

# **PROJECT PROGRESS REPORT**

## **PROJECT 1**

**IIT271-2**

**Group No: 11**

Online Quiz Platform

**Quizzify**

**Industrial Information Technology**

**Department of Computer Science and Informatics**

**Uva Wellassa University**

**21<sup>st</sup> July 2023**

## Group Details

### Group members details

Enrollment No.	Name	Email address	Contact number
UWU/IIT/20/061	A.C.Aysha	iit20061@std.uwu.ac.lk	0719931187
UWU/IIT/20/053	M.F.F.Sumra	iit20053@std.uwu.ac.lk	0787988315
UWU/IIT/20/054	M.H.M.Samir	iit20054@std.uwu.ac.lk	0769397677
UWU/IIT/20/057	A.C.M.Akeel	iit20057@std.uwu.ac.lk	0764175277
UWU/IIT/20/068	M.M.S.Ahamed	iit20068@std.uwu.ac.lk	0755702004
UWU/IIT/20/088	M.M.Zakky	iit20088@std.uwu.ac.lk	0770403781

### Supervisor details

Name	Email address	Contact number
Mr.M.N.T.Nandasena	nisal@uwu.ac.lk	0711059530

### Co-Supervisor details

Name	Email address	Contact Number
Mr.H.P.D.P.Pathirana	dimuth92@gmail.com	0779122911

### Approval Signature

Date:

.....

[Mr. M.N.T Nandasena]

Supervisor

# Table of Content

<b>1.INTRODUCTION.....</b>	<b>4</b>
<b>1.1. Project Title .....</b>	<b>4</b>
<b>1.2. Project background.....</b>	<b>4</b>
<b>2.2. Project Aims / Objectives .....</b>	<b>5</b>
<b>2.PROJECT DESCRIPTION .....</b>	<b>6</b>
<b>2.1 Requirements.....</b>	<b>6</b>
2.1.1 functional requirements.....	6
2.1.2 Non-Functional requirements.....	7
<b>2.2. User levels and User roles.....</b>	<b>7</b>
<b>2.3 Diagrams .....</b>	<b>9</b>
2.3.1 Usecase diagram .....	9
2.3.2 ER Diagram.....	10
2.3.3 Class Diagram .....	11
<b>3. METHODOLOGY .....</b>	<b>12</b>
<b>4. IMPLEMENTATION .....</b>	<b>13</b>
<b>5. RESOURCES .....</b>	<b>15</b>
<b>5.1 Software resources .....</b>	<b>15</b>
<b>5.2 Hardware resources.....</b>	<b>16</b>
<b>5.3 Technology .....</b>	<b>16</b>
<b>6. GANTT CHART .....</b>	<b>17</b>
<b>6.1 Project timeline .....</b>	<b>17</b>
<b>6.2 Individual contribution.....</b>	<b>18</b>
<b>6.3 Future works .....</b>	<b>18</b>
<b>7. REFERENCES.....</b>	<b>19</b>
<b>8. APPENDIXES .....</b>	<b>20</b>

# 1. INTRODUCTION

## 1.1. Project Title

Online Quiz Platform [Quizzify]

## 1.2. Project background

One of the challenges that educators face is how to motivate students to engage with quizzes and assessments in a meaningful way. Many students tend to view quizzes as boring, stressful, or irrelevant, and they may not put much effort or attention into them. This can lead to poor learning outcomes and low retention of the material. To address this problem, we have developed Quizzify, an online quiz platform that aims to make quizzes more fun, interactive, and personalized. It is designed for IT enthusiasts who want to gain knowledge in a fun and stimulating way. It also provides analytics and insights for educators to monitor the progress and performance of their students. Quizzify is designed to enhance the learning experience and outcomes of students by making quizzes more engaging and rewarding.

The website has four main types of users: Admin, Instructor, Participant and Guest User. Admin is the user who has the authority and responsibility for all the functions and management of the platform. Instructor is the user who can register to the system and create a quiz with questions according to his/her preference and invite his/her participants to join the quiz by providing an unique ID.

Participant is the user who can register and enter the quiz by using the correct ID given by their instructor and earn rewards accordingly. Guest User is the user who can view the website and access some of its features without registering. They can also try some sample questions up to a certain limit and if they want to continue they need to register into the system.

In addition to the basic functionalities, Quizzify also provides articles, fun facts and much more along with an attractive and responsive interface for the users. The system is set up in a way that all the user details, questions and other data are stored in respective databases securely. The system also keeps track of all the activities and records. The system aims to provide an effective and user-friendly environment for learning and quizzing.

## **2.2. Project Aims / Objectives**

- Providing users an interesting and productive learning environment.
- Educate users in the field of Information Technology.
- Testing user knowledge on specific areas of IT.
- Providing user friendly environment where users can engage with the system easily.
- Providing a responsive system where users can get optimum use in an easy manner.
- Maintain a database that stores all the relevant information, questions, answers and rewards for the quizzes and the users.
- Managing user and quiz details.

## 2. PROJECT DESCRIPTION

### 2.1 Requirements

#### 2.1.1 functional requirements

- Registration and Login
  - Users can register into the system and login using the email address.
  - Admin can login to the system by providing a predefined username and password which makes admin a super user.
  - Registered accounts are verified by sending a verification code via the email addresses.
  - By registering into the system, users can start the quizzes or play the quizzes.
  - Users can view, edit and manage their user accounts.
- Admin dashboard
  - Quiz control.
  - Viewing quiz results.
  - View and manage users.
  - Managing system updates.
- User
  - Register into the system and play quizzes.
  - Creating their own quizzes.
  - View participants list if he is an instructor.
  - Choosing quiz type.
  - Providing rewards.
  - View quiz analysis.
  - Enabling or disabling participants from viewing the quiz analysis.
  - Create, edit or delete their own questions.

- Attempting quizzes directly or by proving the correct ID provided by an instructor.
  - Viewing the rewards after completing the quiz.
  - Provide rating and reviews.
  - Edit their profiles.
- Guest user
  - View blogs.
  - Attempt sample quizzes.

### **2.1.2 Non-Functional requirements**

- Providing user friendly environment.
- Efficient system.
- Easy to navigate.
- Ability to provide fast and reliable performance.
- Ensuring the security of user details.
- Providing responsive and compatible web pages.
- Should be maintainable.
- Ensuring the security of the platform.

## **2.2. User levels and User roles**

- High level user
  - 1. Admin
    - Login.
    - Manage user details.
    - Handle quizzes.
    - View and remove users.
    - View quiz results.

- Middle level user

1. Instructor

- Login
- Customize questions.
- Create unique ID to provide participants.
- View participants of his quiz.
- Choosing quiz type.
- View quiz analysis.
- Providing rewards and scores for the quiz.
- Enabling and disabling participants from viewing their quiz analysis.
- End quiz.
- Provide rating and reviews.
- Change or delete the created questions.
- Attempting already available questions from the question bank.
- View blogs.

- Low level users

1. Participant

- Login
- Providing the correct ID given by the respective instructor to attempt the quizzes.
- Attempt quizzes.
- View rewards.
- Add reviews.
- View blogs.

2. Guest user

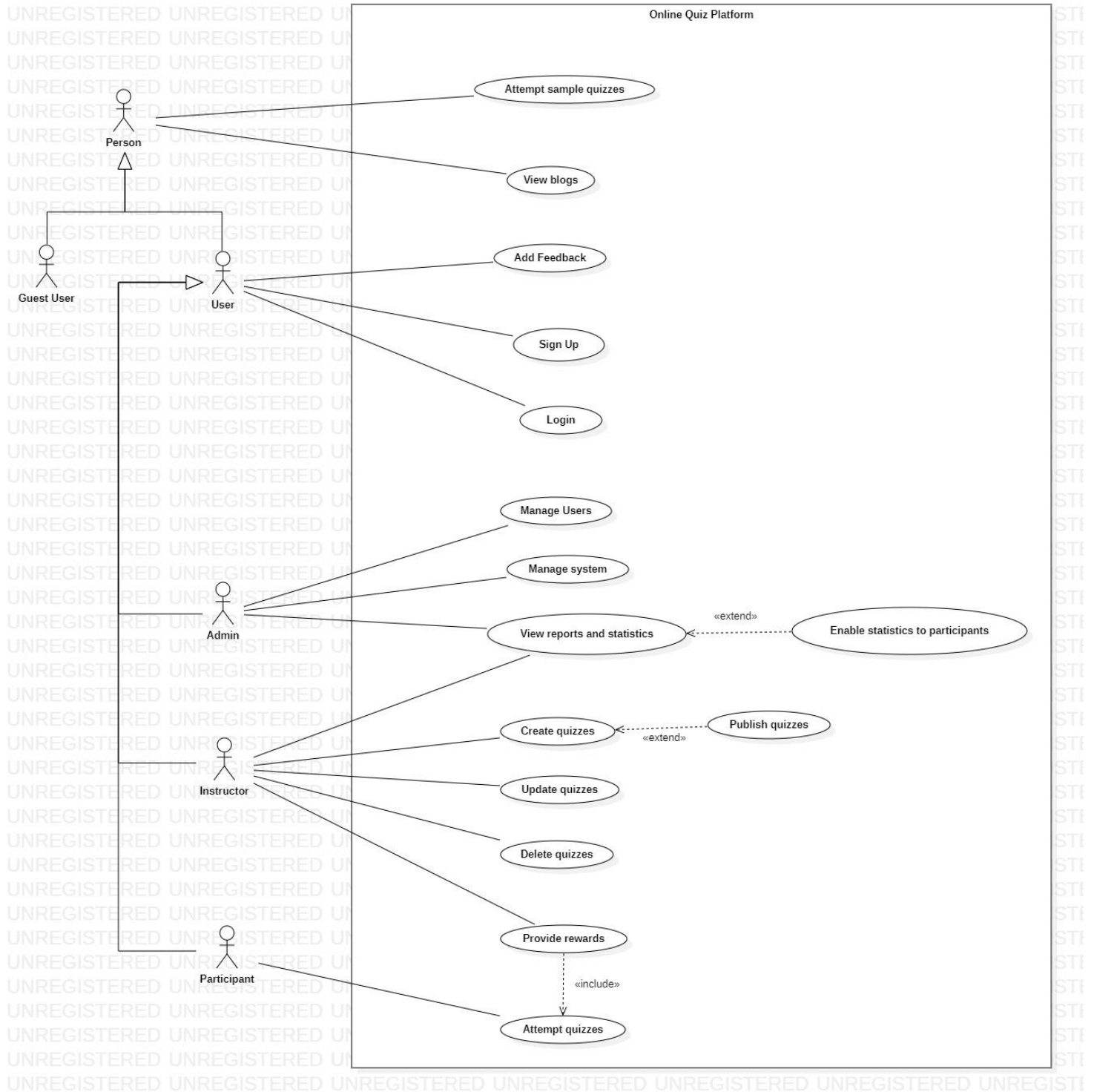
- View the website.
- View blogs.



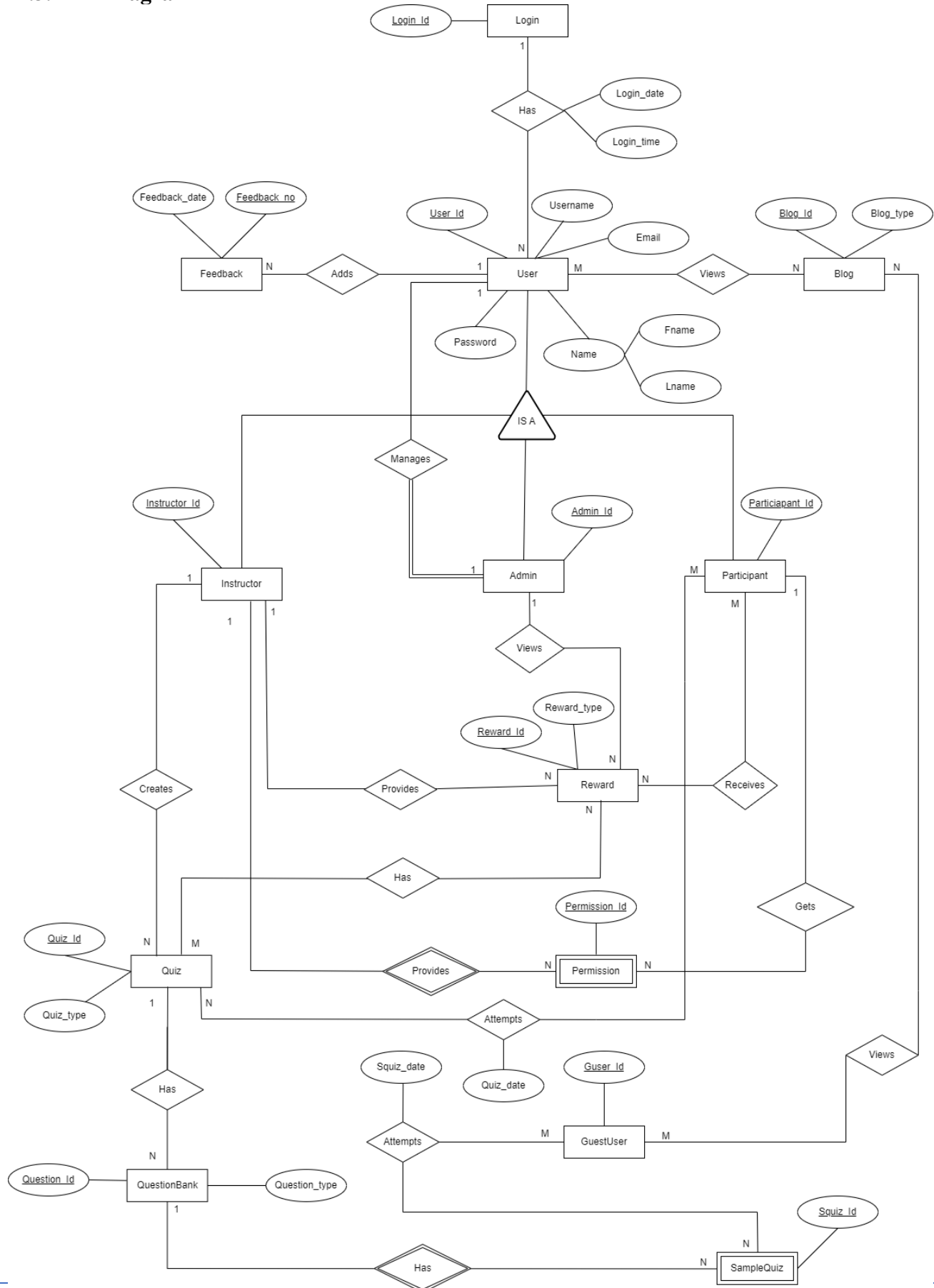
- Attempt sample quizzes.

## 2.3 Diagrams

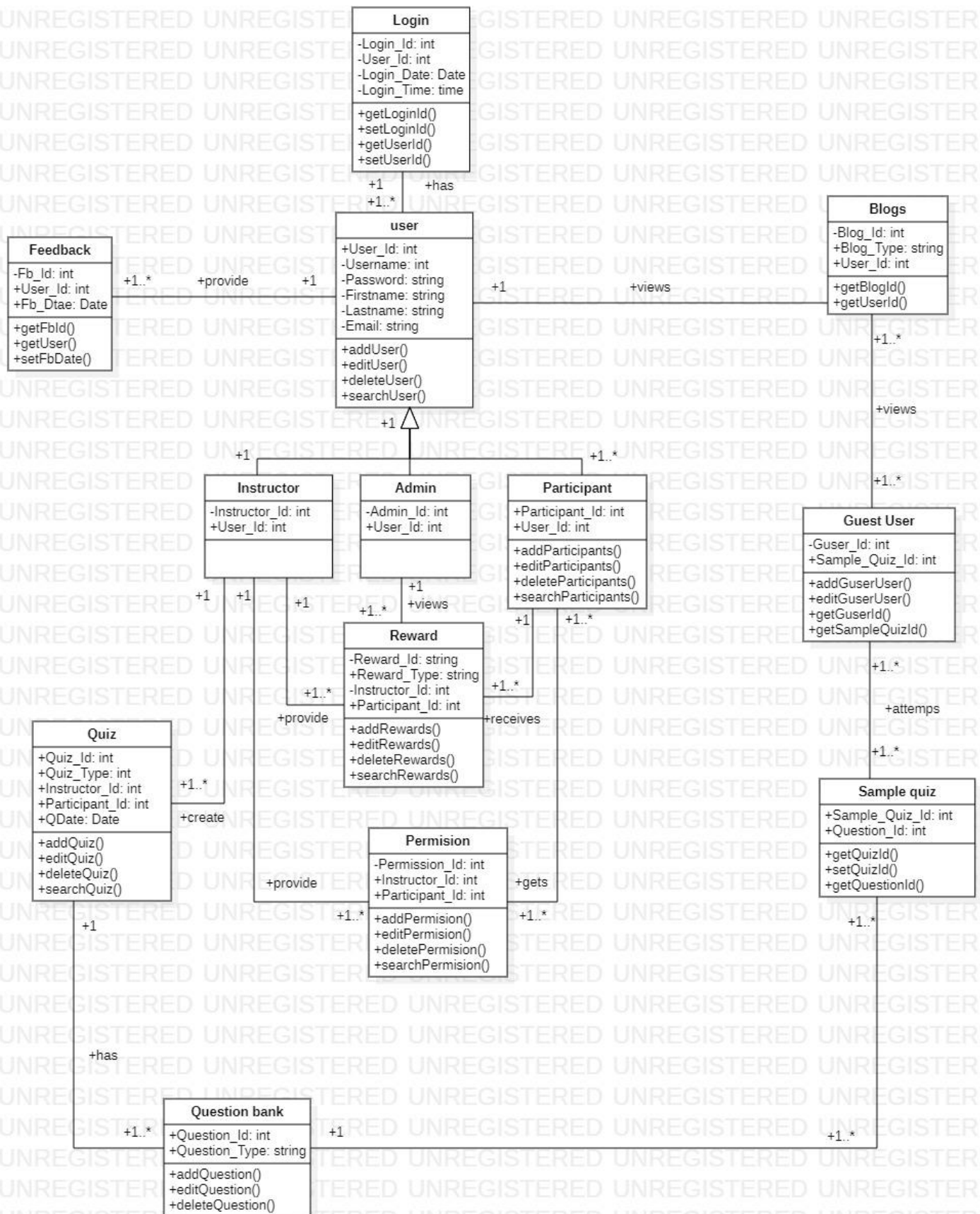
### 2.3.1 Usecase diagram



## 2.3.2 ER Diagram



### 2.3.3 Class Diagram



### 3. METHODOLOGY

One of the most widely used approaches for software development is the incremental development methodology. This method involves breaking down the project into smaller and more manageable units, each of which can be developed, tested, and delivered separately. The main benefits of this approach are that it allows for faster feedback, better quality assurance and more flexibility to accommodate changing requirements. Therefore, we have chosen incremental development methodology to develop our project.

Steps taken to follow the methodology:

- Define the scope and requirements of the project, such as the target audience, the quiz topics, etc.
- Break down the project into smaller and manageable tasks, such as creating admin dashboard, instructor dashboard, user registration, user profile management, Quiz creation and API handling.
- Prioritize the tasks based on their importance and dependencies, such as completing the core functionalities before adding extra features.
- Assigned the tasks to different team members according to their skills and availability and set deadlines for each task.
- Develop and test each task individually, using tools such as prototypes, unit tests, etc.
- Integrate and test the completed tasks with the rest of the project, using tools such as version control, code review, integration tests, etc.
- Review and evaluate the project progress regularly, using tools such as feedback forms, user testing, analytics, etc. (Review and evaluation will be done by the supervisor)
- Identify and resolve any issues or bugs that arise during the development process.
- Repeat steps several times until all the tasks are completed and the project meets the requirements and expectations of the stakeholders.
- Deploy and maintain the online quiz website, using tools such as hosting services, security measures, backup systems, etc.

## 4. IMPLEMENTATION

The database was built in accordance with the ER diagram. And we are currently working on integrating the constructed database into the system.

According to the priority of the features, we are in the process of building the user registration, user profile, and admin dashboard. The frontend/UI is under designing phase, and the backend work is proceeding as planned. In the user registration section, an email verification mechanism is utilized to validate the user by sending a verification code to their email address. And the administrator has a specified username and password, making him a super user. And the admin dashboard contains all user account management and quizzes if and only if any incorrect questions have been submitted.

These are some of the main functionalities we are proceeding with the development of ongoing features of the system.

Some of the created pages have been added in the appendixes of the report. And the rest of the works are under progress.

Created databases for Login, User, Admin, Instructor, Participant tables are below.

### Admin table

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	Admin_Id 	int(11)			No	None			 Change  Drop  More
<input type="checkbox"/>	2	User_Id 	int(11)			No	None			 Change  Drop  More

### Instructor table

	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	Instructor_ID 	int(11)			No	None			 Change  Drop  More
<input type="checkbox"/>	2	User_Id 	int(11)			No	None			 Change  Drop  More

### Login table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 <b>Login_Id</b>	int(11)			No	None			Change  Drop  More
<input type="checkbox"/>	2 <b>Login_time</b>	varchar(30)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/>	3 <b>Login_date</b>	varchar(30)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/>	4 <b>User_Id</b>	int(11)			No	None			Change  Drop  More

### Participant table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 <b>Participant_Id</b>	int(11)			No	None			Change  Drop  More
<input type="checkbox"/>	2 <b>Permission_Id</b>	int(11)			No	None			Change  Drop  More
<input type="checkbox"/>	3 <b>User_Id</b>	int(11)			No	None			Change  Drop  More

### User table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 <b>User_Id</b>	int(11)			No	None			Change  Drop  More
<input type="checkbox"/>	2 <b>First_name</b>	varchar(30)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/>	3 <b>Last_name</b>	varchar(30)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/>	4 <b>Password</b>	varchar(20)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/>	5 <b>Email</b>	varchar(30)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/>	6 <b>username</b>	varchar(30)	utf8mb4_general_ci		No	None			Change  Drop  More



## 5. RESOURCES

### 5.1 Software resources

#### 1. XAMPP server

- XAMPP is a free open-source cross platform web server stack package. XAMPP is used to test a website locally before releasing it to the main server.

#### 2. Visual studio code

- Visual studio code is a code editor used to run task and debugging during the development phase.

#### 3. Star UML

- Star UML is a Unified Modeling Language (UML) used to support as a tool in software modeling. It is an open source software modeling tool.

#### 4. Photoshop

- Photoshop is a paid software used to edit photos and graphic editor. It can also be used as a UI sketcher.

#### 5. Postman API

- Postman is an API platform used for building and using APIs.

#### 6. Microsoft Word and Microsoft PowerPoint

- Microsoft word is word processing software and Microsoft power point is presentation a by Microsoft office 365.
- Both the Microsoft word and Microsoft PowerPoint is used for documentation of simple and complex documents.

#### 7. Freepik

- Freepik is a search engine that helps to find high quality photos and images.

## 5.2 Hardware resources

- Computer and laptop with enough processing power, memory, and storage to run the software tools and applications.
- A backup device or service to store and protect the data and code of the project.
- A printer or scanner to print or scan documents related to the project.

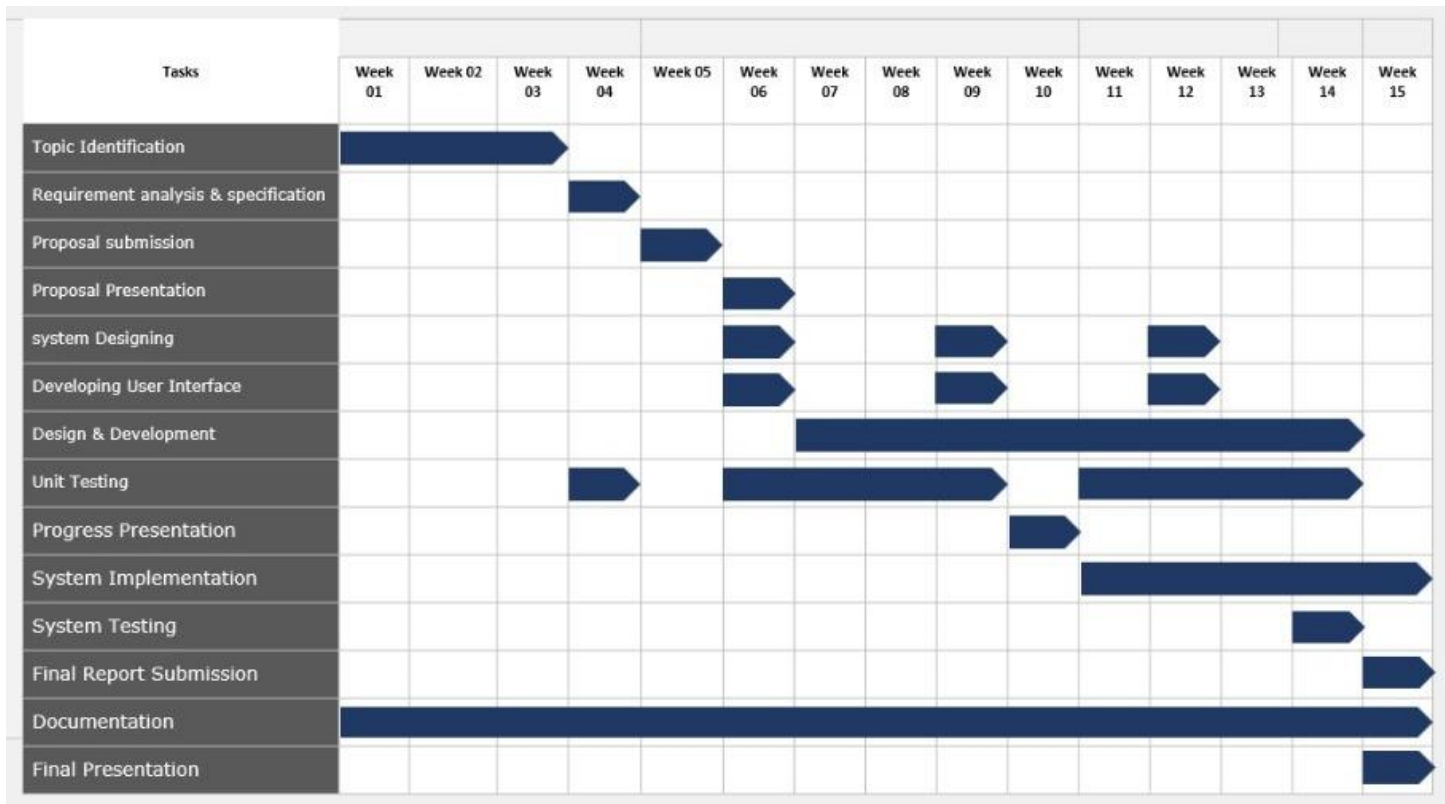
## 5.3 Technology

- CSS 3
- HTML 5
- PHP
- MySQL
- JavaScript
- Framework (Bootstrap, ReactJS)
- APIs



## 6. PROJECT PLAN

### 6.1 Project timeline



## 6.2 Individual contribution

Contributing area	Member
Admin dashboard	M.M. Zakky
Instructor dashboard	A.C.M. Akeel
User registration	A.C Aysha
User profile management	M.H.M. Samir
Quiz creation	M.F.F. Sumra
Question generation using API	M.M.S. Ahamed

## 6.3 Future works

- Instructor dashboard
- Quiz creation or customization
- Question generation using API
- Blog page
- Sample quiz generation

## 7. REFERENCES

- Amazon Web Services (2023). *What is an API? - API Beginner's Guide - AWS*. [online] Amazon Web Services, Inc. Available at: <https://aws.amazon.com/what-is/api/>.
- Kahoot! (n.d.). *Kahoot! Quiz games | Spark your child's natural curiosity for learning*. [online] Available at: <https://kahoot.com/home/kahoot-quiz-games/>.
- OpenAI (2023). *ChatGPT*. [online] chat.openai.com. Available at: <https://chat.openai.com/>.
- PHP Tutorial. (n.d.). *PHP Tutorial*. [online] Available at: <https://www.phptutorial.net/>.
- quizlet (2019). *Quizlet*. [online] Quizlet. Available at: <https://quizlet.com/en-gb>.
- www.w3schools.com. (n.d.). *Bootstrap 5 Tutorial*. [online] Available at: <https://www.w3schools.com/bootstrap5/index.php>.

## 8. APPENDIXES

### Login Page

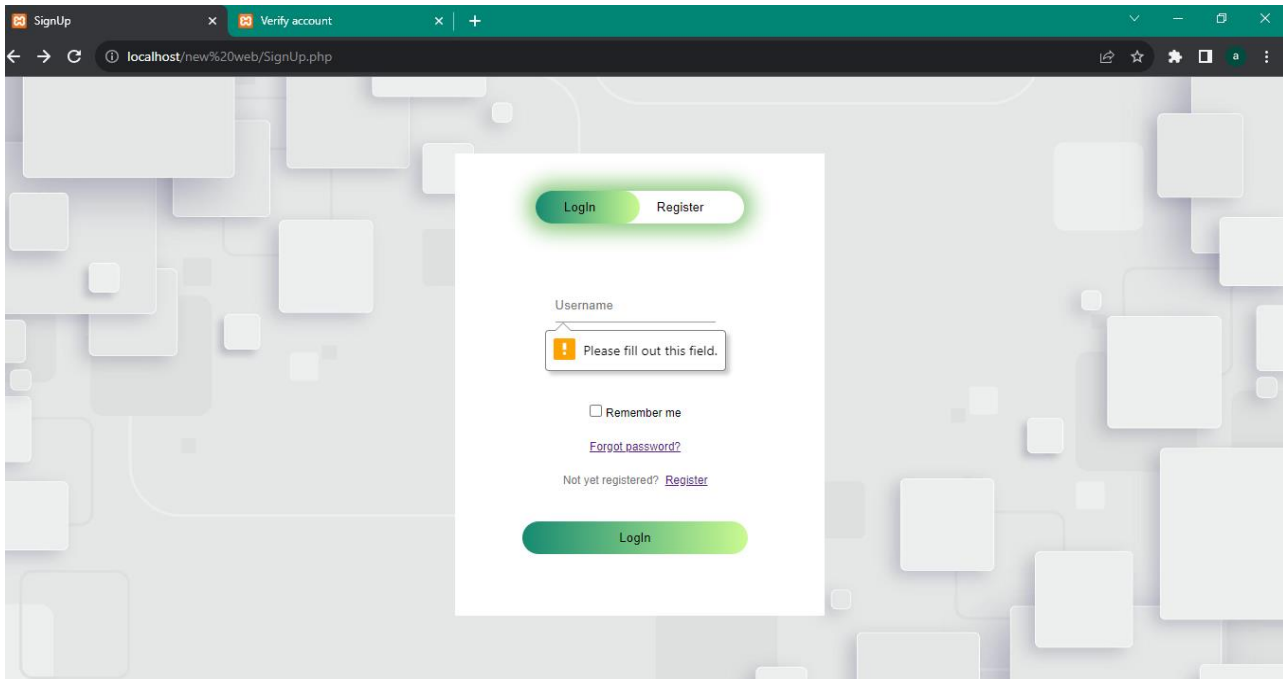


Figure 1

### Sign-up page

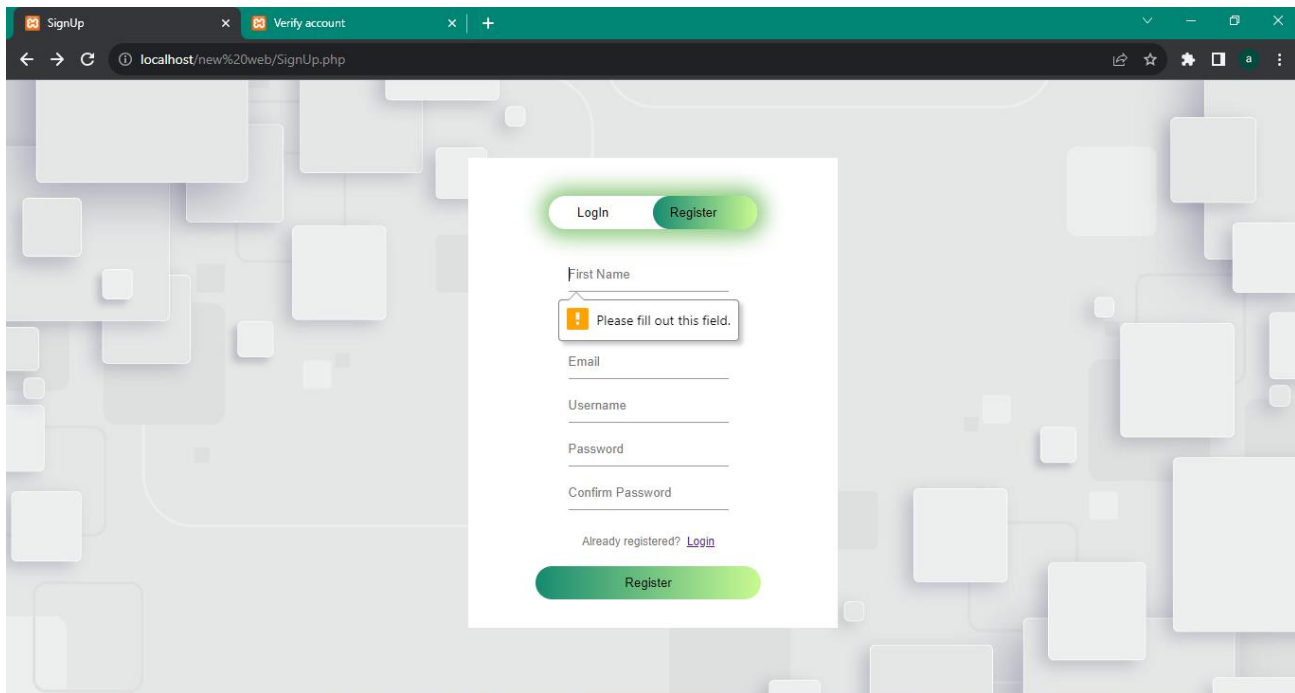
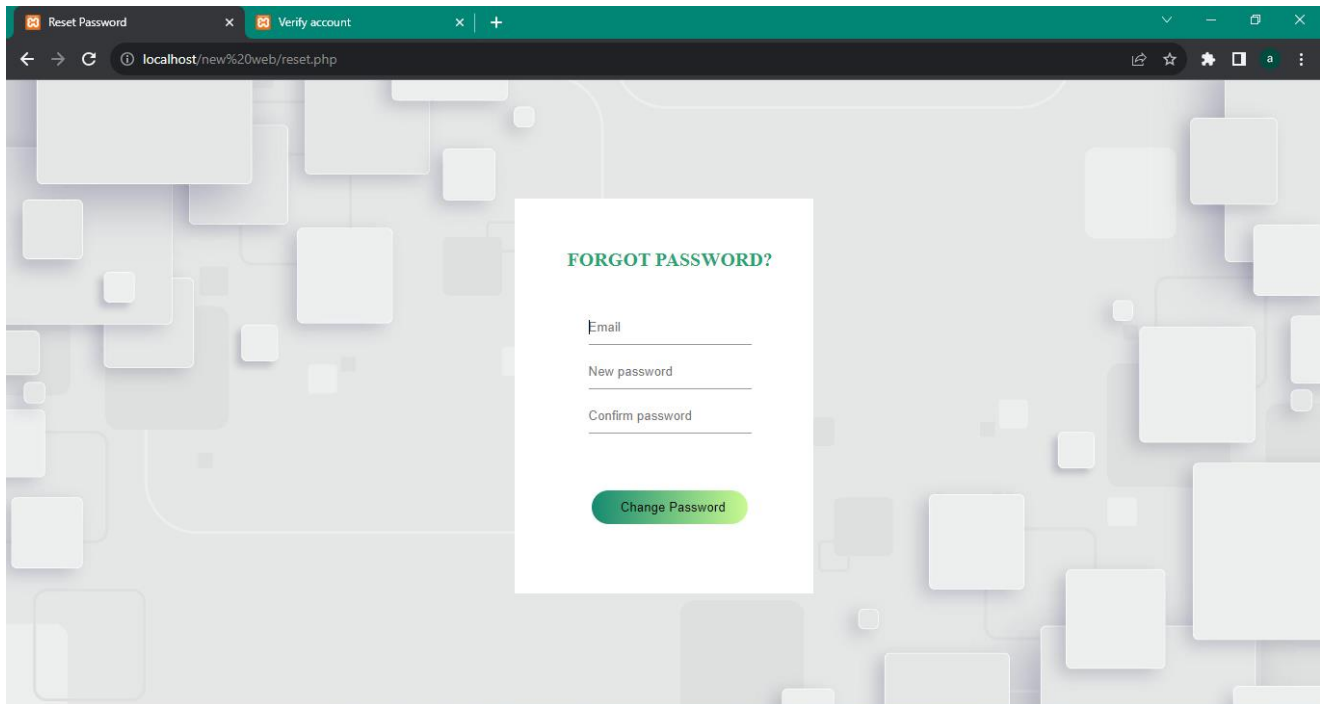


Figure 2

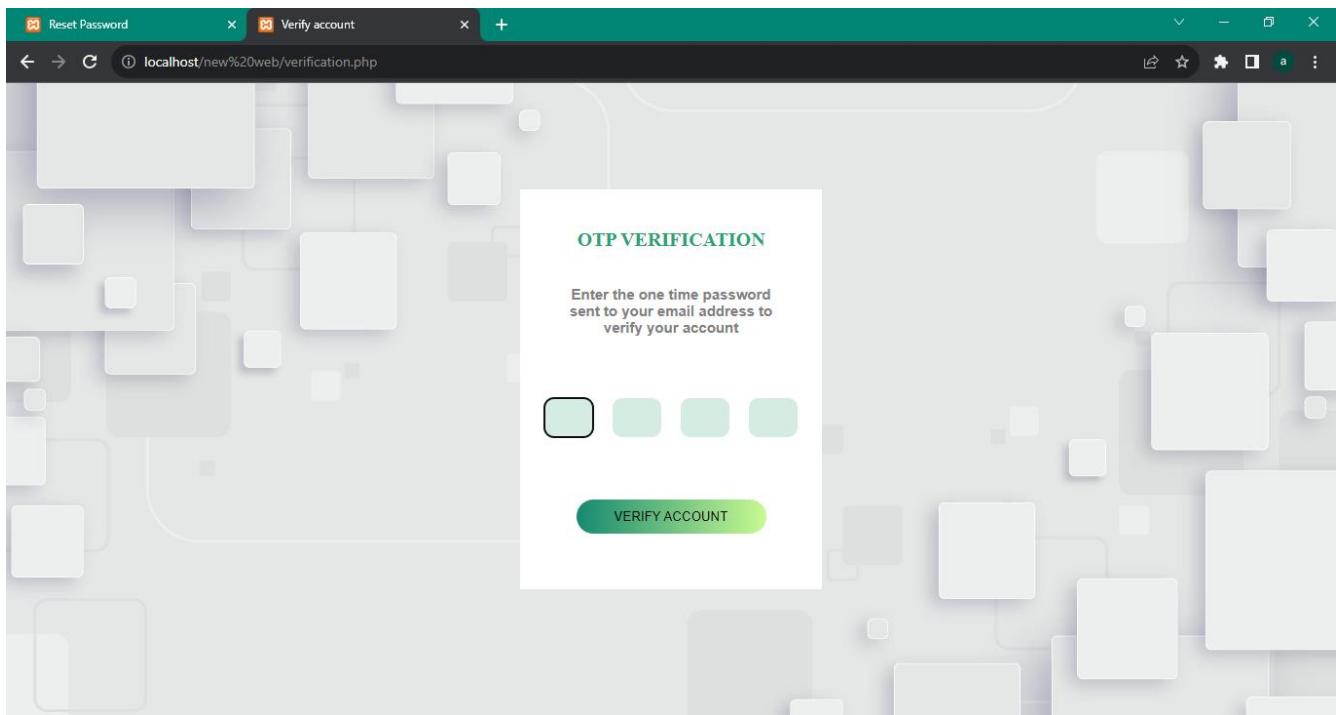
## Change password / Forgot password



The screenshot shows a web browser window with two tabs: 'Reset Password' and 'Verify account'. The address bar displays 'localhost/new%20web/reset.php'. The main content area features a white card with the title 'FORGOT PASSWORD?' in green. Below the title are three input fields: 'Email', 'New password', and 'Confirm password'. At the bottom of the card is a green button labeled 'Change Password'.

*Figure 3*

## OTP Verification



The screenshot shows a web browser window with two tabs: 'Reset Password' and 'Verify account'. The address bar displays 'localhost/new%20web/verification.php'. The main content area features a white card with the title 'OTP VERIFICATION' in green. Below the title is the instruction 'Enter the one time password sent to your email address to verify your account'. There are four input fields for the OTP, each represented by a light green square. At the bottom of the card is a green button labeled 'VERIFY ACCOUNT'.

*Figure 4*