tr><tr><td>2.1</td><td>Not responding</td></tr><tr><td></td><td>2.1.a Try again</td></tr><tr><td>3.1</td><td>Not Responding</td></tr><tr><td></td><td>3.1.a Reload</td></tr></table>		1.1	Server down		1.1.a try again	2.1	Not responding		2.1.a Try again	3.1	Not Responding		3.1.a Reload
1.1	Server down													
	1.1.a try again													
2.1	Not responding													
	2.1.a Try again													
3.1	Not Responding													
	3.1.a Reload													
Quality Requirements	The user will Immediately Logout After pressing the Logout Button.													

System Design

Data Flow Diagram

Data Flow Diagram Level-0:

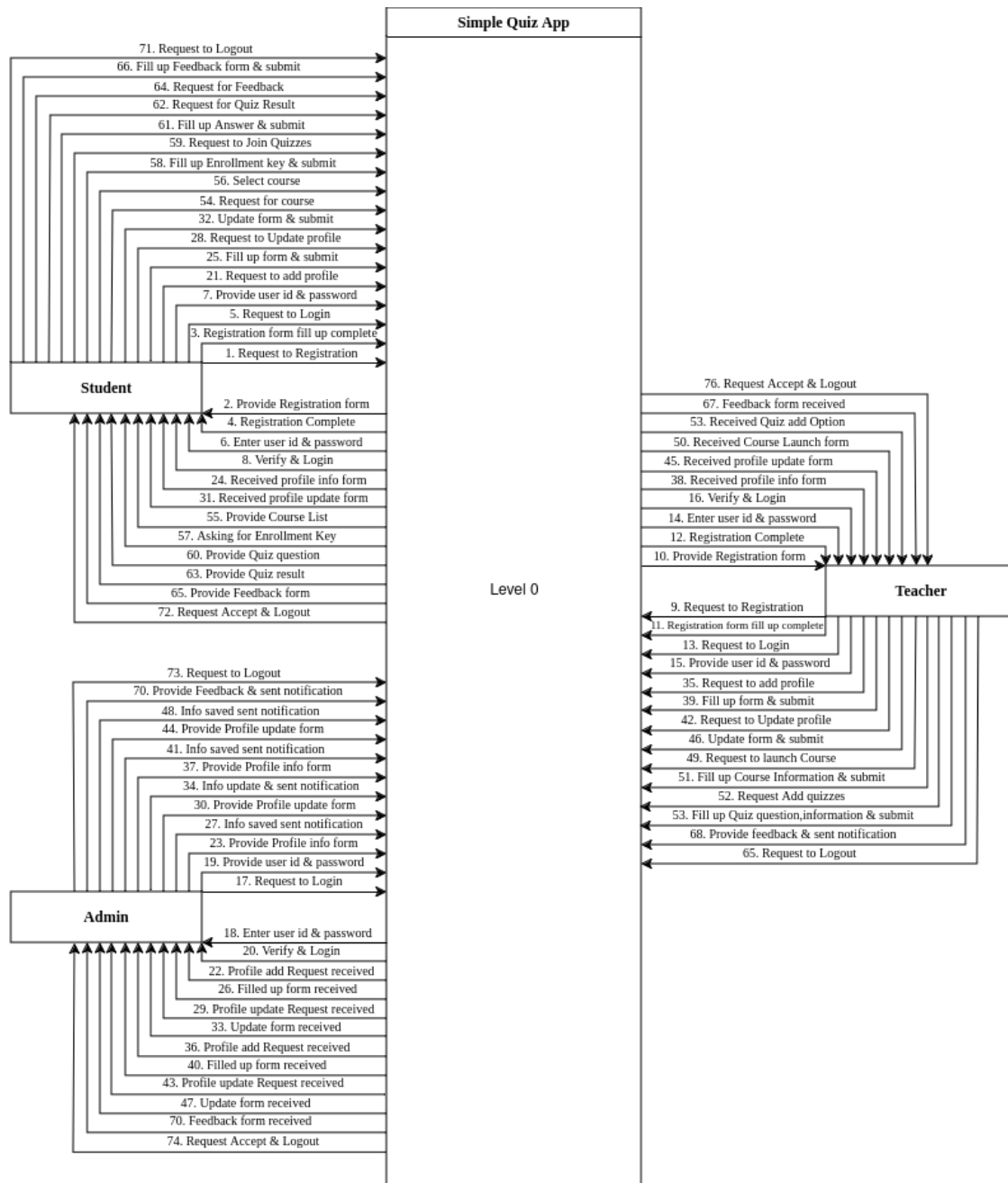


Figure-5: Data Flow Diagram Level 0

Data Flow Diagram Level-1:

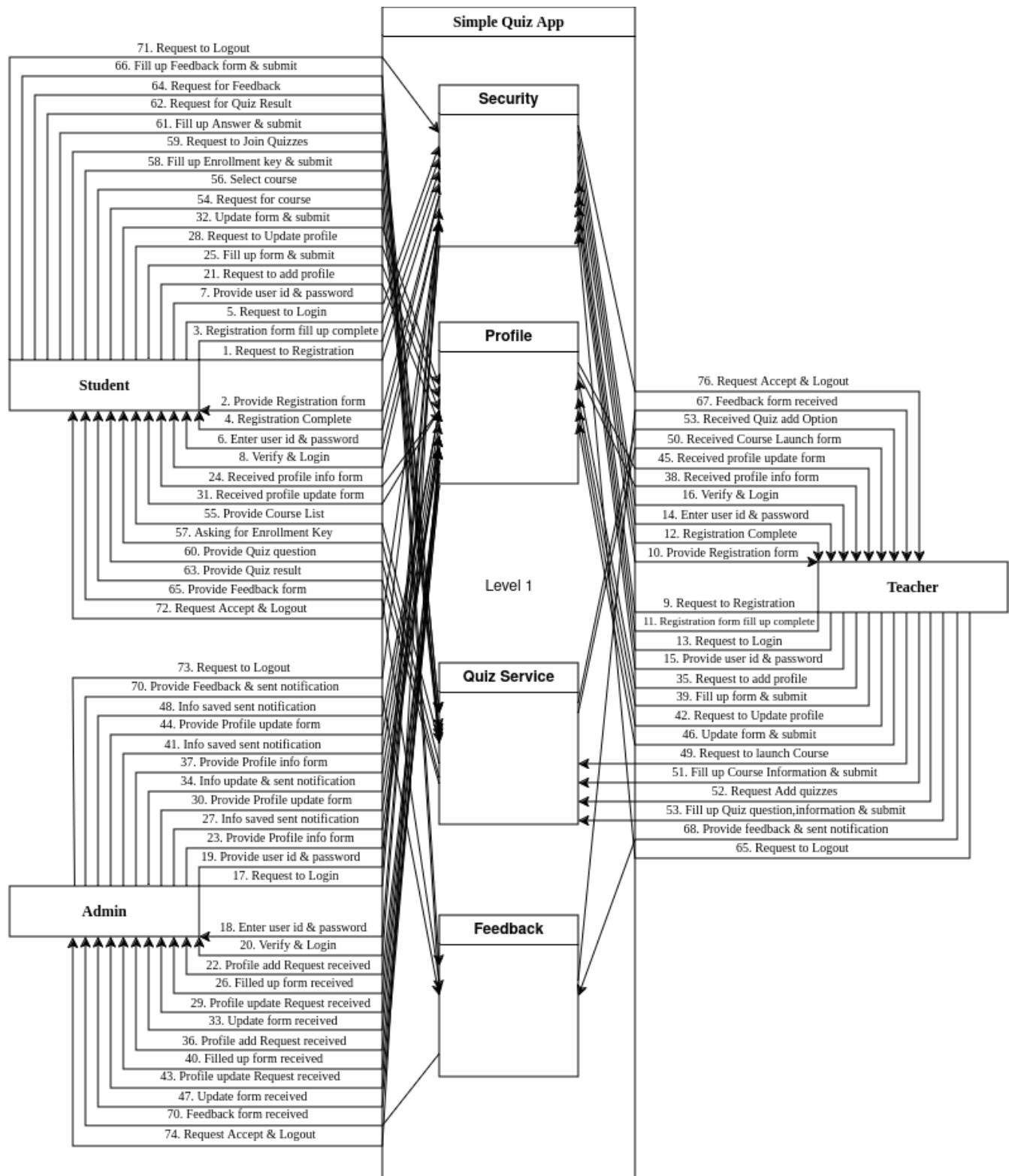


Figure-6: Data Flow Diagram Level 1

Activity Diagram

Activity Diagram-1: Add Profile

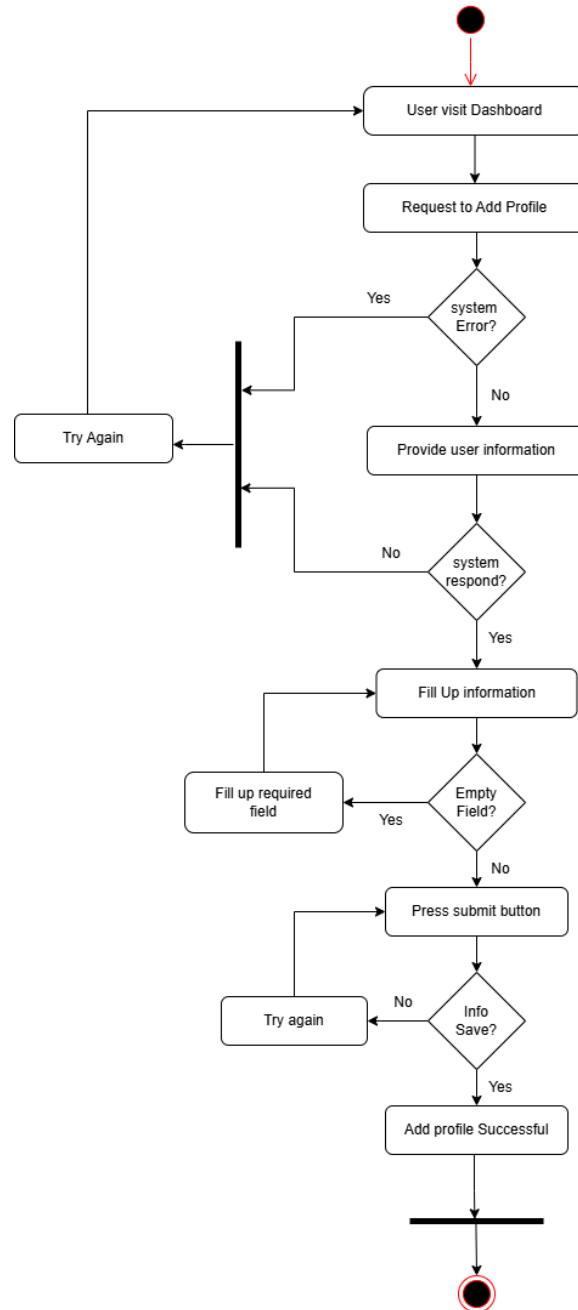


Figure-7: Activity diagram for Add Profile

Activity Diagram-2: Create Quiz

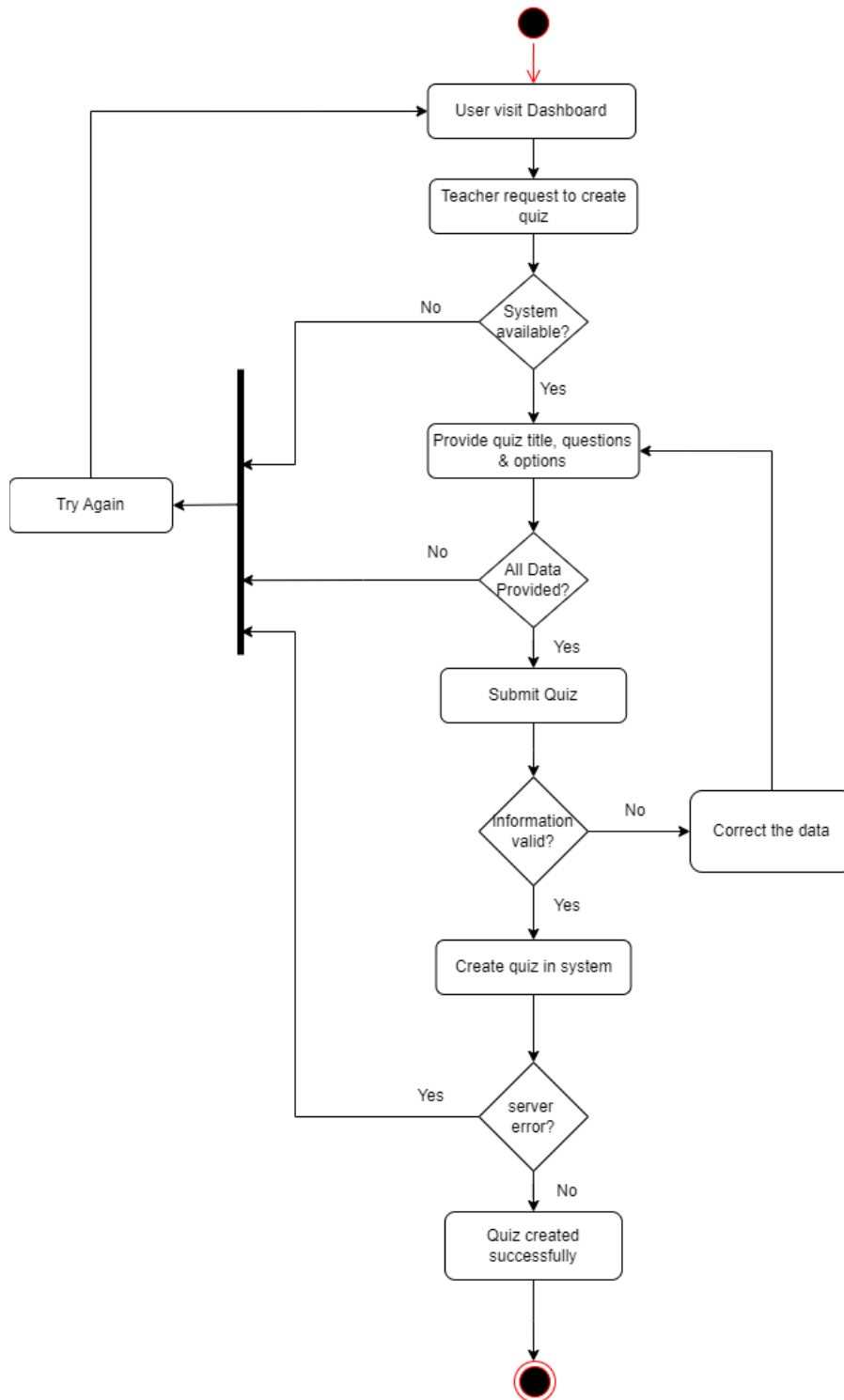


Figure-8: Activity diagram for Create Quiz

Activity Diagram-3: Quiz Participation

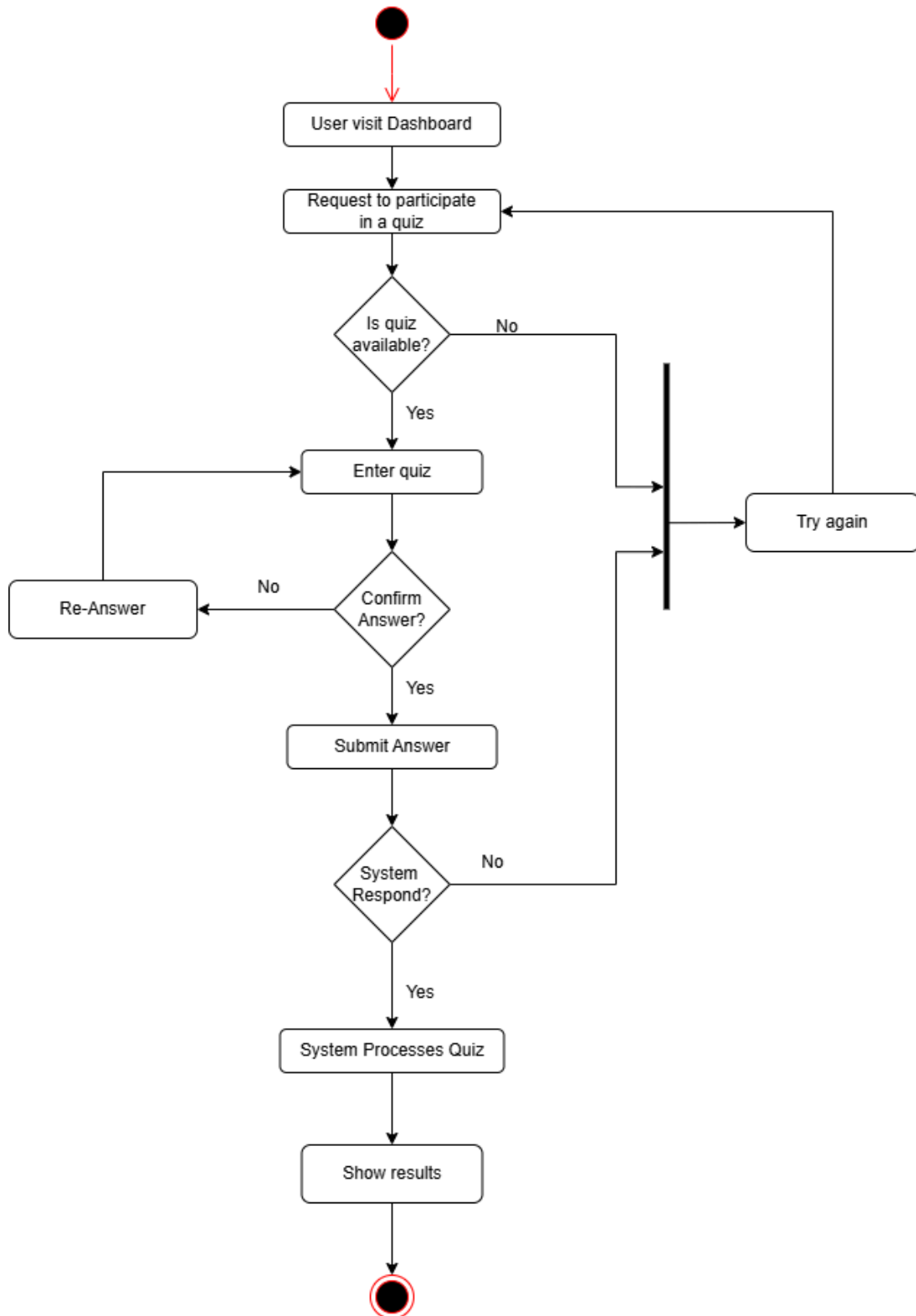


Figure-9: Activity diagram for Quiz Participation

Activity Diagram-4: View Quiz Result

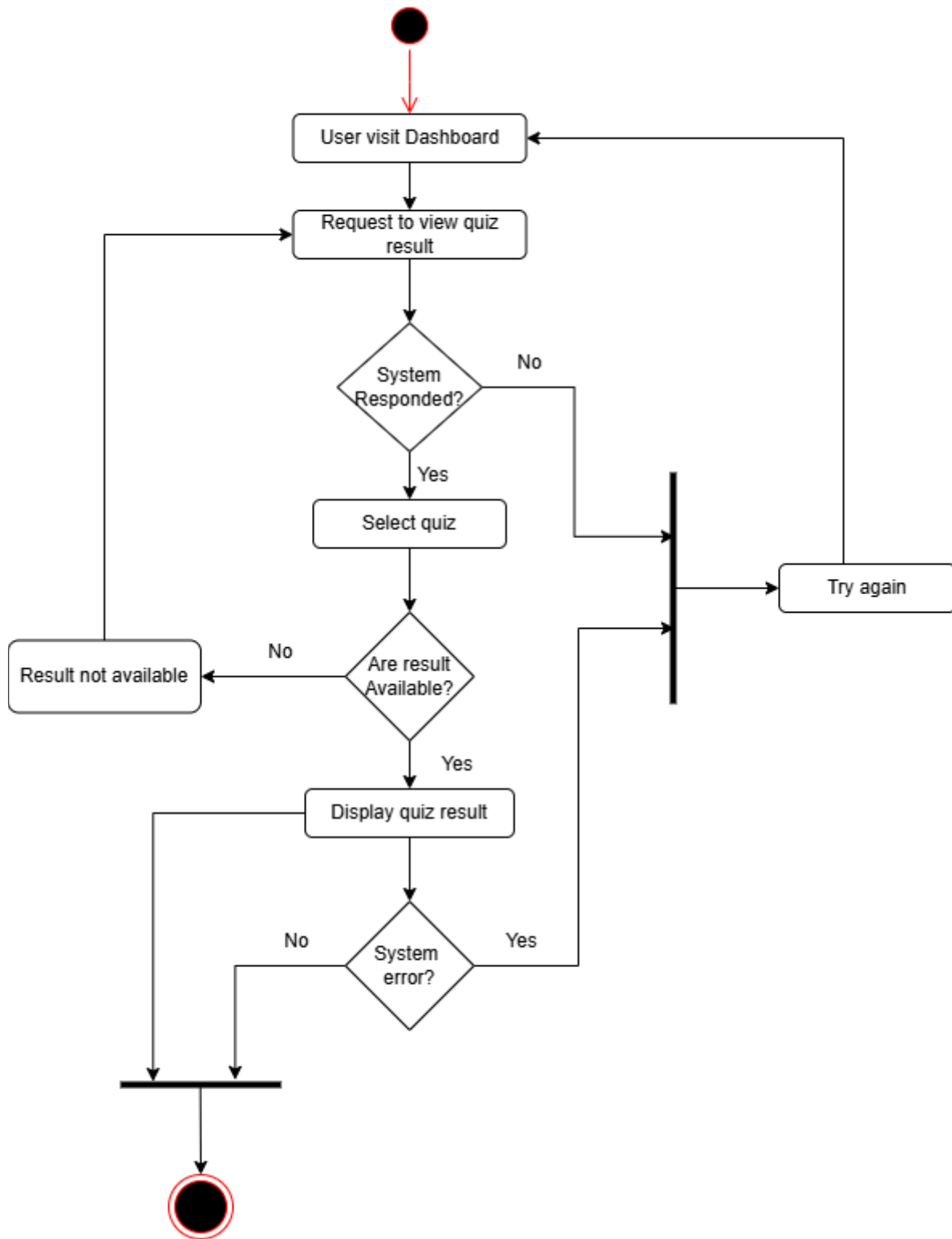


Figure-10: Activity diagram for View Quiz result

Activity Diagram-5: Course Enrollment

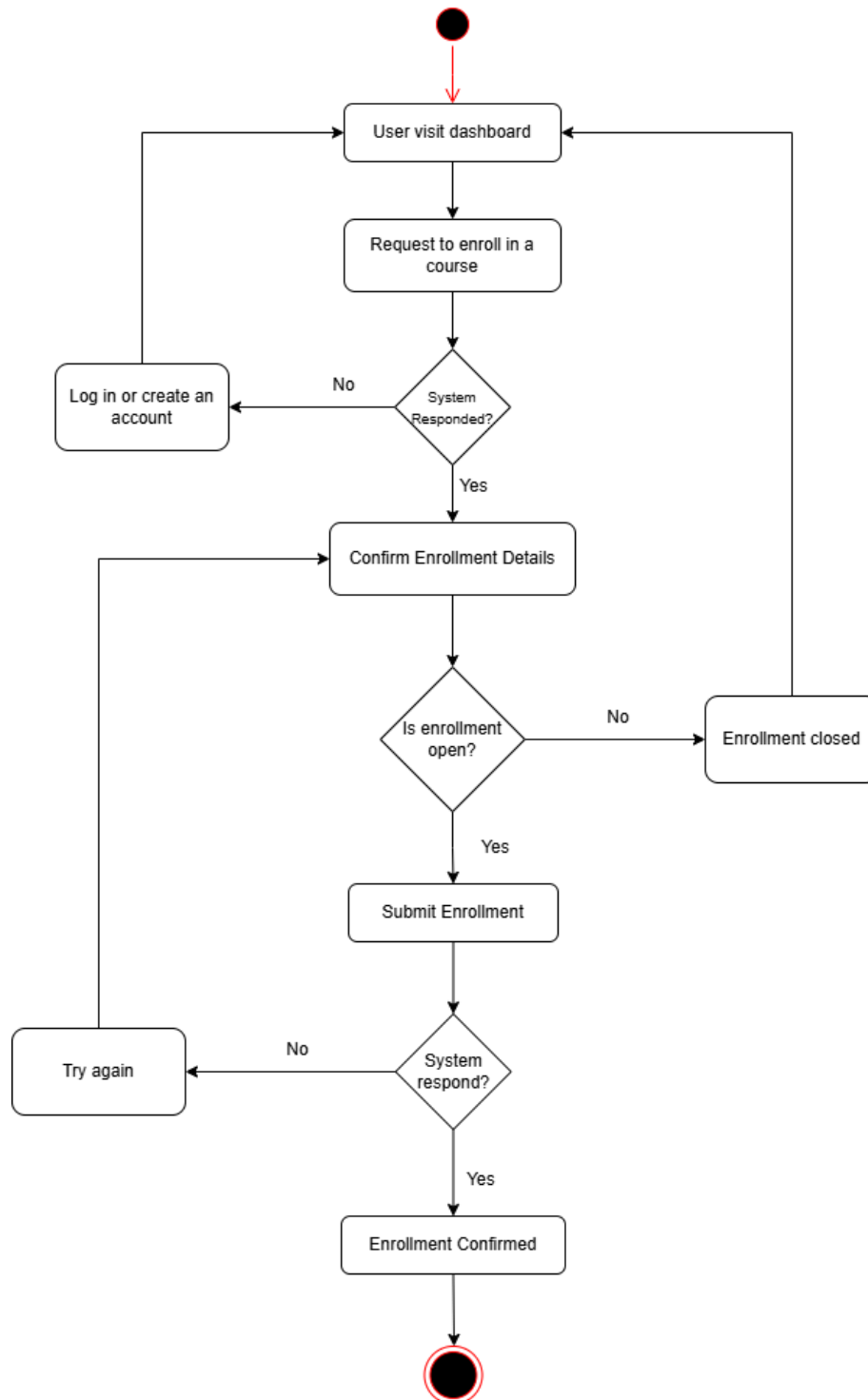


Figure-11: Activity diagram for Course Enrollment

Activity Diagram-6: Leaderboard

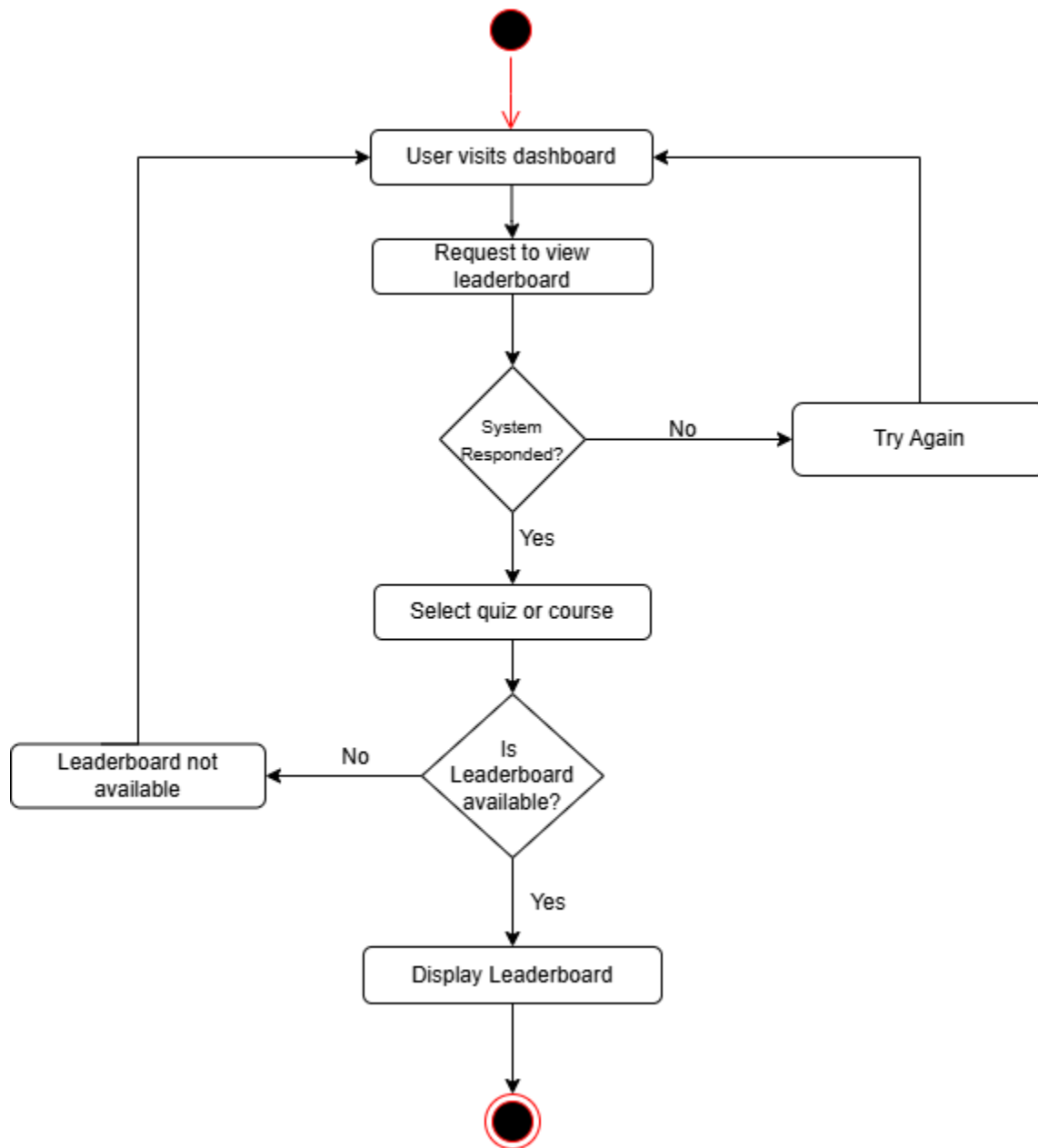


Figure-12: Activity diagram for Leaderboard

State Diagram

State Diagram-1: Add Profile

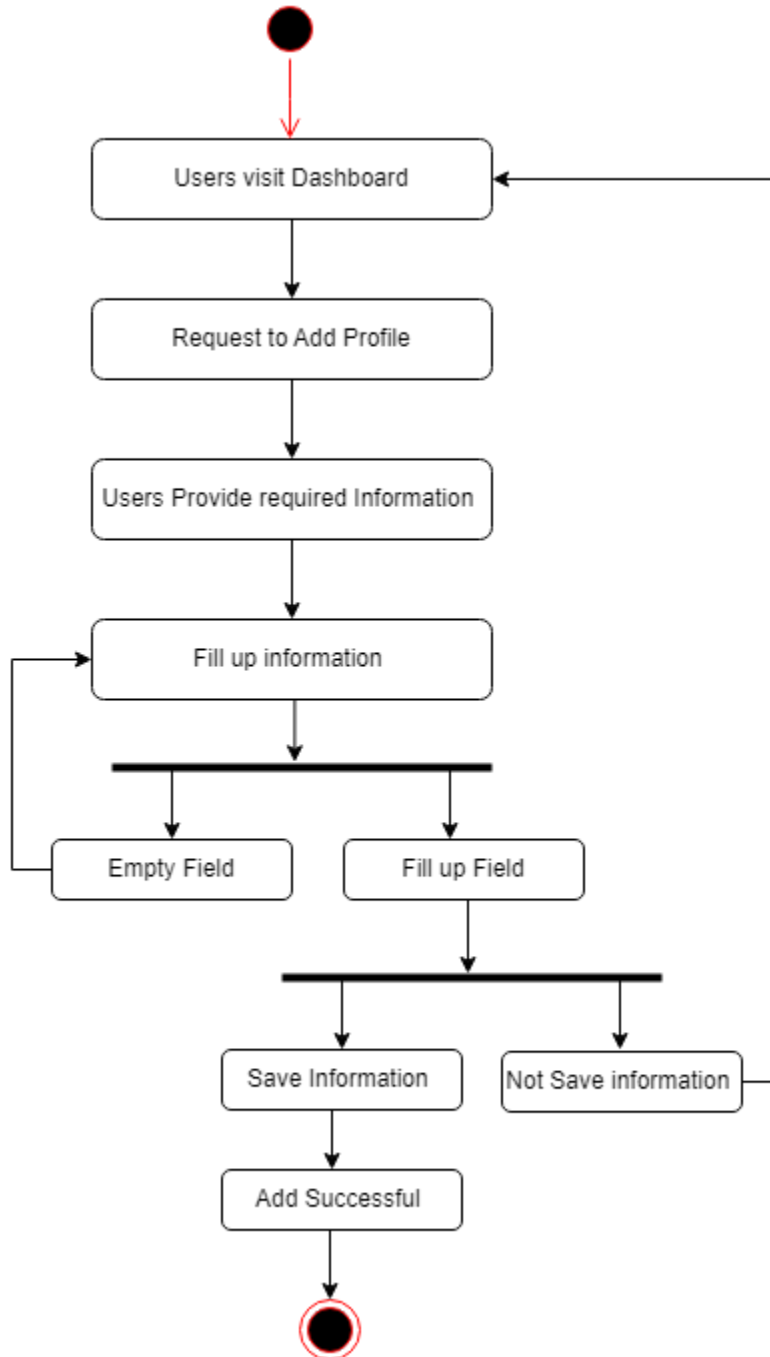


Figure-13: State Diagram for Add Profile

State Diagram-2: Create Quiz

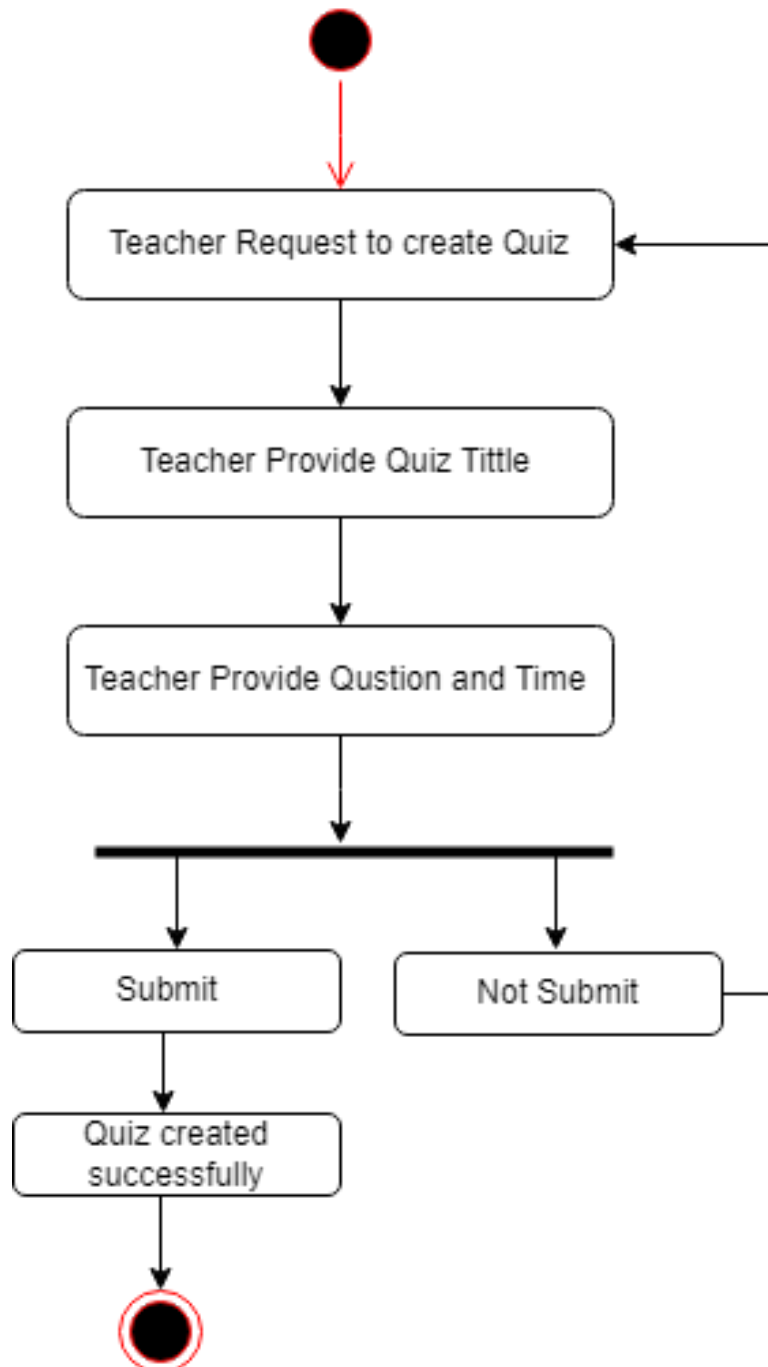


Figure-14: State Diagram for Create Quiz

State Diagram-3: Quiz Participation

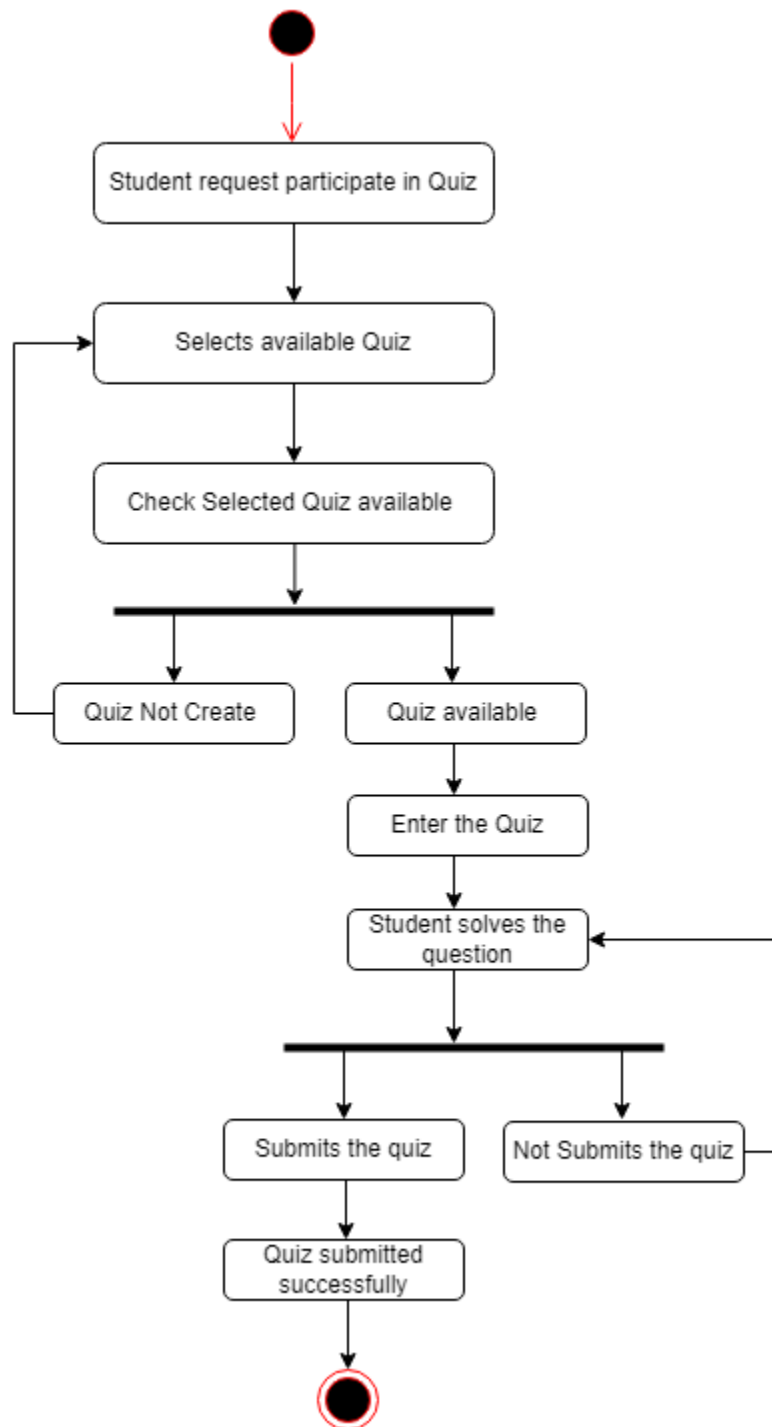


Figure-14: State Diagram for Quiz Participation

State Diagram-4: View Quiz Results

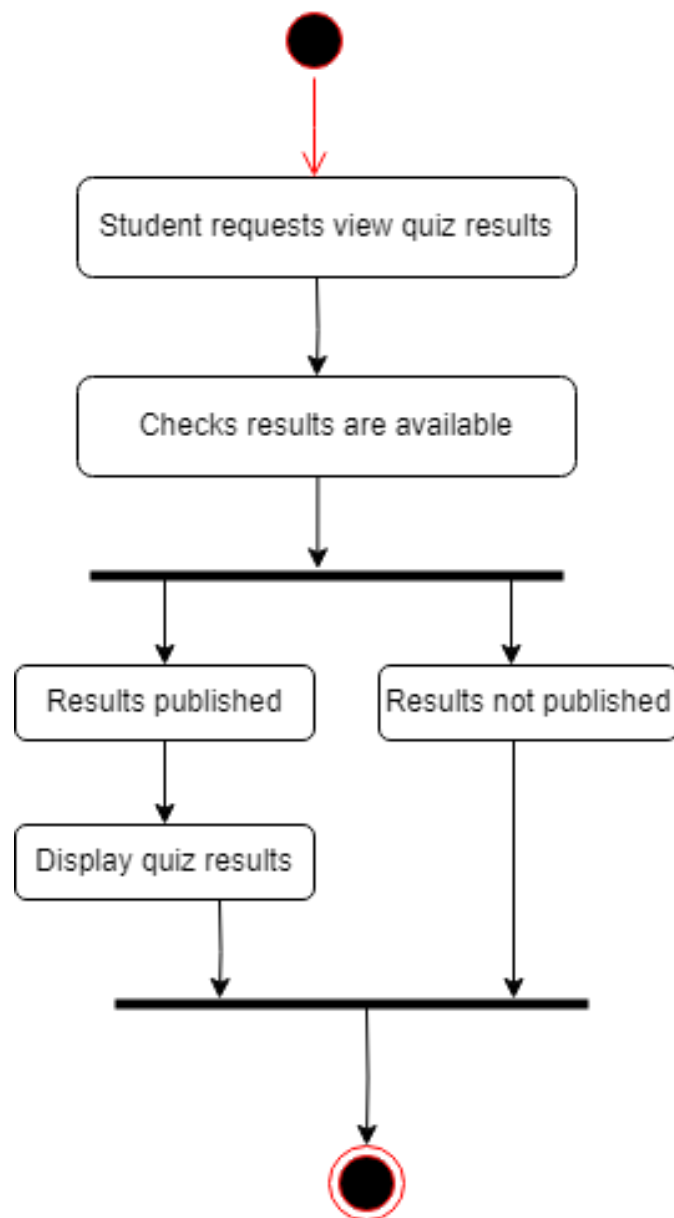


Figure-15: State Diagram for View Quiz Result

State Diagram-5: Course Enrollment

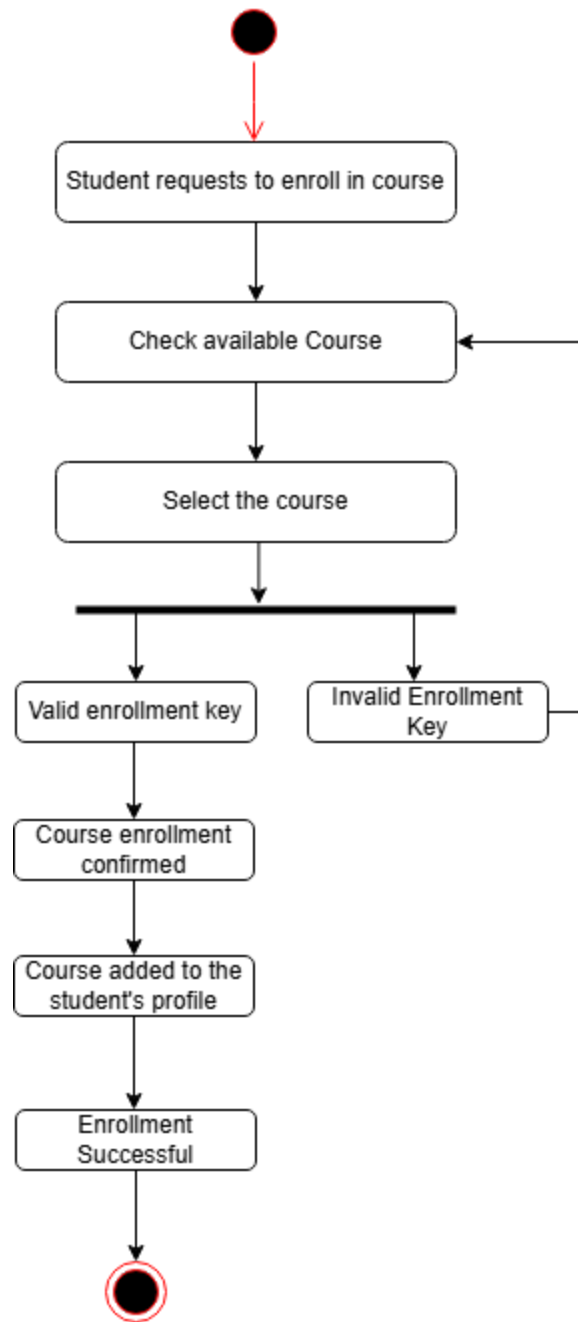


Figure-16: State Diagram for Course Enrollment

State Diagram-6: Leaderboard

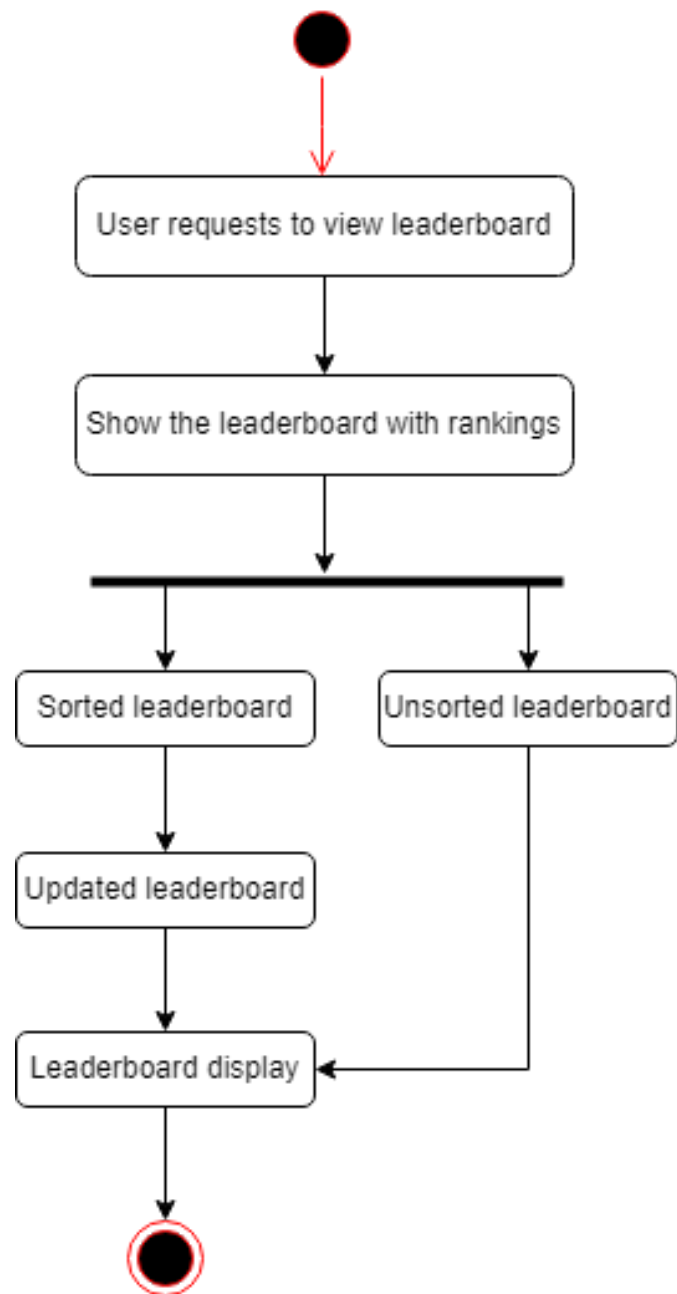


Figure-17: State Diagram for Leaderboard

Sequence Diagram

Sequence Diagram-1: Add Profile

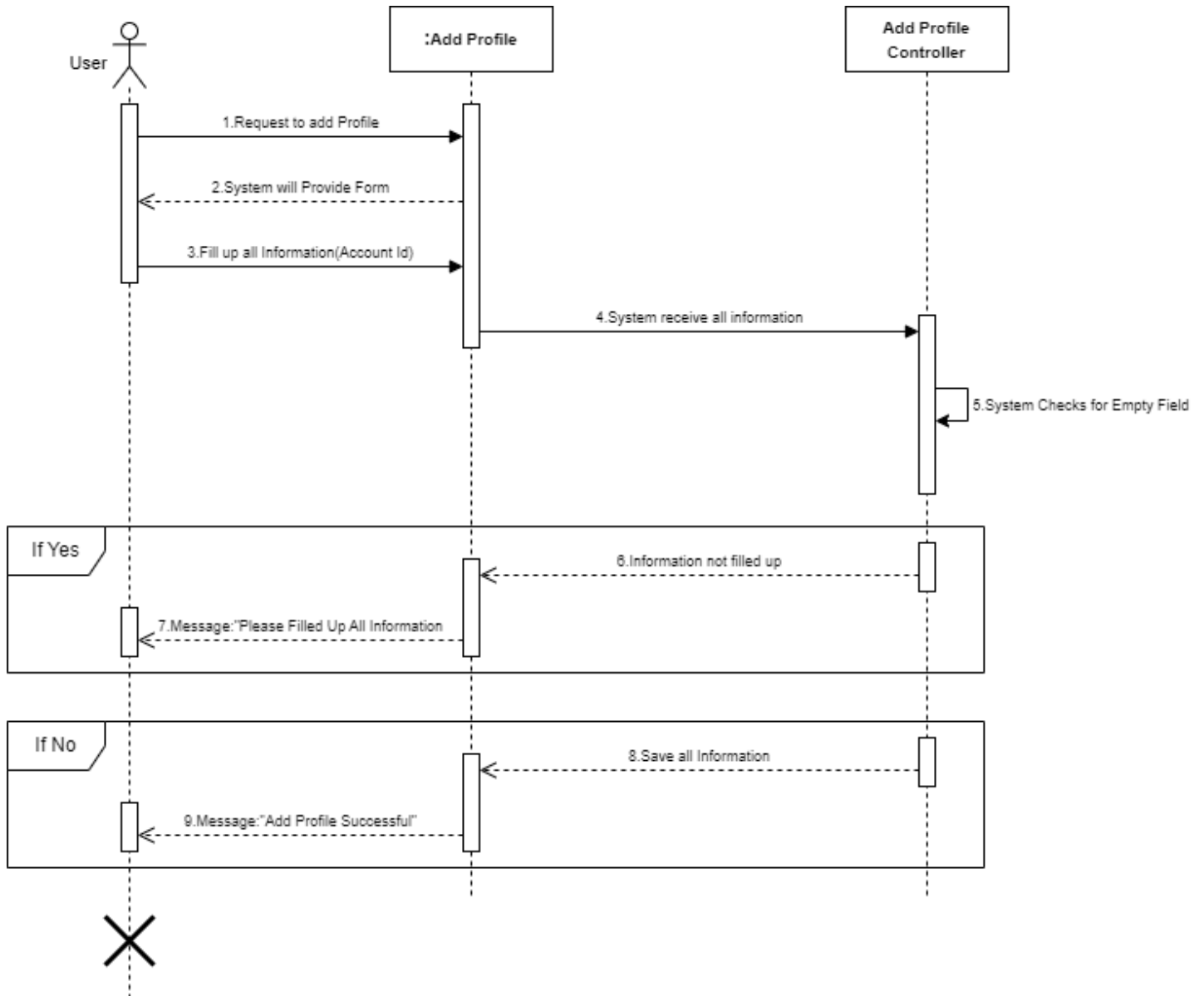


Figure-18: Sequence Diagram for Add Profile

Sequence Diagram-2: Create Quiz

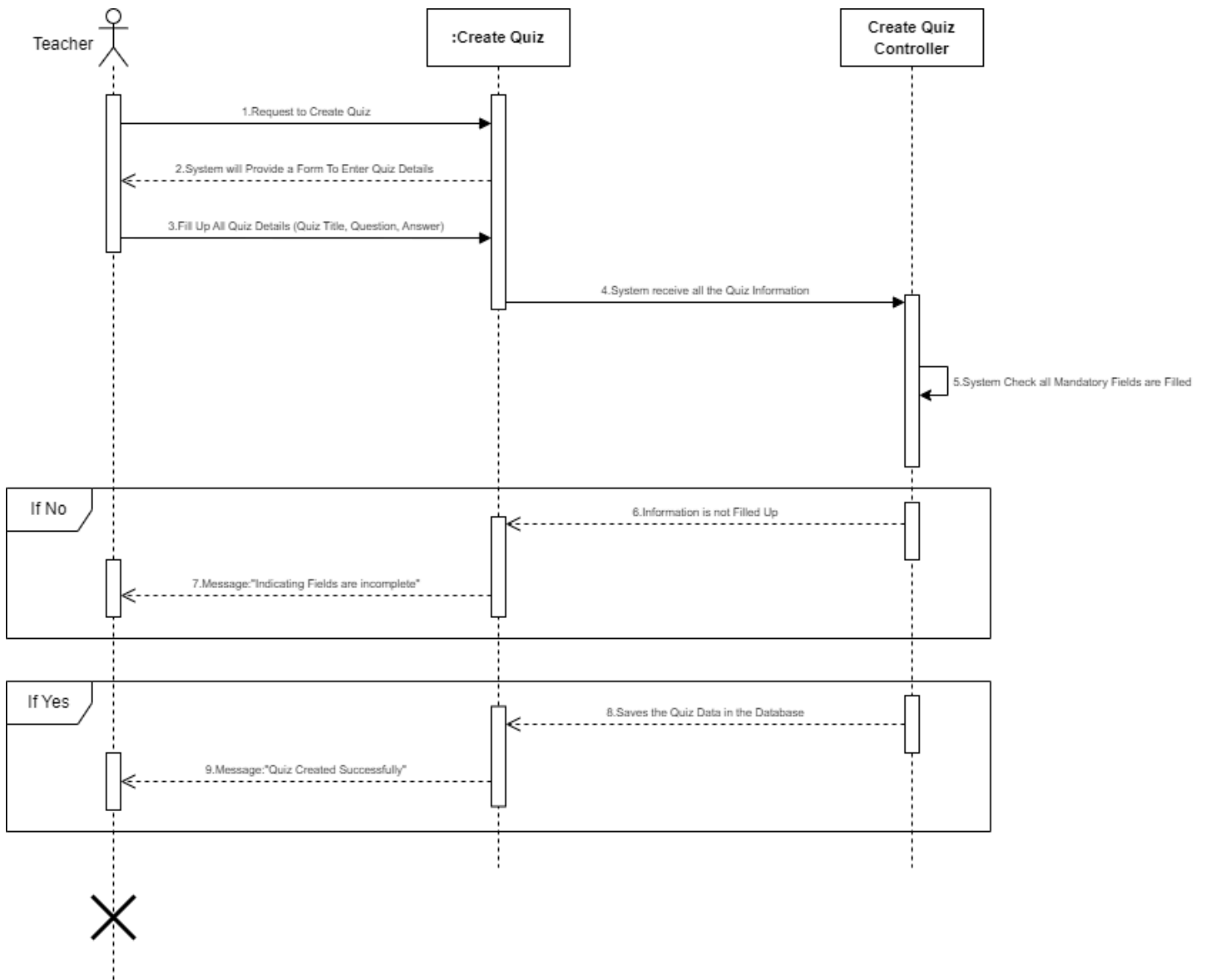


Figure-19: Sequence Diagram for Create Quiz

Sequence Diagram-3: Quiz Participation

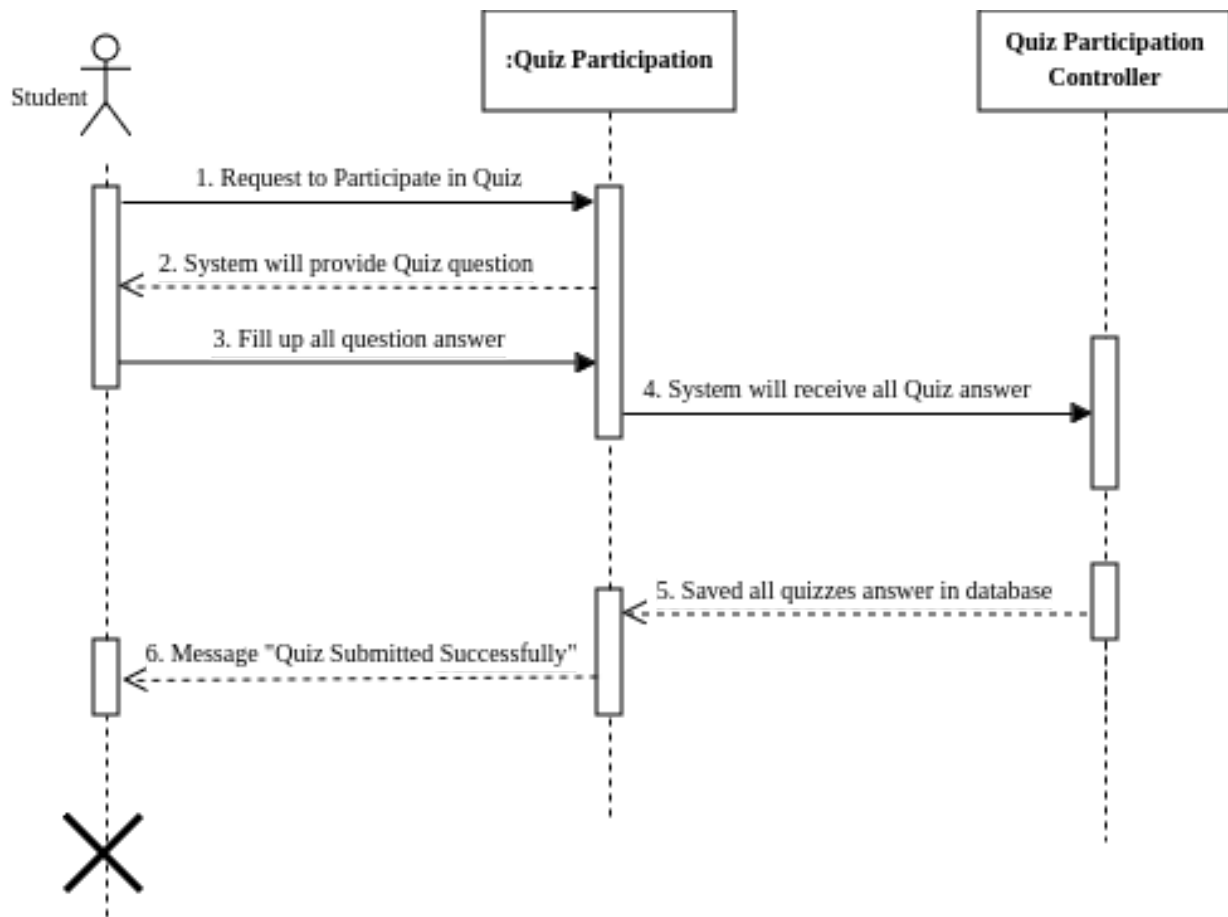


Figure-20: Sequence Diagram for Quiz Participation

Sequence Diagram-4: View Quiz Results

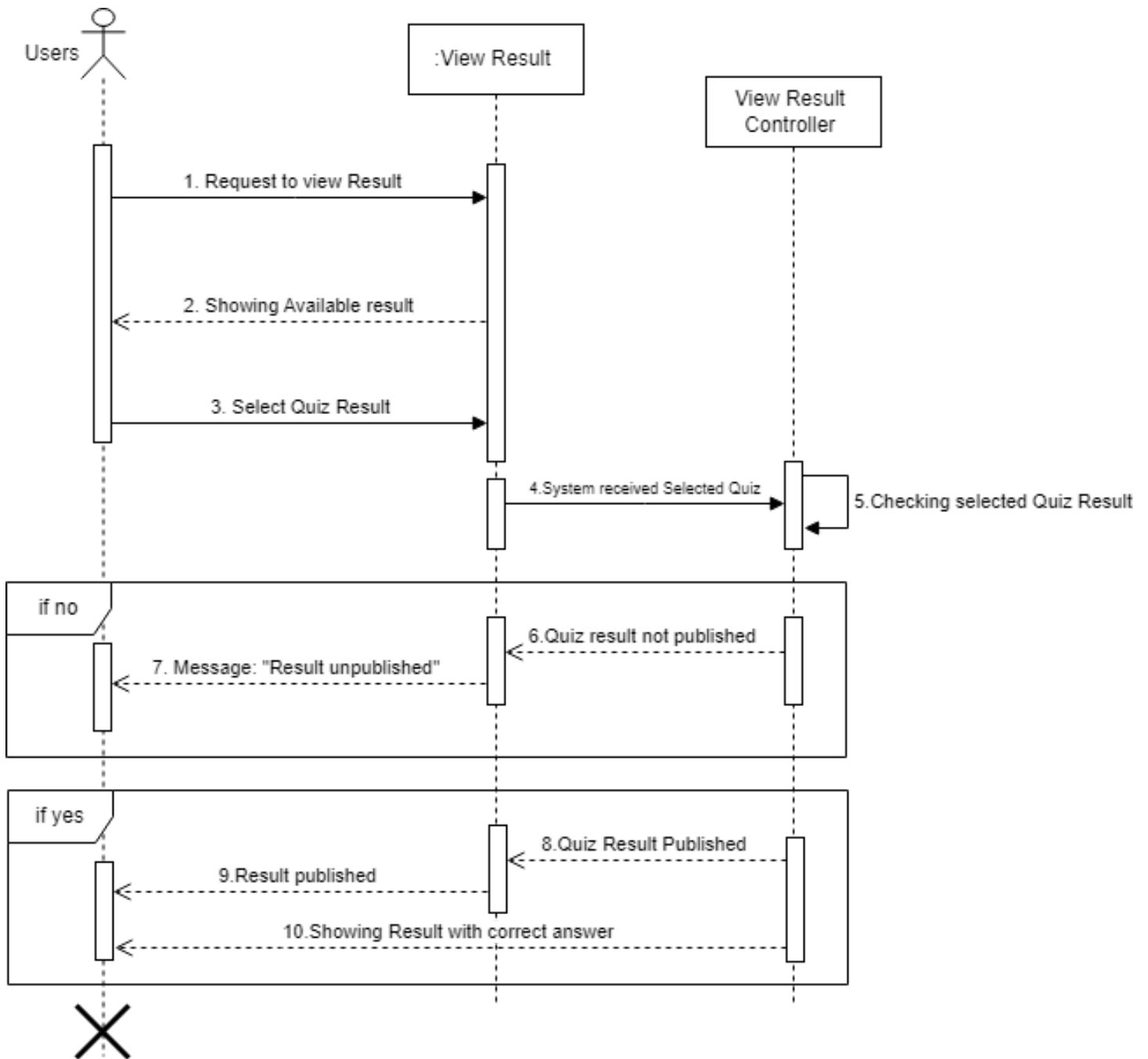


Figure-21: Sequence Diagram for View Quiz Results

Sequence Diagram-5: Course Enrollment

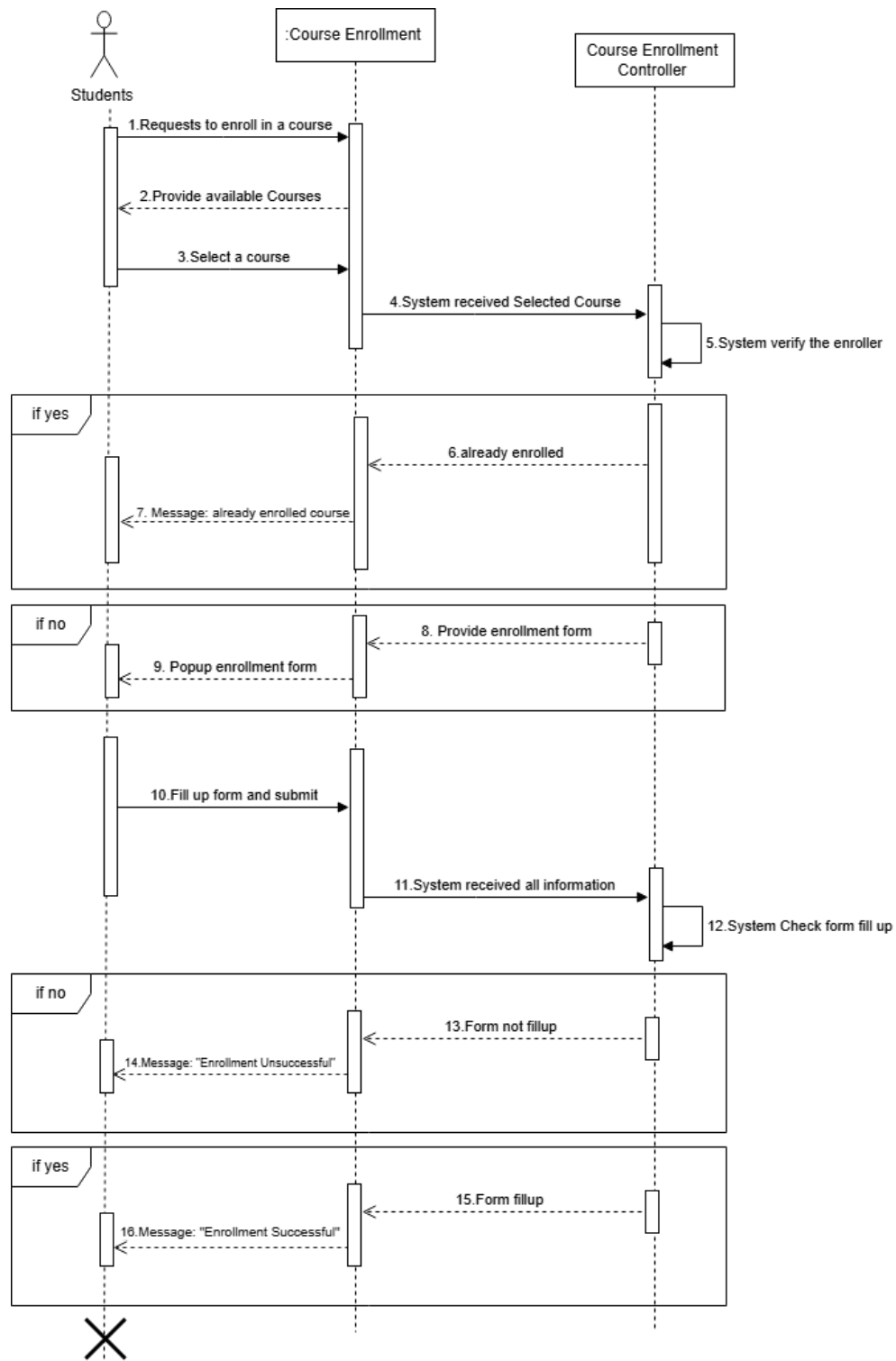


Figure-22: Sequence Diagram for Course Enrollment

Sequence Diagram-6: LeaderBoard

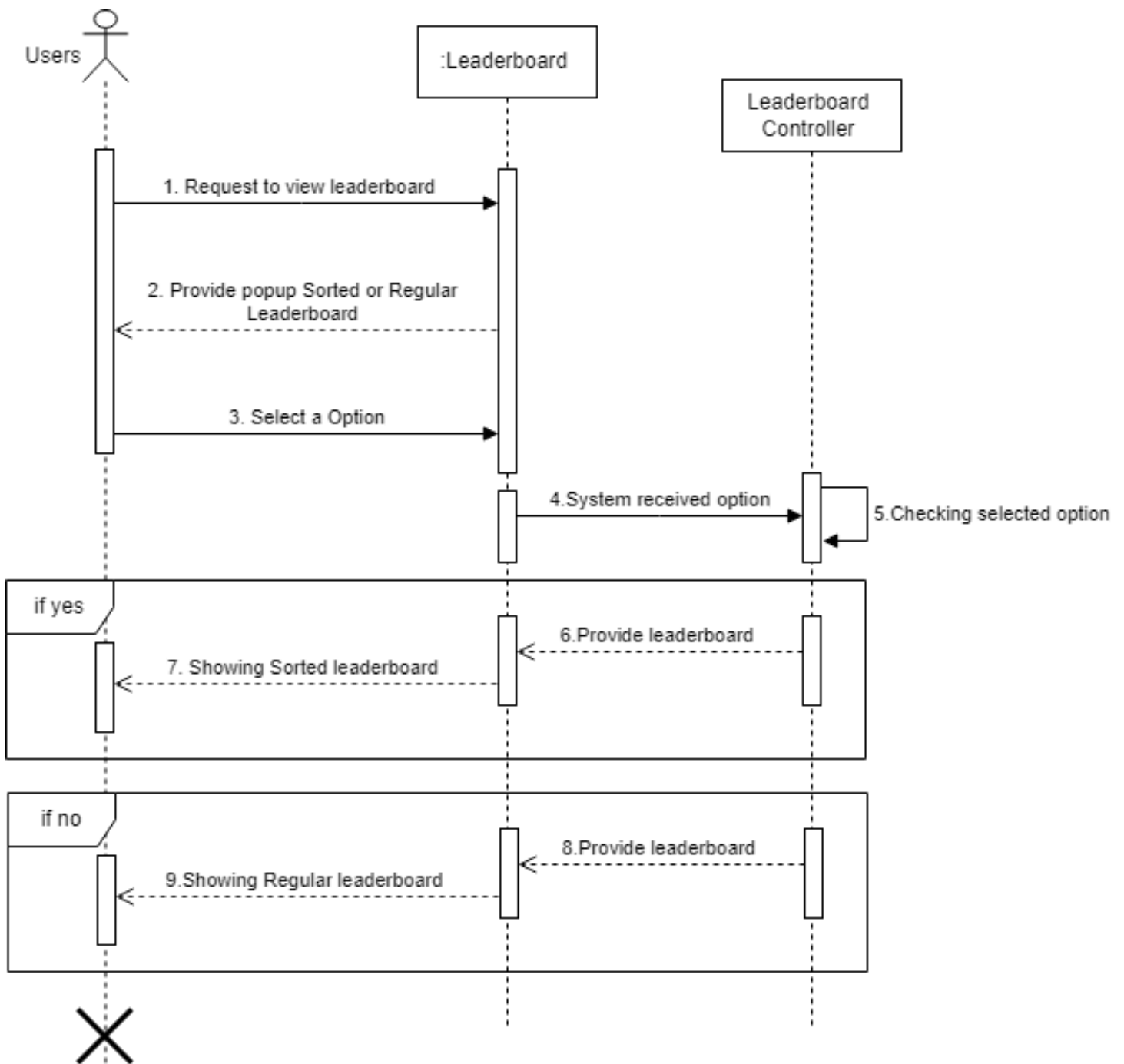


Figure-23: Sequence Diagram for LeaderBoard

Class Diagram

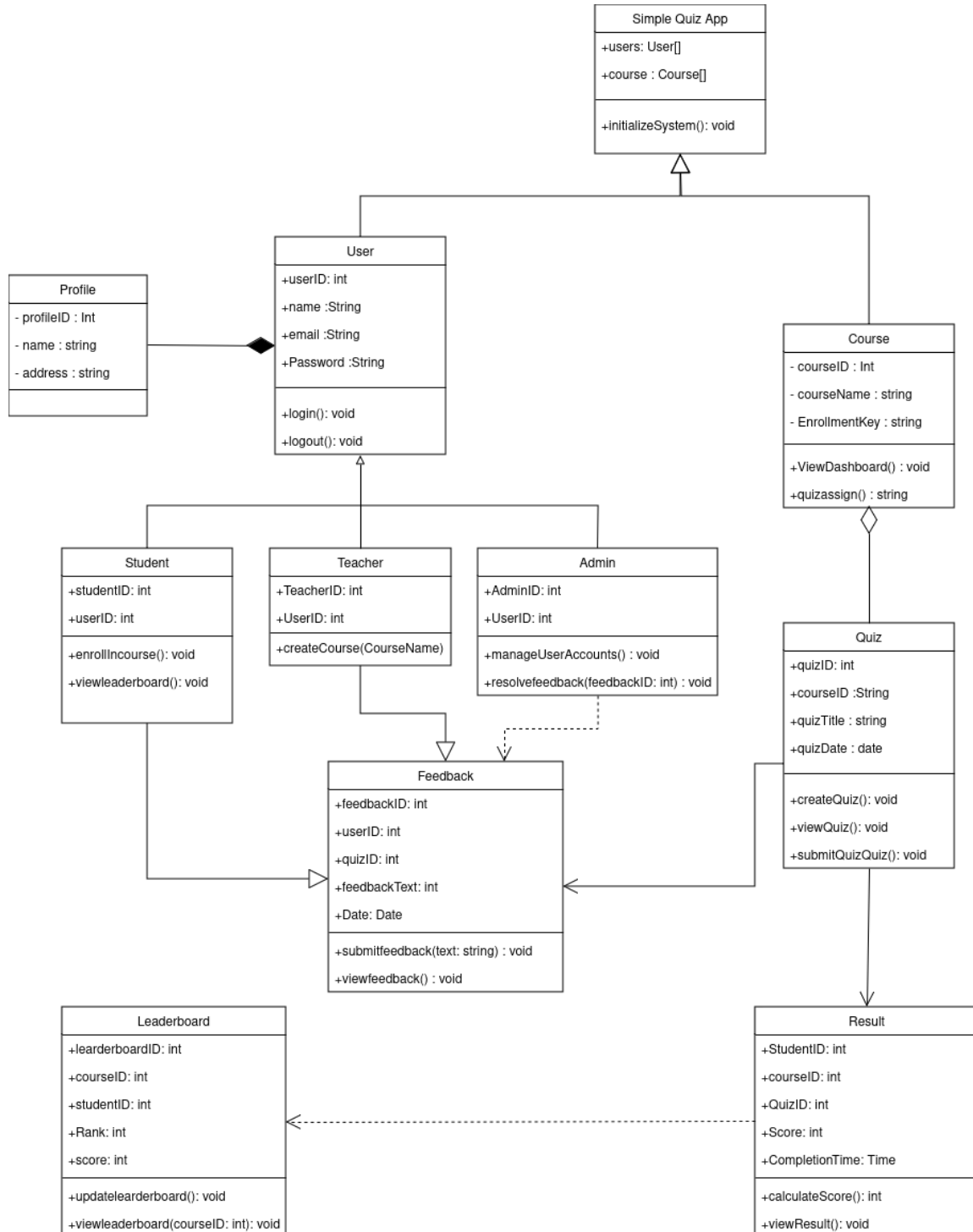


Figure-24: Class Diagram for Simple Quiz App

Er Diagram

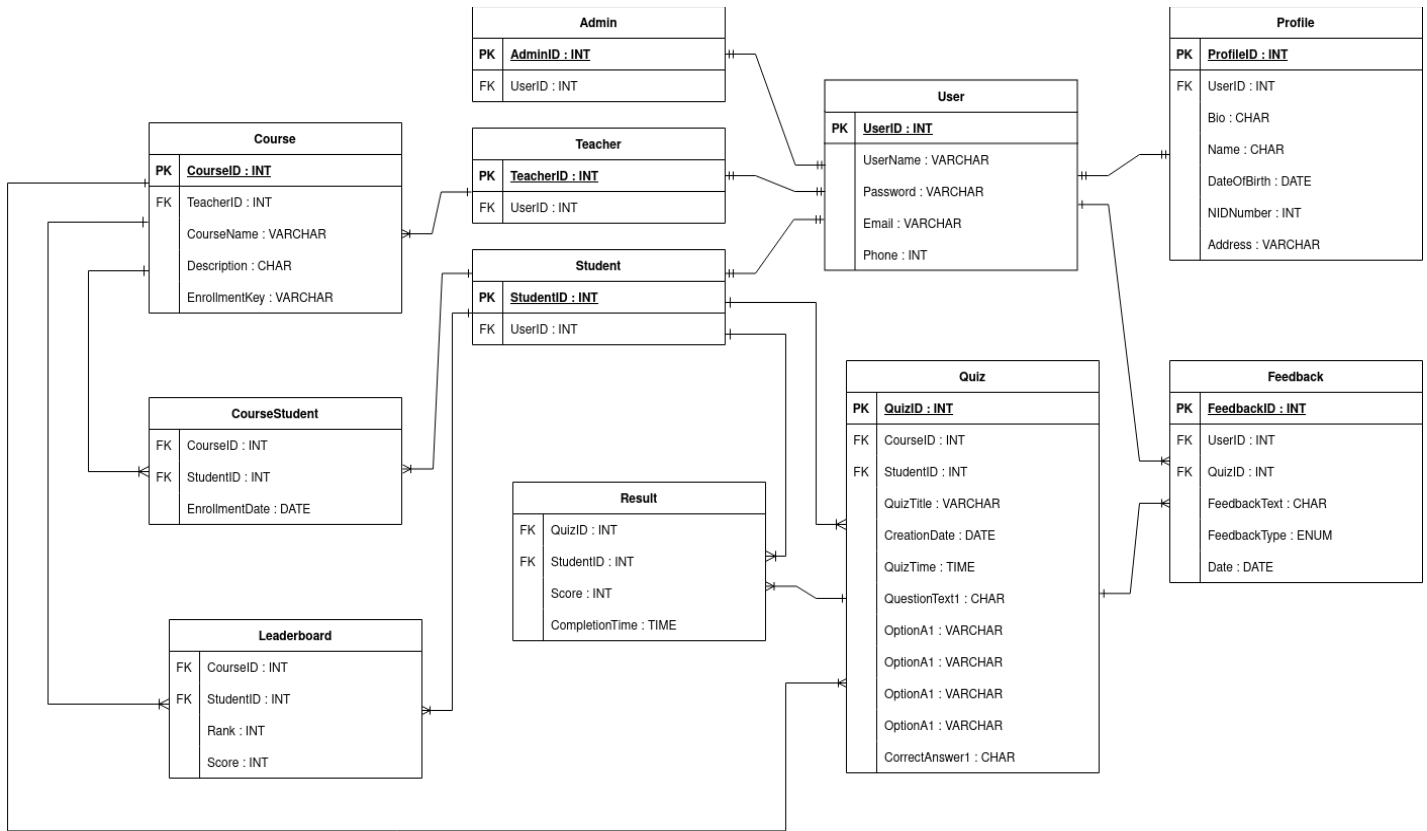


Figure-25: ER Diagram for Simple Quiz App