

A Project Report On

# QUIZ MANAGEMENT SYSTEM

Submitted in partial fulfillment of the  
**MASTER OF COMPUTER APPLICATION**

By  
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**DEPARTMENT OF COMPUTER SCIENCE & IT**  
**ARKA JAIN UNIVERSITY, JHARKHAND**

**Jamshedpur**

**2021-2023**

# ARKA JAIN UNIVERSITY

The image shows the entrance gate of Arka Jain University. The gate is a large, white, rectangular structure with a flat roof. The words "ARKA JAIN UNIVERSITY" are written in large, blue, capital letters across the top of the gate. The gate is flanked by two tall, white pillars. Between the pillars is a large, dark brown wooden gate. A person in a blue shirt and dark pants is standing near the gate. The background shows green trees and a clear blue sky. The ground in front of the gate is a light-colored, textured surface.

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**DEPARTMENT OF COMPUTER SCIENCE AND IT**

**2021-2023**

# ARKA JAIN UNIVERSITY, JHARKHAND

## DEPARTMENT OF COMPUTER SCIENCE & IT



### CERTIFICATE

This is to certify that the project entitled, " **Quiz Management System**", is bonafied work of **Rishita Pramanick** bearing **Enrollment no- AJU/211583** submitted in partial fulfillment of the requirements for the award of degree in **MASTER OF COMPUTER APPLICATION** from **ARKA JAIN UNIVERSITY, JHARKHAND**.

**Internal Guide**

**HOD**

**Date:** 23.7.2022



**University**

# **ABSTRACT**

Quiz Management System is a software on computerized quiz challenge to develop knowledge about frontend web development requirements among it's users. The users can login and take up the quiz challenge to test their skills. It stores the data into a database in a sequential manner which can be easily retrieved when needed. The goal of this software is to provide easy accessing and manipulation of data from multiple systems. The software "Quiz Management System" is developed by using the markup language "HTML", implemented on PHP. It would be a distributed system so that multiple systems can access and manipulate the database. The database would be maintained in mySQL.

Overall this project is developed to arise awareness about the basic building blocks of web development to it's users.

# ACKNOWLEDGEMENT

It is a genuine pleasure to express my profound gratitude and deep regards to my Internal Guide **Ms. Alka Singh** and our HOD **Dr. Arvind Kumar Pandey** for their exemplary guidance, monitoring and constant encouragement. I would like to express my special thanks to **ARKA JAIN UNIVERSITY** who gave me the golden opportunity to do this wonderful project on the topic **Quiz Management System**, which helped me in doing a lot of Research and I came to know about so many new things.

With Regards

Rishita Pramanick

AJU/211583

Roll no: 41

# DECLARATION

I hereby declare that the project entitled, “**Quiz Management System**” done at “**Arka Jain University**”, has not been in any case duplicated to submit to any other university for the award of any degree to the best of my knowledge other than me. No one has submitted to any other university.

This project is done in partial fulfillment of the requirements for the award of degree in **MASTER OF COMPUTER APPLICATION** to be submitted as mini project as part of our curriculum.

Rishita Pramanick

**Signature of the student**

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# **Ch 1. INTRODUCTION**

## **1.1. OVERVIEW**

The project has been planned to be having the view of distributed architecture, with centralized storage of the database. The application for the storage of the data has been planned. Using the constructs of MySQL Server and all the user interfaces has been designed using the PHP technologies. The database connectivity is planned using the “MySQL Connection” methodology. The standards of security and data protective mechanism have been given a big choice for proper usage. The application takes care of different modules and their associated reports, which are produced as per the applicable strategies and standards that are put forwarded by the administrative staff. It has one module i.e. admin who manages all the functions of the QMS.

## **1.2. OBJECTIVE**

The Quiz Management System (QMS) aims to create awareness among it's users regarding Frontend technology that is used to design a website. When the user attends the exam he gets to see the result on exam submission. There is a specified time allotted to each question, on time-out the user will be automatically directed to next question and to the score board in case of last question. The application administrator can view all the results.

## **1.3. BENEFITS OF NEW SYSTEM**

The project is identified by the merits of the system offered to the user. The merits of this project are as follows: -

The user is mainly more concerned about the validity of the data, whatever he is entering. There are checks on every stages of any new creation, data entry or updation so that the user cannot enter the invalid data, which can create problems at later date.

Sometimes the user finds in the later stages of using project that he needs to update some of the information that he entered earlier. There are options for him by which he can update the records. There is restriction for him that he cannot change the primary data field. This keeps the validity of the data to longer extent. Project is user friendly which is one of the primary concerns of any good project. Data storage and retrieval will become faster and easier to maintain because data is stored in a systematic manner and in a single database.

Decision making process would be greatly enhanced because of faster processing of information since data collection from information available on computer takes much less time than manual system.

Easier and faster data transfer through latest technology associated with the computer and communication.

Through these features it will increase the efficiency, accuracy and transparency.

#### **1.4. IDENTIFICATION OF NEEDS**

The existing system is a manual one. After studying the problems of the existing system, the following requirements have been identified. Develop a new system that will reduce the manual effort of calculating. Develop a system that will built-up the database to facilitate future information and retrieval for analysis and other statements. Develop a system that will automate the monitoring of any problem during analysis. Develop a system that has a flexible design. The system should have provision to view performance during working with system. After completing the requirement determination and doing requirement analysis new system is designed with could solve the problem of existing system and fulfill the requirement of the users.

# Ch 2. SURVEY OF TECHNOLOGY

## 2.1. SOFTWARE DESCRIPTION

### Visual studio Code

Visual Studio Code combines the simplicity of a source code editor with powerful developer tooling, like IntelliSense code completion and debugging.

First and foremost, it is an editor that gets out of your way. The delightfully frictionless edit-build-debug cycle means less time fiddling with your environment, and more time executing on your ideas.

### Languages

#### HTML

HTML stands for **Hypertext Markup Language**. It allows the user to create and structure sections, paragraphs, headings, links, and blockquotes for web pages and applications.

HTML is not a programming language, meaning it doesn't have the ability to create dynamic functionality. Instead, it makes it possible to organize and format documents, similarly to Microsoft Word.

#### CSS

Cascading Style Sheets, fondly referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable.

CSS handles the look and feel part of a web page. Using CSS, you can control the color of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colors are used, layout designs, variations in display for different devices and screen sizes as well as a variety of other effects.

#### JavaScript

JavaScript is a dynamic computer programming language. It is lightweight and most commonly used as a part of web pages, whose implementations allow client-side script to interact with the user and make dynamic pages. It is an interpreted programming language with object-oriented capabilities.

## Why Using PHP?

There are a lot of reasons to know and love PHP, probably the most potent and valid of which is this: it's used and runs everywhere the web does. Your cheap little \$3 per month hosting account *may* let you run a web application in Python or Ruby if you shop carefully. But it'll definitely run PHP. This means that you can count on it wherever you are.

And because it runs everywhere, and is easy to get started with, *a lot* of very popular software is written in PHP. **WordPress** is the example that's both largest and most familiar to me, but tools like Joomla, Drupal, Magento, ExpressionEngine, vBulletin (yep, that's still around), MediaWiki, and more are all running PHP on the server.

## Why using MYSQL?

Many of the world's largest and fastest-growing organizations including Facebook, Google, Adobe, Alcatel Lucent and Zappos rely on MySQL to save time and money powering their high-volume Web sites, business-critical systems and packaged software.

Since then, the performance & scalability, reliability, and ease of use of the world's most **popular** open source database, characteristics that made **MySQL** the #1 choice for web applications, have relentlessly been improved.

## Ch 3. REQUIREMENT AND ANALYSIS

### 3.1. SOFTWARE REQUIREMENTS SPECIFICATIONS

A software requirements specification is a document that captures complete description about how the system is expected to perform. It is usually signed off at the end of requirements engineering phase.

1. **Product perspective:** The software product is a Web application. The application will be made up of two parts, one administrator who has all the rights and the other user who has limited rights to handle the application. The two users of the system, namely the Admin and User interact with the system in different ways.
2. **Product Functions:** First of all, it will authenticate the user whether he is Admin or User the unauthorized person can't get access to the application. The Admin will be able to Add, delete, and modify question. He can use this application to check all reports related to examination. The User has some less function compare to Admin. He will be able to play the quiz, see the score, etc.
3. **Safety Requirements:** All the data will be saved to database for safety purpose so there will be no data loss. These data can be accessed only by an authorized person so data theft is also not possible in this application.
4. **Security Requirements:** For preventing unauthorized access to the application, this application has login feature so only granted user can access with defined rights.
5. **System Analysis and Design:** It refers to the process of examining a business situation with the intent of improving it through better methods and procedures. System Analysis is the process of gathering and interpreting the facts, diagnosis the problems and using the information to recommend the improvements to replace or compliment an existing system.
6. **Preliminary investigation:** The system is investigated. The objective of this phase is to conduct an initial analysis and findings of the system.

#### Requirement analysis

During this phase, all the relevant information is collected from the customer to develop a product as per their expectation. Any ambiguities must be resolved in this phase only.

#### Feasiblity study

To evaluate feasibility, a feasibility study is performed, which determines whether the solution considered to accomplish the requirements is practical and workable in the software. Information such as resource availability, cost estimation for software development, benefits of the software to the organization after it is developed and cost to be incurred on its maintenance are considered during the feasibility study. The objective of the feasibility study is to establish the reasons for developing the software that is acceptable to users, adaptable to change and conformable to established standards.

## **System analysis**

Gather, analyze, and validate the information. Define the requirements and prototypes for new system.

## **Hardware and software study**

The hardware and software is developed or maintained for the smooth running of the project.

## **System design**

The design phase comes after a good understanding of customer's requirements, this phase defines the elements of a system, the components, the security level, modules, architecture and the different interfaces and type of data that goes through the system.

## **System testing and implementation**

Testing is becoming more and more important to ensure customer's satisfaction, and it requires no knowledge in coding, hardware configuration or design. In this phase, the system is ready to be deployed and installed in customer's premises.

## **Evaluation**

This phase identifies whether the system meets the initial requirements and objectives. This is when the system is evaluated for weaknesses. The objective of the evaluation phase of the systems development life cycle is to deploy the system and train the system end users.

## **Maintenance and modification**

In this phase, periodic maintenance for the system will be carried out to make sure that the system won't become obsolete, this will include replacing the old hardware and continuously evaluating system's performance, it also includes providing latest updates for certain components to make sure meets the right standards and the latest technologies to face current security threats.

## **3.2. PRELIMINARY INVESTIGATION**

The first step in any system development is the preliminary investigation to determine the feasibility of the system. The purpose of the preliminary investigation is to evaluate project requests. It is rather concerned with collecting of information that helps to evaluate the merits of the project that is to be undertaken and make an informed judgment about the feasibility of the proposed project.

While working on the QUIZ MANAGEMENT SYSTEM, I kept in mind that following objectives must be accomplished:

- Understand the project requested.
- Determine the size of the project
- Assess costs and benefits of alternative approaches
- Determine the technical and operational feasibility of alternative approaches.
- Report the findings to management, with recommendations outlining the acceptance of the proposal.

While conducting the investigation I have gone through the following activities:

1. **On-Site Observation:** Another technique I used to collect the training information is on-site observation. During this activity, I have observed the activities of the system directly. One main purpose was to get as close to the real system being studied.
2. **Conducting the interviews:** Written document and on-site observation technique helped me to understand how the Quiz System operates, but again they don't include enough details to allow a decision to be made about the merits of the system proposed, nor do they present user views about current operations. To learn these details I have conducted the interviews.

Requirement determination technique involves studying the current system to find out how it works and where improvement should be made. System studies results in evaluation of how current methods are working and where adjustments are necessary.

After studying all the details of the existing system, the exact problem is found out, new requirements of the user are studied and main objectives of the proposed system are outlined. After thorough study of the exact requirement of the system is clear and presentation diagram of the proposed system is designed and presented to the user, several solution strategies with regard to the problem is outlined.

### **3.3. FEASIBILITY REPORT**

Preliminary investigation examines project feasibility. The main objective of the feasibility study is to test the Technical, Operational and Economical feasibility for adding new modules and debugging old running system. There are aspects in the feasibility study portion of the preliminary investigation:

- Technical Feasibility
- Operation Feasibility
- Economical Feasibility

#### **Technical Feasibility**

The technical issue usually raised during the feasibility stage of the investigation includes the following:

- 1.Does the necessary technology exist to do what is suggested?
- 2.Do the proposed equipments have the technical capacity to hold the data required to use the new system?
- 3.Will the proposed system provide adequate response to inquiries, regardless of the number or location of users?
- 4.Can the system be upgraded if developed?
- 5.Are there technical guarantees of accuracy, reliability, ease of access and data security?

Earlier no system existed to cater to the needs of 'Secure Infrastructure Implementation System'. The current system developed is technically feasible. It is a web-based user interface. Thus, it provides an

easy access to the users. The database's purpose is to create, establish and maintain a workflow among various entities in order to facilitate all concerned users in their various capacities or roles. Permission to the users would be granted based on the roles specified. Therefore, it provides the technical guarantee of accuracy, reliability and security. The software and hardware requirements for the development of this project are not many and are available as free as open source. The work for the project is done with the current equipment and existing software technology. Necessary bandwidth exists for providing a fast feedback to the users irrespective of the number of users using the system.

### **Operational Feasibility**

Proposed projects are beneficial only if they can be turned out into information system. That will meet the organization's operating requirements. Operational feasibility aspects of the project are to be taken as an important part of the project implementation. Some of the important issues raised are to test the operational feasibility of a project includes the following: -

1. Is there sufficient support for the management from the users?
2. Will the system be used and work properly if it is being developed and implemented?
3. Will there be any resistance from the user that will undermine the possible application benefits?

This system is targeted to be in accordance with the above-mentioned issues. Beforehand, the management issues and user requirements have been taken into consideration. So there is no question of resistance from the users that can undermine the possible application benefits.

The well-planned design would ensure the optimal utilization of the computer resources and would help in the improvement of performance status.

### **Economic Feasibility**

A system can be developed technically and that will be used if installed must still be a good investment for the organization. In the economical feasibility, the development cost in creating the system is evaluated against the ultimate benefit derived from the new systems. Financial benefits must equal or exceed the costs.

The system is economically feasible. It does not require any additional hardware or software. Since the interface for this system is developed using the existing resources and technologies. There is nominal expenditure and economical feasibility for certain.

## **3.4. SYSTEM ANALYSIS**

After analyzing the requirements of the task to be performed, the next step is to analyze the problem and understand its context. The first activity in the phase is studying the existing system and other is to understand the requirements and domain of the new system. Both the activities are equally important, but the first activity serves as a basis of giving the functional specifications and then successful design of the proposed system. Understanding the properties and requirements of a new system is more difficult and requires creative thinking and understanding of existing running system is also difficult, improper understanding of present system can lead diversion from solution.



## **Study of The System**

### **GUI'S**

In the flexibility of the uses the interface has been developed a graphics concept in mind, associated through a browses interface. The GUI'S at the top level have been categorized as

1. Administrative user interface
2. The operational or generic user interface

The administrative user interface concentrates on the consistent information that is practically, part of the organizational activities and which needs proper authentication for the data collection. The interfaces help the administrations with all the transactional states like Data insertion, Data deletion and Date updation along with the extensive data search capabilities.

The operational or generic user interface helps the users upon the system in transactions through the existing data and required services. The operational user interface also helps the ordinary users in managing their own information helps the ordinary users in managing their own information in a customized manner as per the assisted flexibilities.

## **3.5. HARDWARE AND SOFTWARE REQUIREMENTS**

### **Hardware Requirement :-**

- Dual core processor and above
- 2GB of RAM & above
- 20GB of hard disk & above

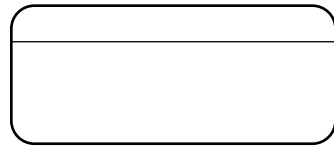
### **Software Requirement :-**

- Operating system: Windows 10
- Front end: Html, CSS, JavaScript
- Frameworks and library: Bootstrap, Font awesome, Google fonts
- Backend: PHP
- Text Editor: Visual Studio Code
- Database: MySQL
- Web Server: Apache

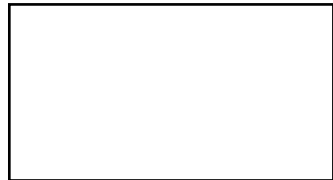
### 3.6 DATA FLOW DIAGRAM

DFD is an important tool used by system analysis. The main merit of DFD is that it can provide an overview of what data a system would process.

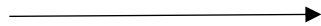
#### Symbols:



**Process**



**Entity**

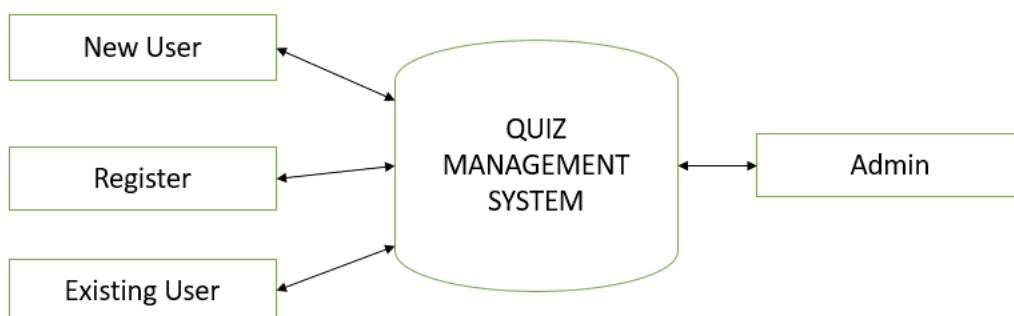


**Data Flow**



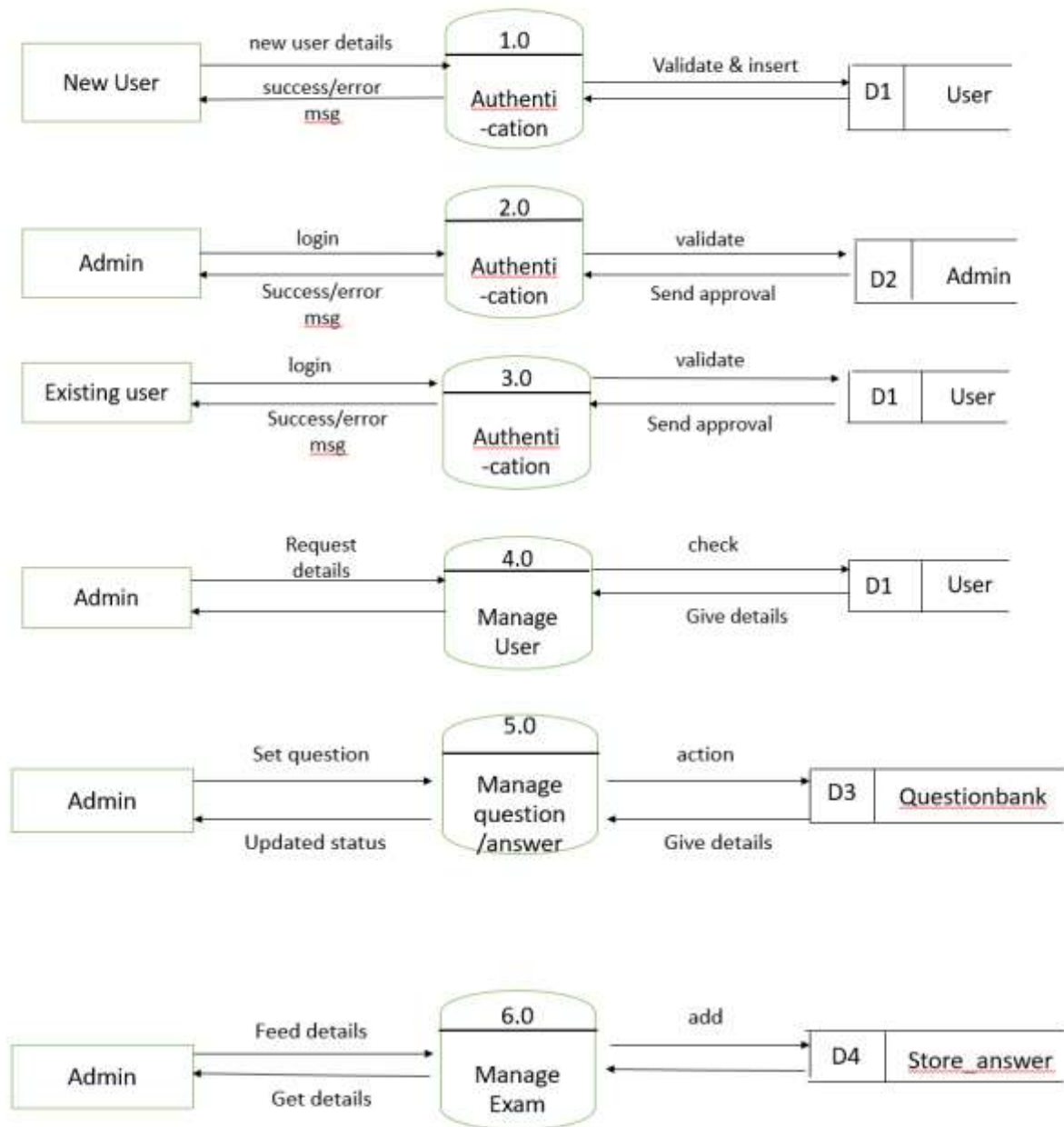
**Data Store**

#### 3.6.1. CONTEXT LEVEL DFD



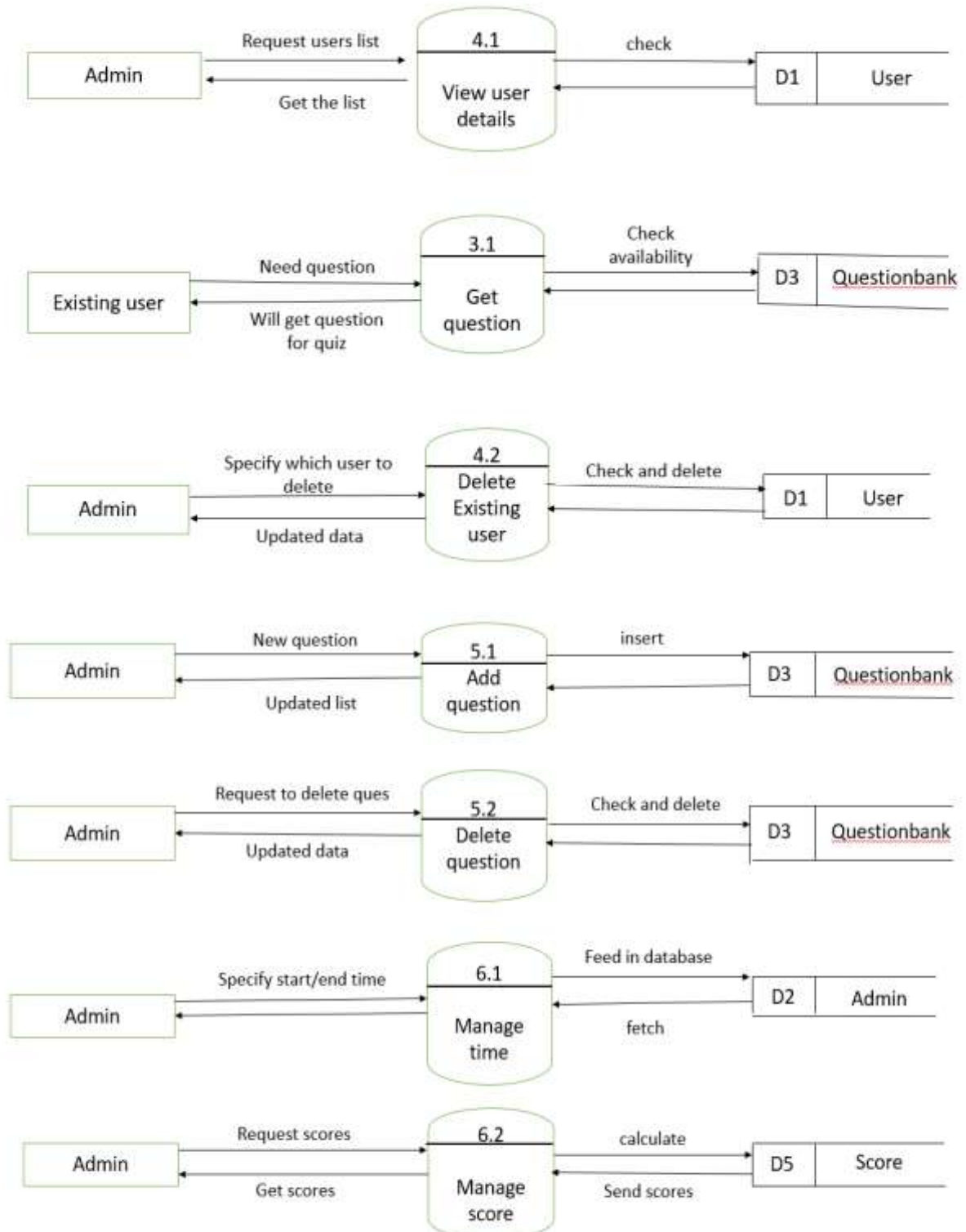
**DFD 0-LEVEL**

### 3.6.2. LEVEL 1 DFD



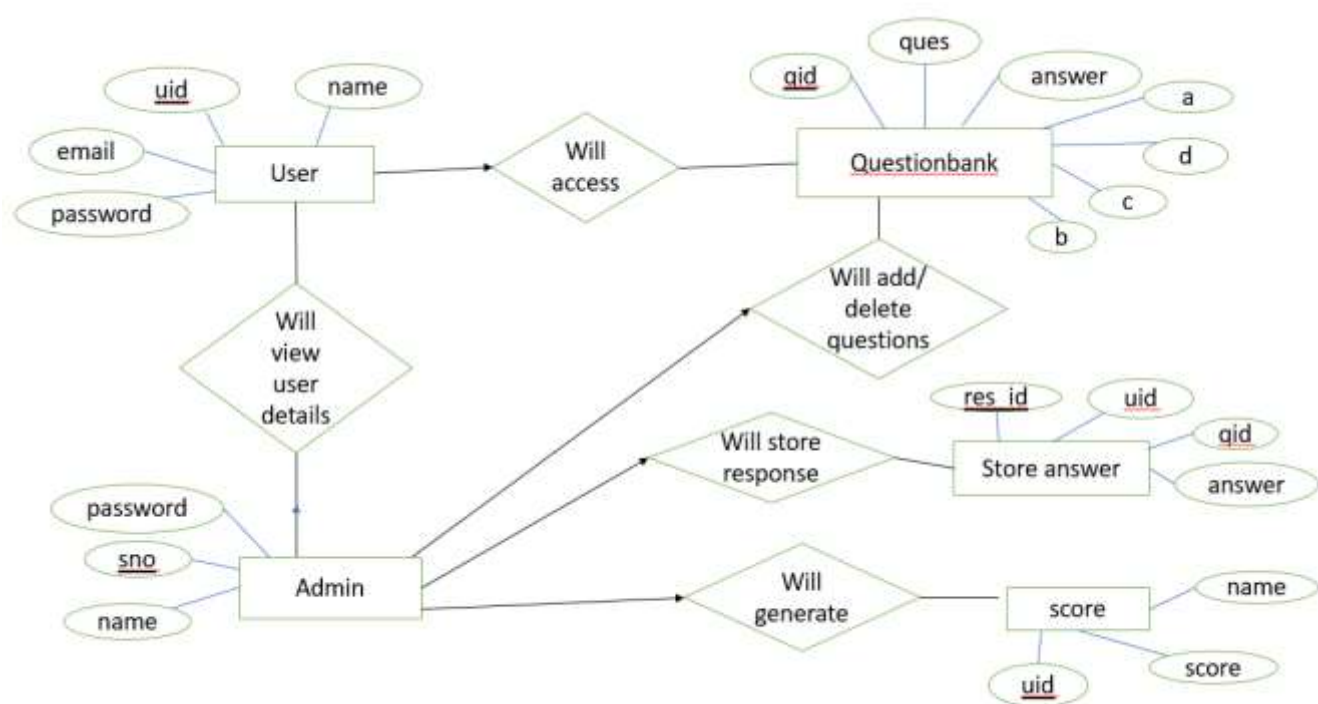
DFD 1-level

### 3.6.3. LEVEL 2 DFD



Fig, DFD 2-LEVEL

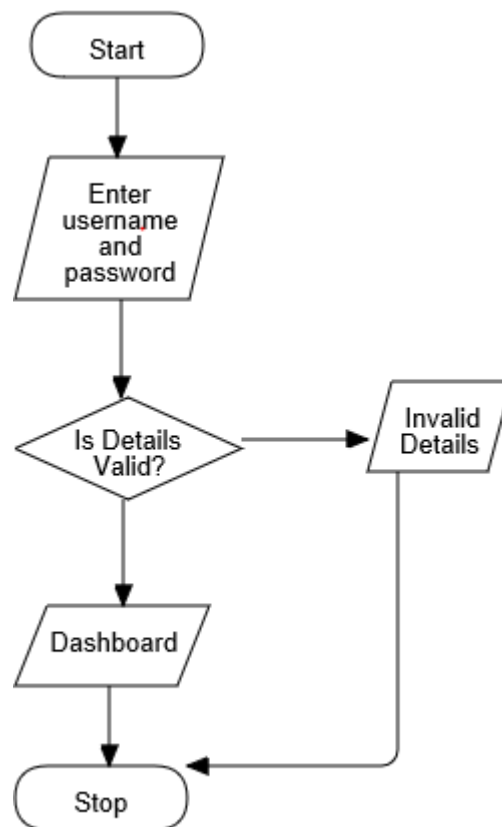
3.7. ER DIAGRAM



### 3.8. FLOW CHART

A flowchart is a diagram that depicts a process, system or computer algorithm. They are widely used in multiple fields to document, study, plan, improve and communicate often complex processes in clear, easy-to-understand diagrams. Flowcharts, sometimes spelled as flow charts, use rectangles, ovals, diamonds and potentially numerous other shapes to define the type of step, along with connecting arrows to define flow and sequence.

#### Login:



## **Ch.4 SYSTEM DESIGN**

Software design sits at the technical kernel of the software engineering process and is applied regardless of the development paradigm and area of application. Design is the first step in the development phase for any engineered product or system. The designer's goal is to produce a model or representation of an entity that will later be built. Beginning, once system requirements have been specified and analyzed, system design is the first of the three technical activities -design, code and test that is required to build and verify software.

The importance can be stated with a single word "Quality". Design is the place where quality is fostered in software development. Design provides us with representations of software that can assess for quality. Design is the only way that we can accurately translate a customer's view into a finished software product or system. Software design serves as a foundation for all the software engineering steps that follow. Without a strong design we risk building an unstable system – one that will be difficult to test, one whose quality cannot be assessed until the last stage.

During design, progressive refinement of data structure, program structure, and procedural details are developed reviewed and documented. System design can be viewed from either technical or project management perspective. From the technical point of view, design is comprised of four activities – architectural design, data structure design, interface design and procedural design.

### **4.1.INPUT TO THE PROJECT**

In order to complete the tasks of the Application and to get output by using this application work, there is need of some input based on the work that is to be carried out by using it. Input required for different purposes are:

- 1. Input for Login**
  - a. Username
  - b. Password
- 2. Input for Update Admin Profile**
  - a. Name
  - b. Username
- 3. Input for Add and Edit Questions**
  - a. Category Name
  - b. Category Code
- 4. Input for Search Product**
  - a. Product Name
- 5. Input for User Details**
  - a. Name
  - b. Email
  - c. Password

## 4.2. OUTPUT TO THE PROJECT

The development of the new system contains the following activities, which try to automate the entire process keeping in view of the database integration approach.

1. User friendliness is provided in the application with various controls.
2. The system makes the overall project management much easier and flexible.
3. There is no risk of data mismanagement at any level while the project development is under process.
4. It provides high level of security with different level of authentication.
5. User friendliness is provided in the application with various controls.
6. The system makes the overall project management much easier and flexible.
7. There is no risk of data mismanagement at any level while the project development is under process.
8. It provides high level of security with different level of authentication.

## 4.3. MODULARIZATION DETAILS

### **Admin Features:**

#### **Dashboard:**

In this section, admin can see all detail in brief like Total questions, registered users,scores,etc.

#### **Add/Delete question:**

In this section, admin can add/delete questions.

#### **Reports**

In this section, admin can see scores of all users.

## 4.4. DATA INTEGRITY

Data integrity is the overall completeness, accuracy and consistency of data. This can be indicated by the absence of alteration between two instances or between two updates of a data record, meaning data is intact and unchanged. Data integrity is usually imposed during the database design phase through the use of standard procedures and rules. The concept of data integrity ensures that all data in a database can be traced and connected to other data. This ensures that everything is recoverable and searchable. Having a single, well-defined and well-controlled data integrity system increases stability, performance, reusability and maintainability. Data values are standardized according to a data model and data type. All characteristics of the data must be correct including business rules, relations, dates and definitions for data to be complete. Data integrity is imposed within a database when it is designed and is authenticated through the ongoing use of error checking and validation routines. As a simple example, to maintain data integrity numeric columns/cells should not accept alphabetic data



## 4.5. DATA DICTIONARY

The data in the system has to be stored and retrieved from database. Designing the database is part of system design. Data elements and data structures to be stored have been identified at analysis stage. They are structured and put together to design the data storage and retrieval system.

A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. The general objective is to make database access easy, quick, inexpensive and flexible for the user. Relationships are established between the data items and unnecessary data items are removed. Normalization is done to get an internal consistency of data and to have minimum redundancy and maximum stability. This ensures minimizing data storage required, minimizing chances of data inconsistencies and optimizing for updates. The MS Access database has been chosen for developing the relevant databases.

### Database tables :

**admin :** This table stores admin login details

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 <b>sno</b>	int(1)			No	None		AUTO_INCREMENT	Change  Drop  More
<input type="checkbox"/>	2 <b>name</b>	varchar(30)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/>	3 <b>password</b>	varchar(10)	utf8mb4_general_ci		No	None			Change  Drop  More

**user:** This table store user details.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 <b>uid</b>	int(2)			No	None		AUTO_INCREMENT	Change  Drop  More
<input type="checkbox"/>	2 <b>name</b>	varchar(30)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/>	3 <b>email</b>	varchar(30)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/>	4 <b>password</b>	varchar(8)	utf8mb4_general_ci		No	None			Change  Drop  More

**questionbank :** This table stores the question for quiz

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/> 1	<b>qid</b>	varchar(4)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/> 2	<b>ques</b>	varchar(100)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/> 3	<b>a</b>	varchar(50)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/> 4	<b>b</b>	varchar(50)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/> 5	<b>c</b>	varchar(50)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/> 6	<b>d</b>	varchar(50)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/> 7	<b>ans</b>	varchar(1)	utf8mb4_general_ci		No	None			Change  Drop  More

**score :** This table stores scores for each user.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/> 1	<b>uid</b>	int(2)			No	None			Change  Drop  More
<input type="checkbox"/> 2	<b>name</b>	varchar(30)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/> 3	<b>score</b>	smallint(2)			No	None			Change  Drop  More

**Store\_ans:** This table stores the answer to each question of the quiz marked by each user

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/> 1	<b>res_id</b>	int(2)			No	None		AUTO_INCREMENT	Change  Drop  More
<input type="checkbox"/> 2	<b>uid</b>	varchar(5)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/> 3	<b>qid</b>	varchar(5)	utf8mb4_general_ci		No	None			Change  Drop  More
<input type="checkbox"/> 4	<b>answer</b>	text	utf8mb4_general_ci		No	None			Change  Drop  More

4.6 NORMALIZATION

0NF

email
password
name
uid
qid
ques
answer
a
b
c
d
res_id
score
sno
name
password

1NF

admin
sno
name
password

questionbank
qid
ques
answer
a
b
c
d

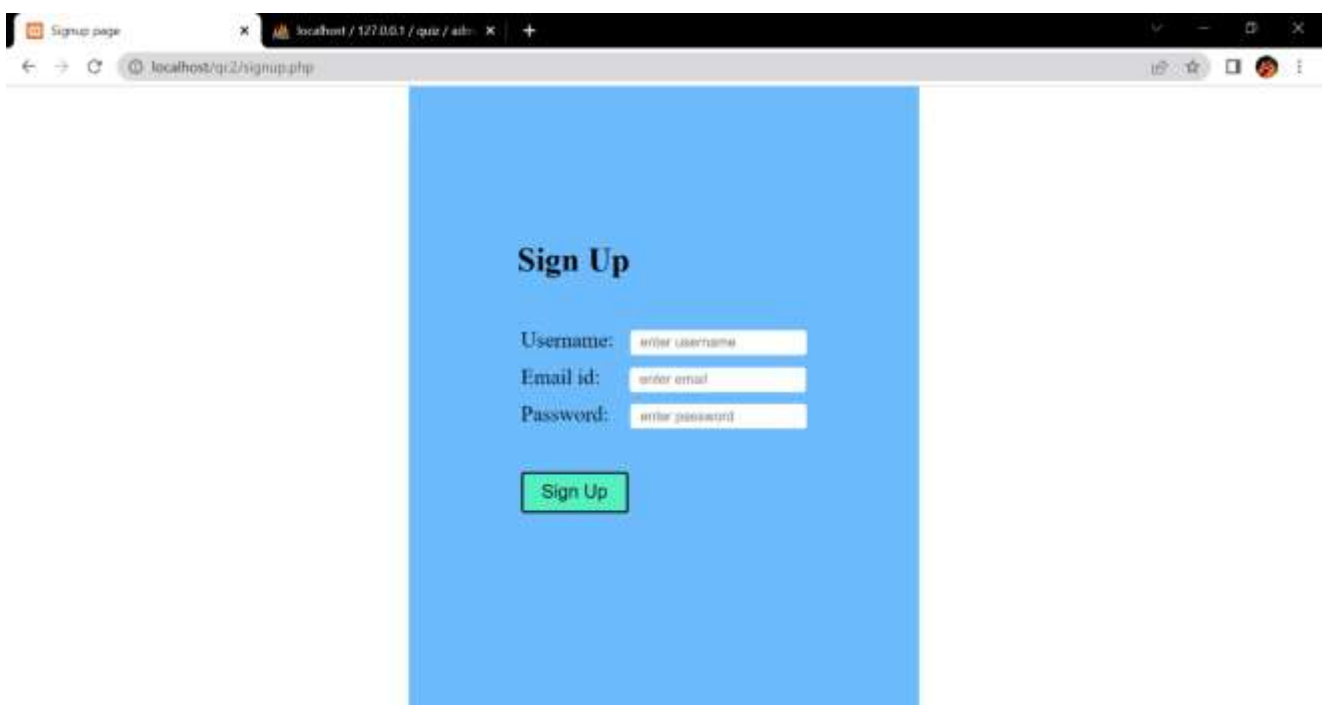
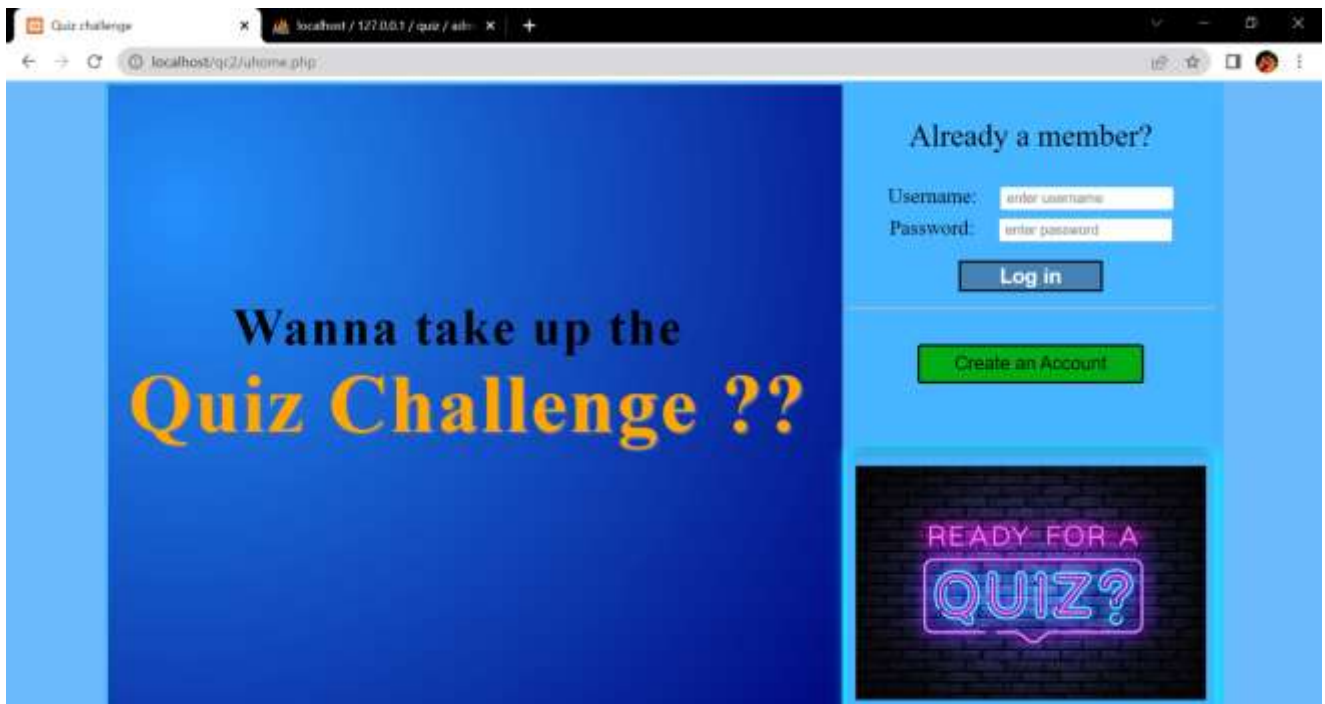
user
uid
name
email
password

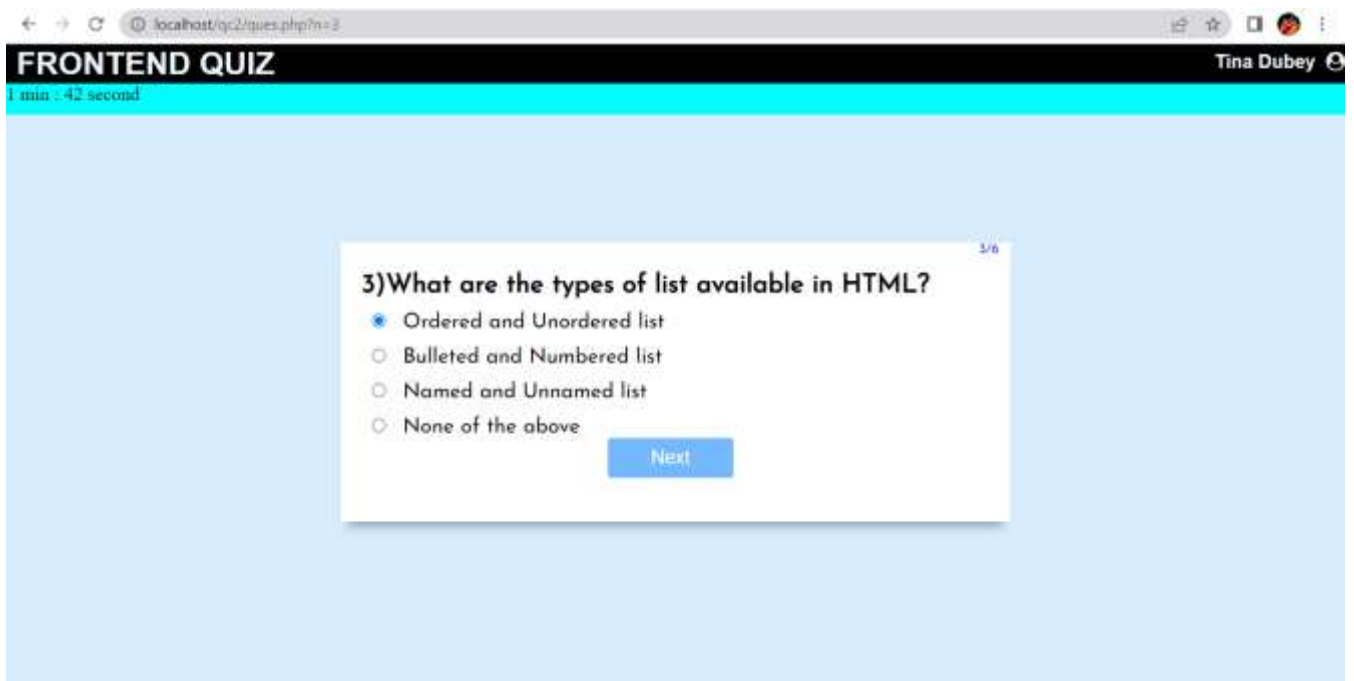
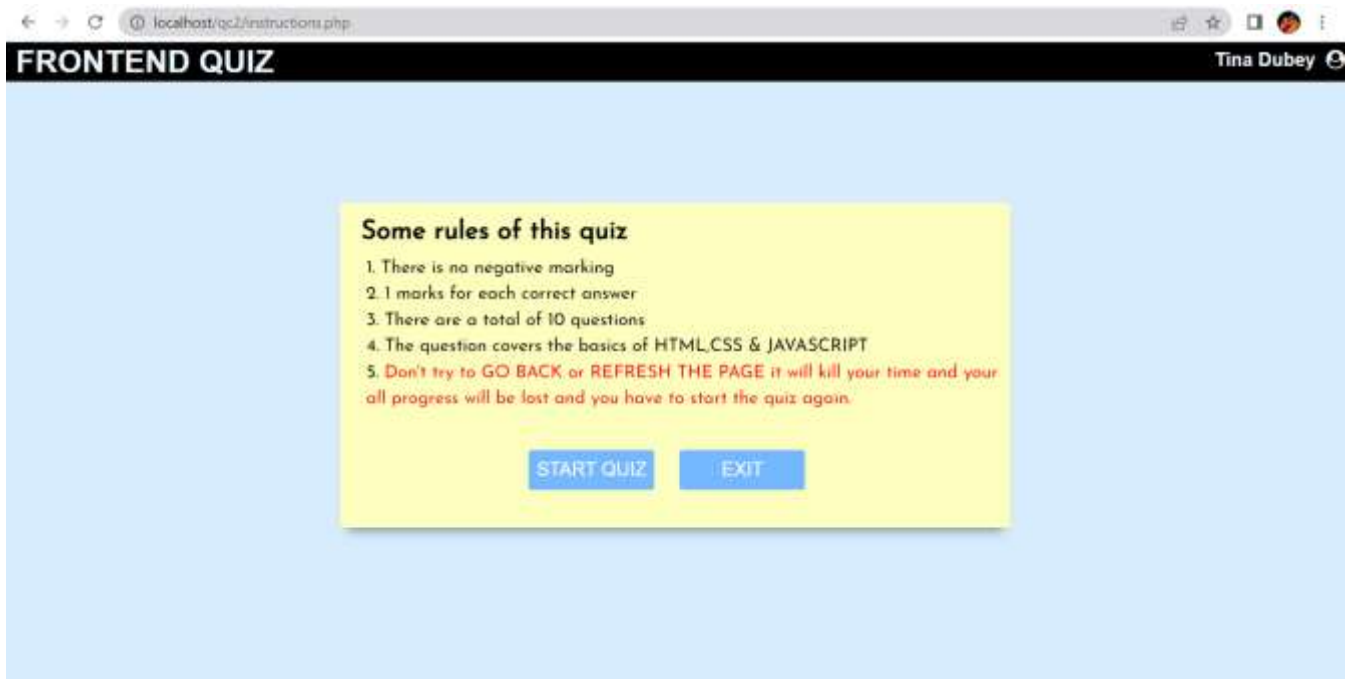
score
uid
name
score

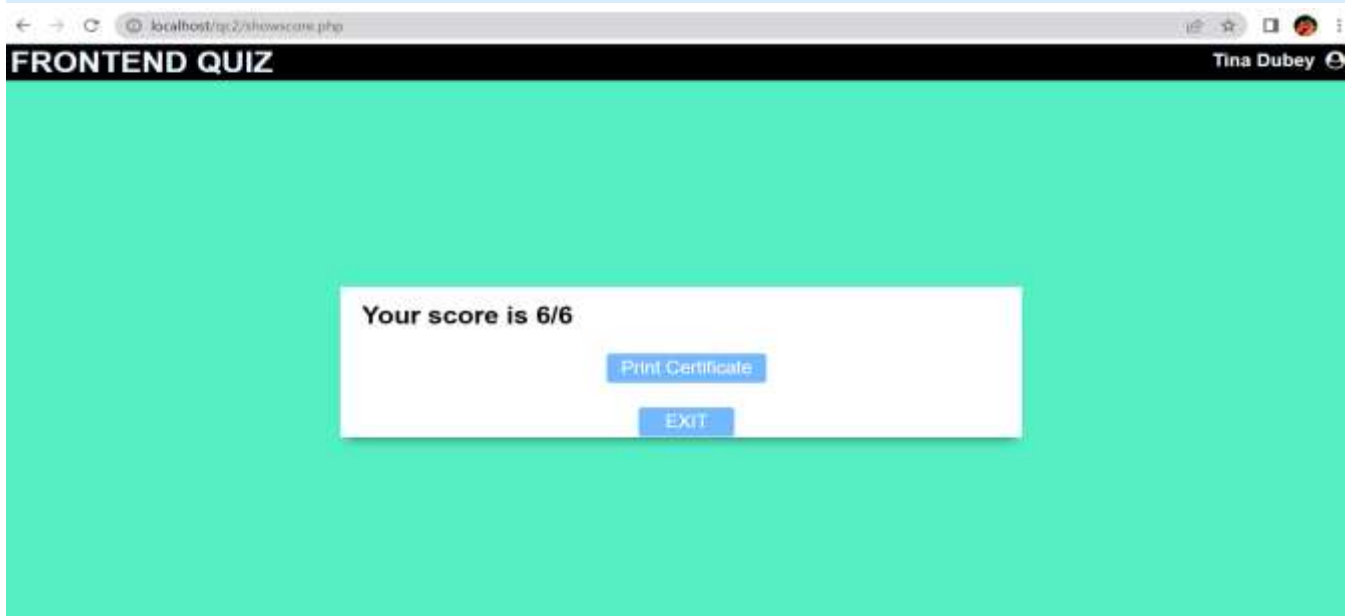
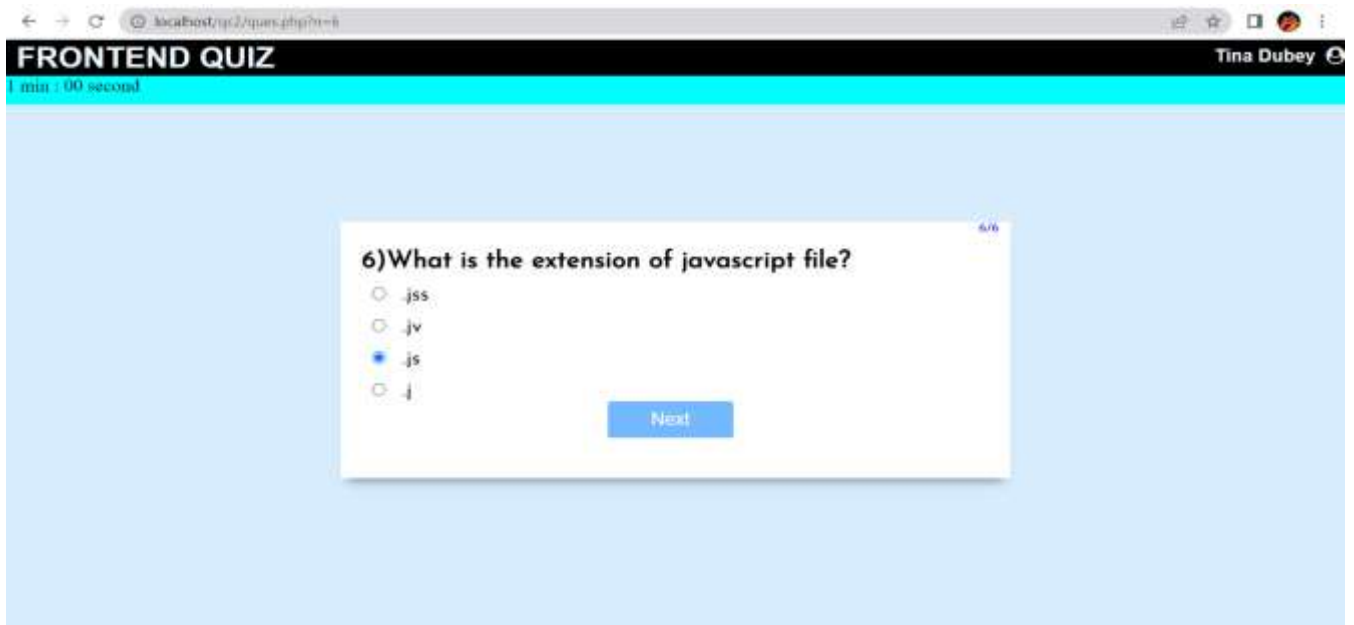
|

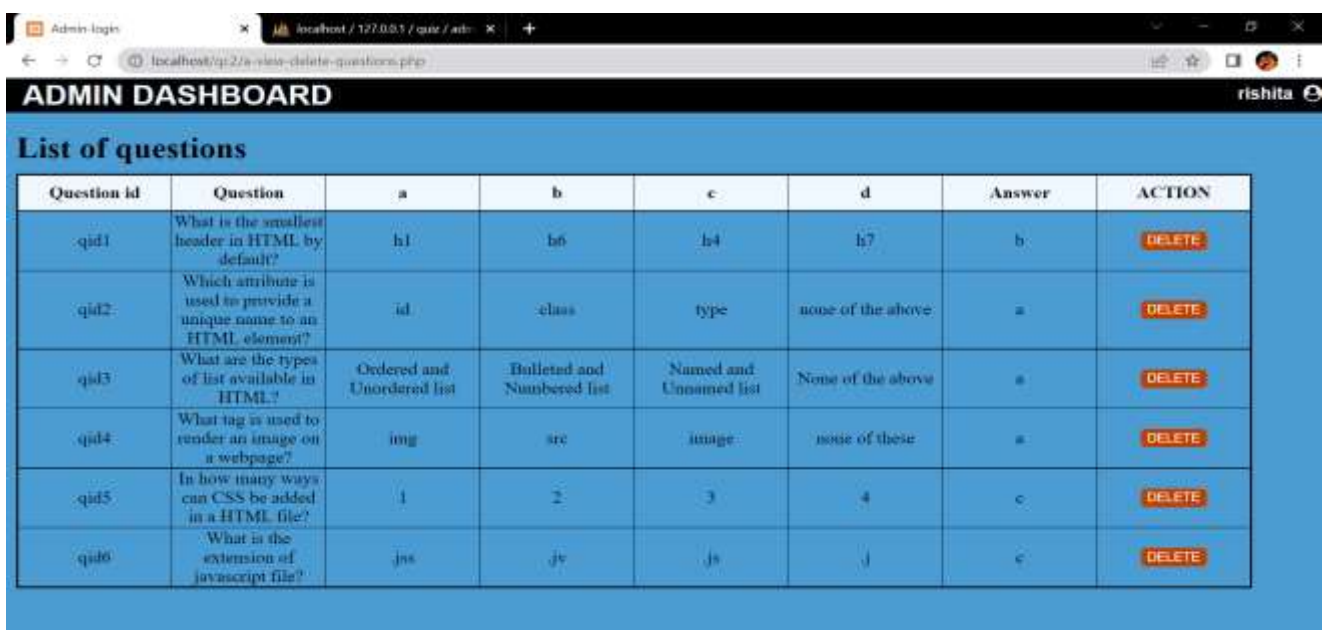
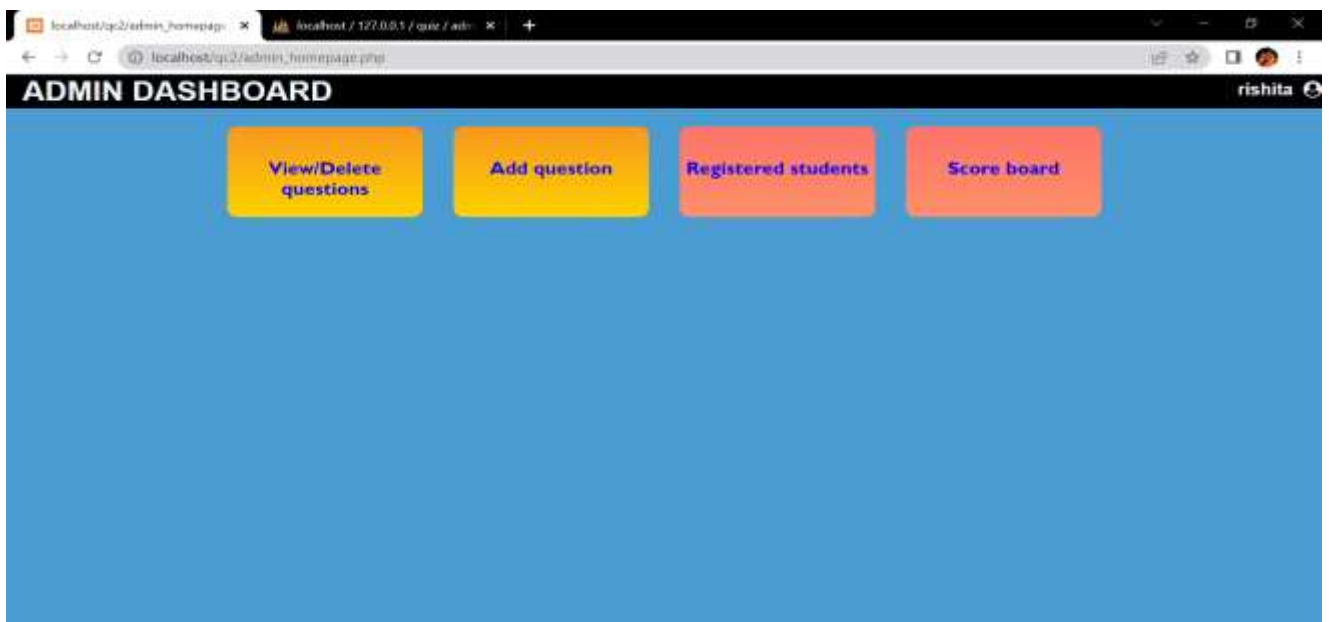
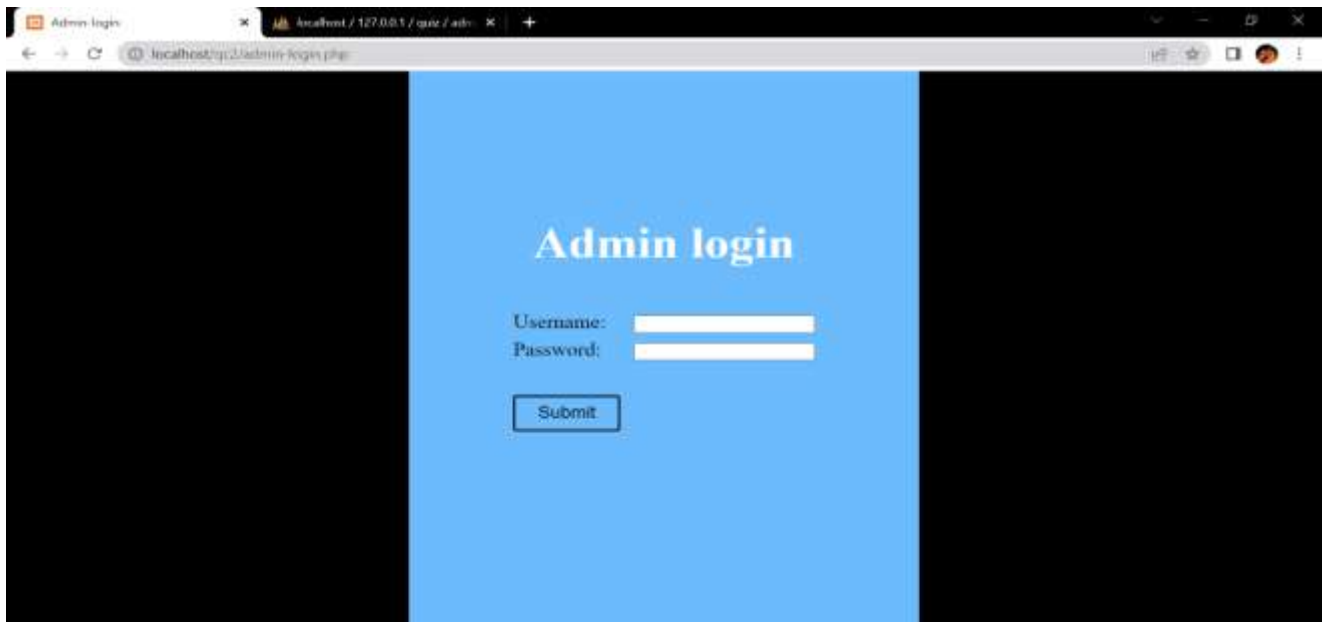
Store_answer
uid
qid
answer
res_id

## Ch 5. SCREENSHOTS











ADMIN DASHBOARD rishita

Write the question

a

b

c

d

Answer

ADMIN DASHBOARD rishita

Registered students

Serial no	Name	Email	Password	ACTION
58	Yash Raj	yash.r23@gmail.com	rqj123	<input type="button" value="DELETE"/>
59	Meera Singh	agf56k@gmail.com	ms1234	<input type="button" value="DELETE"/>
60	Sara Kumari	sara123@gmail.com	Skumari8	<input type="button" value="DELETE"/>
61	Aryan Singh	aryan234k@gmail.com	ASingh32	<input type="button" value="DELETE"/>
62	Maya Sinha	Maya54@gmail.com	Mayas980	<input type="button" value="DELETE"/>
63	Tina Dubey	tind56@gmail.com	TinaD45	<input type="button" value="DELETE"/>

ADMIN DASHBOARD rishita

Scoreboard

Userid	Name	Score
58	Yash Raj	5
59	Meera Singh	1
60	Sara Kumari	5
61	Aryan Singh	5
62	Maya Sinha	4
63	Tina Dubey	6



## Ch 6. PROGRAM CODE AND TESTING

### 6.1. CODE DETAILS AND CODE EFFICIENCY

#### uhome.php

```
<?php
session_start() ;
//checking login credentials
if(isset($_POST['btn2']))
{
    $_SESSION["username"] = $_POST['user'] ;
    echo "session variable is :".$_SESSION["username"];
    include 'connection.php';
    //step 1 collect post variables
    $nm= $_POST['user'];
    $pswd= $_POST['pass'];
    //step 2 write sql query to get values
    $sql="select * from `user` ";
    $res=mysqli_query($con,$sql);
    $flag=0;
    //echo $res;
    while($row=mysqli_fetch_array($res)){
        //echo $row;  array
        // echo $row["sno"].$row["name"].$row["password"]."<br>";
        if(( $row["name"]== $nm) and ($row["password"]== $pswd))
        {
            $_SESSION["userid"] =$row["uid"];
            echo "session variable is :".$_SESSION["userid"];
            $flag++;
            break;}
    }
    $no=mysqli_num_rows($res);
    echo $no;
    if($flag==1){

?>
<script>alert("matched");
window.location="instructions.php";</script>
<?php
}
else{
?>
<script>alert("no match");</script>
<?php
}
}
?>
```

```

<!DOCTYPE html>
<html>
<head>
  <title>Quiz challenge</title>
  <style>
    *{margin:0;padding:0;box-sizing:border-box;}
    html{font-size:62.5%;}
    body{background-color:rgb(107, 187, 253) ;
      }
    #d{
      height:100vh; width:85%;margin:auto; padding:3px;
      background-color:#47B5FF;
      display:grid;
      grid-template-columns: 66% 33%;
      grid-template-rows:19fr 12fr ;
      text-align: center;
      grid-gap:5px;

    }
    #left{ grid-row:1/-1;
      display:flex;
      flex-direction:column;
      justify-content:center;
      align-items:flex-start;
      background-image: radial-gradient( circle farthest-corner at 10% 20%, rgba(37,145,251,0.98)
0.1%, rgba(0,7,128,1) 99.8% );
      background-color: #0077c0;
    }
    h1{font-size: 5rem; letter-spacing: .2rem;margin-top:-5rem; }
    #span1{font-size:8rem; color:orange;text-shadow: 2px 2px 2px royalblue;margin-left: 2rem;}
    #rightbottom{ margin:auto 0; box-shadow: 1px 2px 10px 3px #0ff;}
    #rightbottom img{background-size: cover;
height:90%;width:100%;margin:auto;padding:1.3rem 0.8rem;
    }
    #righttop{ box-shadow: 1px 5px 10px 3px #0ff;
      display:flex;flex-direction:column; justify-content: center; align-items: center;
      box-shadow:0 1rem 1rem -0.7rem rgba(0,0,0,0.4)}
      p{ font-size: 3rem;margin-top:-3rem}
      .sd{margin:0.6rem}
      #righttop input{padding-left:0.6rem; border:none;border-
radius:0.2rem;height:2.2rem;outline:none}
      #righttop label{font-size:2rem}
      hr{width:100%;margin-top:1rem;}
      #btn2{ width:14rem;height:3rem; margin-top:1.3rem;margin-bottom:4px; background-color:
steelblue;color:white; }
      #btn1{ width:22rem;height:3.8rem; margin-top:3.5rem; font-size: large; background-color:
#03ac13; border-radius: 3px;
    }
      #btn1:hover{
        border-color:blue; background-color:#03c04a }
      #btn2:hover{background-color:royalblue}
  </style>

```

```

</head>
<body>
  <div id="d">
    <div id="left">
      <h1>Wanna take up the <br><span id="span1">Quiz Challenge ??</span></h1>
    </div>

    <div id="righttop">
      <p>Already a member?</p>
      <form method="post" action="uhome.php">
        <div class="sd" style="margin-top:3rem"><label>Username:</label><input type="text"
style="margin-left:2.3rem" name="user" placeholder="enter username" required></div>

        <div class="sd"><label>Password:</label><input type="password"
name="pass"style="margin-left:2.4rem" placeholder="enter password" required></div>

        <button name="btn2" id="btn2"><h2>Log in</h2></button>

      </form>
      <hr/>
      <button type="sumbit" name="btn1" id="btn1">Create an Account</button>
    </div>

    <div id="rightbottom">
      
    </div>
  </div>
  <script>
    document.getElementById("btn1").addEventListener('click',()=>
    { window.location="signup.php";})
  </script>
</body>
</html>

```

## **processing.php**

```

<?php
session_start();
include 'connection.php';

//first tym it will be 0 only
if(!isset($_SESSION["score"]))
{ $_SESSION["score"]=0;}

if($_POST){
  $choice=$_POST["rd");// from radio button
  $c=$_POST["count"]; // from hidden input
  $id= "qid".$c;
  $userid=$_SESSION["userid"];

```

```

//step 10 write sql query to insert
$sql1="INSERT INTO `store_answer` ( `uid`, `qid`, `answer`) VALUES ('$userid ', '$id',
'$choice')";
//step 11 execute the query
$check=mysqli_query($con,$sql1);

//step 1 write sql query to get the question
$sql="select * from `questionbank` where qid='$id' ";
$res=mysqli_query($con,$sql);
$row=mysqli_fetch_assoc($res);
$correctans=$row["ans"];
//comparison
if($correctans == $choice)
    { $_SESSION["score"]++;}

// count total question n divert accordingly to respective page
//to count total rows in the table
$sql="select * from `questionbank` ";
$res=mysqli_query($con,$sql);
$total_rows=mysqli_num_rows($res);
if($c == $total_rows )
header("location:showscore.php") ;
else

    header("location:ques.php?n=" .++$c);}
?>

```

## **ques.php**

```

<?php
session_start() ;
include 'connection.php';
//this we r taking from instructions page
$c=$_GET['n'];
$id= "qid".$c;
//step 1 write sql query to get question
$sql="select * from `questionbank` where qid='$id' ";
$res=mysqli_query($con,$sql);
$row=mysqli_fetch_array($res);
//to count total rows in the table
$sql="select * from `questionbank` ";
$res=mysqli_query($con,$sql);
$total_rows=mysqli_num_rows($res);
?>

<!DOCTYPE html>

<head>
    <title>Questions</title>
    <link
href="https://fonts.googleapis.com/css2?family=Josefin+Sans:wght@300;400&display=swap"

```

```

rel="stylesheet">

<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-
awesome.min.css">
<script type="text/javascript">
  window.history.forward();
</script>
<style>

  html{ font-size:62.5%;}
  *{ margin:0;padding:0;box-sizing:border-box }

  #outer{ min-height:89vh;width:100vw;display: grid;place-items: center; background-color:
hsl(206,94%,92%);
  }
  #inner{height:43vh;width:50vw; margin-top:-4rem;
    background-color:white ;
    box-shadow:0 1rem 1rem -0.7rem rgba(0,0,0,0.4);
    font-size: 1.3rem;

    font-family: 'Josefin Sans', sans-serif;
    padding-left:2rem;
  }
  #display_ques{ display:flex;flex-direction:column;align-items: flex-start;justify-
content:center;}
  h2{ color: black; font-size: 2.5rem; margin-top:1.5rem }

  #btn4{ width:12rem;height:3.8rem; margin-left:23.5rem; font-size: large; border-radius: 3px;
    cursor:pointer;

    border:none;background-color: #74b9ff; color:white}

  #btn5:hover,#btn4:hover{ background-color: #0984e3;
    box-shadow: inset 0 0 0 0 rgba(255,255,255,0.9)}

  li{list-style-type:none;font-size:2rem; margin-top:0.5rem; }
  input{margin:1rem 0 0.5rem 1rem; cursor:pointer}
  label{margin:-3rem 0 -0.7rem 1rem; }
  #show{ display:none;flex-direction:column;align-items: center;justify-content:center;}
  #showr{display:none;}
  a{text-decoration: none;}
  #btn5{ display:none}
  nav{ height:6vh;width:auto;display:flex;background-color: #000;font-size: 20px;align-items:
center;justify-content:space-between;font-family: Helvetica;color:aliceblue;}
  nav h1{ margin-left:1rem}
  nav h2{ margin-top:-3px;font-size: 18px;color:aliceblue;}
  #timer{ height:30px ;width:100vw;background-color:cyan;font-size:large;font-weight:500;}
</style>
</head>
<body>
<script src="timer.js"></script>
<nav>

```

```

        <h1>FRONTEND QUIZ</h1>
        <div><h2 ><?php echo $_SESSION["username"] ?> &nbsp;<span
class="fa">&#xf2bd;</span></h2></div>

</nav>
<div id="timer"> <p id="para"></p> </div>
<div id="outer">
    <div id="inner">
        <div id="check" style="color:blue; margin-left:59rem"><?php echo
$c."/". $total_rows;?></div>
        <div id="display_ques">
            <h2 id="ques"><?php echo $c.")". $row[1];?></h2>
            <form action="processing.php" method="post" >
                <ul >
<li id="l1"><input type="radio" name="rd" id="option1" class="answer" value="a">
                    <label id="op1"><?php echo $row[2];?></label></li>
                    <li id="l2"><input type="radio" name="rd" id="option2" class="answer" value="b">
                        <label id="op2"><?php echo $row[3];?></label></li>
                    <li id="l3"><input type="radio" name="rd" id="option3" class="answer" value="c">
                        <label id="op3"><?php echo $row[4];?></label></li>
                    <li id="l4"><input type="radio" name="rd" id="option4" class="answer" value="d">
                        <label id="op4"><?php echo $row[5];?></label></li>
                <!-- to send the count we need this -->
                    <input type="hidden" name="count" value="<?php echo $c;?>">
                </ul>
                <button type="sumbit" name="btn4" id="btn4">Next</button>
            </form>
        </div>
    </div>
</div>
</body>
</html>

```

### admin add question.php

```

<?php
session_start() ;
include 'connection.php';
//to count total rows in the table
$sql1="select * from `questionbank` ";
$res1=mysqli_query($con,$sql1);
$total_rows=mysqli_num_rows($res1);
if(isset($_POST["btn21"])){
    $id= "qid".$total_rows+1;
    $q= $_POST['qname'];
    $op1= $_POST['op1'];
    $op2= $_POST['op2'];
    $op3= $_POST['op3'];
    $op4= $_POST['op4'];
    $answ= $_POST['answ'];
}

```

```

//step 2 write sql query to insert
$sql="INSERT INTO `questionbank` ( `qid`,`ques`,`a`,`b`,`c`,`d`,`ans`) VALUES ('$id','$q','$op1',
'$op2','$op3','$op4','$answ')";

//step 3 execute the query
$check=mysqli_query($con,$sql);
if($check){

    ?>
    <script>alert("Inserted successfully");</script>
    <?php
    }
    else{
    ?>
    <script>alert("Insertion failed..try again");</script>
    <?php
    }

}

?>

<!DOCTYPE html>
<head>
    <title>Add question</title>
    <style>{*margin:0;padding:0;box-sizing:border-box}

button{background-color:#f46d29;color:white;border:none; border-radius:5px;height:20px}
button:hover{background-color:#db5807}
body{background-color:#4B9CD3}
#hd{margin-top:20px; margin-left:10px}
label{font-size:x-large; height:60px;margin-top:20px}
input{border:none; padding:3px;height:45px;margin-top:20px;font-size:large;border-radius:5px}
.s1{margin-left:150px;width:200px}
.s0{margin-left:48px;width:700px}
.s3{margin-left:130px;width:100px;height:30px;margin-top:30px}
.optn{margin-left:63px;}
button{ width:120px;height:40px;margin-left:810px;font-family: 'Gill Sans', 'Gill Sans MT', Calibri,
'Trebuchet MS', sans-serif; margin-top:50px; font-size:larger ;color:black}
</style>
</head>
<body >
    <?php include'admin_header.php'?>
    <form action="a-add-question.php" method="post">
        <label>Write the question</label><input type="text" name="qname" class="s0" required><br>
        <label class="optn">a</label><input type="text" name="op1" class="s1" required><br>
        <label class="optn">b</label><input type="text" name="op2" class="s1" required><br>
        <label class="optn">c</label><input type="text" name="op3" class="s1" required><br>
        <label class="optn">d</label><input type="text" name="op4" class="s1" required><br>
        <label style="margin-left:20px">Answer</label><select name="answ" class="s3" required>
            <option >a</option><option >b</option><option >c</option><option >d</option>

```

```
</select><br>
<button name="btn21">Submit</button>
</form>
</body>
</html>
```

## **6.2. TESTING APPROACH**

### **Types Of Testing**

The system was designed according to the requirement of the system. But we are not 100% confident. The lack of confidence stems from several things. First the system deals with large number of states, complex logic and activities. So some error might occur in the system. Error may be software, which is known as “SOFTWARE ERROR” i.e. the software doesn’t do what the requirement says. So an exhaustive and thorough testing must be conducted to ascertain. Whether the system produces right results. The project guide and the user both did testing.

### **Module Testing**

The testing was done in several stages. First each program module was tested as a single program, which is also known as module testing or unit testing. In unit testing a set of data as input was given to the module and observed what output data is produced. In addition, the logic and boundary condition for input and output data was also checked. The interface between this module and others was checked for correctness. While collecting the input data for testing the program module it was kept in mind that input should be from all classes, so the entire condition of the program could also be checked.

### **Interrogating Testing**

When the individual program modules were working properly, we combine the module in the working system. This integration is planned and coordinated so that when an error occurs, we have an idea of what caused it. Integration testing is the process of verifying that the components of a system work together as described in the program design specification. For testing, the system was viewed as a hierarchy of modules. We began with the module at the highest level of design and worked down. The next modules to be tested are those that call previously tested modules.

### **Function Testing**

Once we are sure that information is passed among modules according to the design prescription we tested the system to assure whether the function described in the requirement specification are actually performed by the integrated system.

### **Acceptance Test**

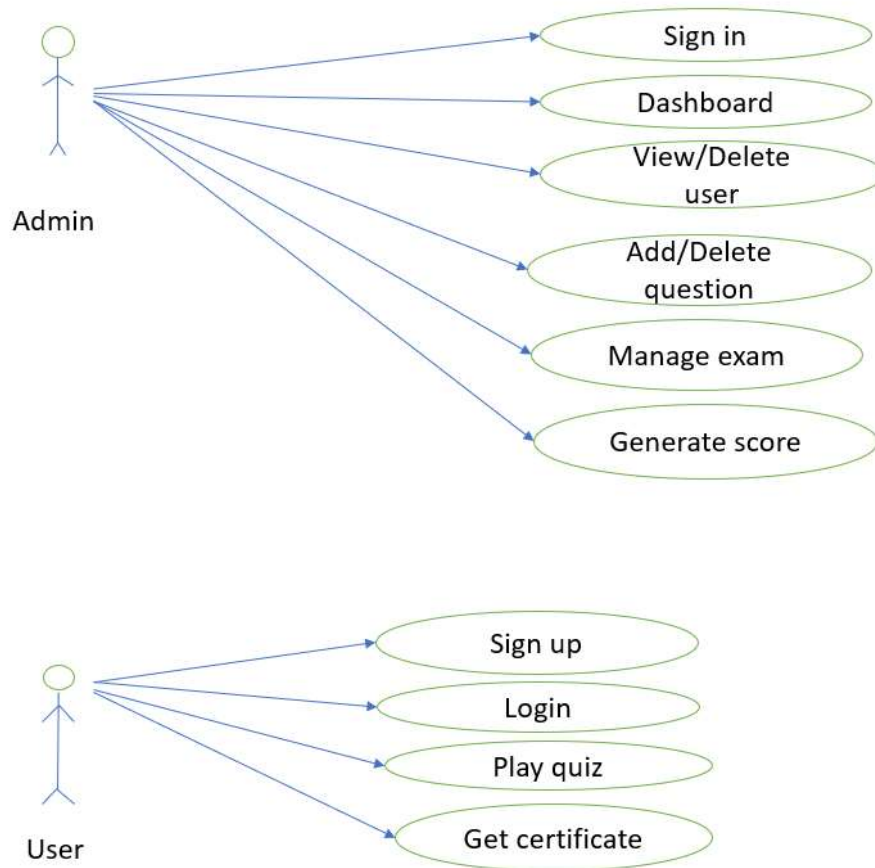
When the function test completes then we involved the user to make sure that system works according to the user’s expectation. Thus, the user did the acceptance test.



## Implementation

Once the system was tested (module wise as well as integrated) satisfactorily, and then comes the implementation of the system. Implementation is the process of changing from old system (manual) to the new system (computerized). Some training was also given to the user about how to work on the new system and finally the system was successfully adopted.

### 6.2.1 USE CASE DIAGRAM



# **Ch 7. CONCLUSION**

## **7.1 LIMITATIONS**

The size of the database increases day-by-day, increasing the load on the database backup and data maintenance activity.

Instead of providing a specific time for each question, a specific time can be specified for the project as a whole.

There can be a bunch of multiple questions from which admin can choose some as part of quiz because as of now whatever questions are in database every question becomes part of the quiz.

It doesn't have any industrial implementation, it is just applicable to be implemented on a small scale.

## **7.2 FURTHER SCOPE**

After analysing the answer pattern of questions by the user, we can improve the type of questions based on where majority is going wrong, etc.

A basic tutorial on the quiz can be provided before starting the quiz.

The order of the question can be altered along with the options for the quiz.

A specific time and date can be added from admin's end to start the quiz.

This project can be further customized and additional features /improvements can be made.