ONLINE EXAMINATION SYSTEM

A MINI PROJECT REPORT

Submitted by

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Under the guidance of
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In partial satisfaction of the requirements for the degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE & ENGINEERING
With specialization in <.....>

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COLLEGE OF ENGINEERING AND TECHNOLOGY

SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

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SRM INSTITUTE OF SCIENCE & TECHNOLOGY
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BONAFIDE CERTIFICATE

Certified that this project report **" Online Examination System "** is the bonafide work of **" Anushree Upadhyaya(1156), Kumar Abhishek(1171), Shrimayi Matanhelia(1141)"** of III Year/VI Sem B.tech(CSE) who carried out the mini project work under my supervision for the course 18CSC303J- Database Management systems in SRM Institute of Science and Technology during the academic year 2022-2023(Even sem).

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LIST OF ABBREVIATIONS

I.	CSS	Cascading Style Sheet
II.	SQL	Structured Query Language
III.	UI	User Interface
IV.	HTML	Hypertext-Markup Language
V.	PHP	Hypertext Preprocessor
VI.	ER	Entity Relationship
VII.	API	Application Programming Interface

1. ABSTRACT

Online Examination System is web-based application for technical evaluation. It not only replaces paperwork but also releases the workload of the faculty. It fulfills the requirements of the institute to conduct the exams online. Students can give exam without need of going to any physical destination. The required software and hardware are easily available and easy to work with.

Online Examination System, as described above, can lead to error free, secure, reliable and fast management. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus, it will help organization in better utilization of resources. The organization can maintain computerized records without redundant entries. That means that one need not be distracted by information that is not relevant, whilebeing able to reach the information.

The scope and application for online examination systems are vast, and they can be used in various educational and professional settings. Here are some examples:

Educational Institutions: Online examination systems are widely used in educational institutions, such as schools, colleges, and universities. They provide an efficient way of conducting exams, saving time and resources while improving accuracy and security.

Professional Certification: Online examination systems are also used for professional certification exams, such as medical exams, engineering exams, and IT certifications. These exams can be taken online, allowing professionals to get certified from anywhere in the world.

Recruitment Exams: Online examination systems are used for recruitment exams conducted by government agencies and private companies. These exams can be administered remotely, making the recruitment process more efficient and cost-effective.

Skill Assessments: Online examination systems can be used for skill assessments in various industries, such as IT, finance, and healthcare. Employers can use these exams to assess the skills of job candidates or existing employees.

Online Courses: Online examination systems can be used in online courses to assess the learning outcomes of students. They can provide instant feedback to students and instructors, helping them to identify areas where students need improvement.

Overall, the scope and application of online examination systems are vast, and they offer a wide range of benefits, including efficiency, accuracy, security, and accessibility. They have become an essential tool in the education and professional industries, and their popularity is likely to continue to grow in the future.

2. PROBLEM STATEMENT

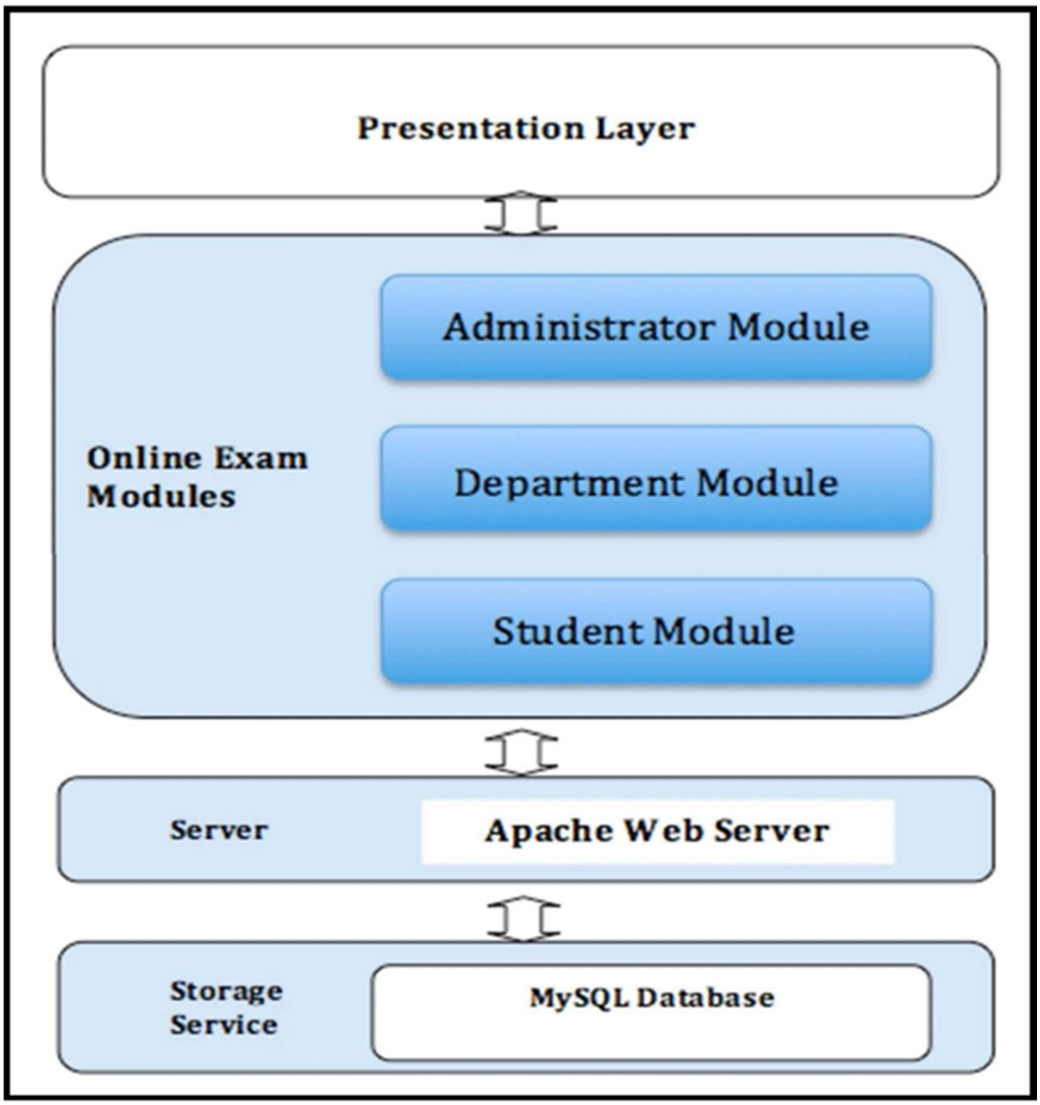
- Since the traditional have many drawbacks such as:
    - **a)** Time consuming
    - **b)** Difficulty of analyzing the test manually
    - **c)** More observers are required to take exam of many students
    - **d)** Results are not accurate since calculations is done manually
    - **e)** The chance of losing exam's result is higher in current systems
    - **f)** Checking of result is time consuming since it done manually
    - **g)** Limited no of students can give examination at a time.

- With the development of information technology and use it in an orderly and properly helps to overcome the existing error in the manual system.
- Online examination system saves the exams information in a database
- This make it an easier way to give exam teachers can add their exams rules, and student can give exam in a totally automated system.

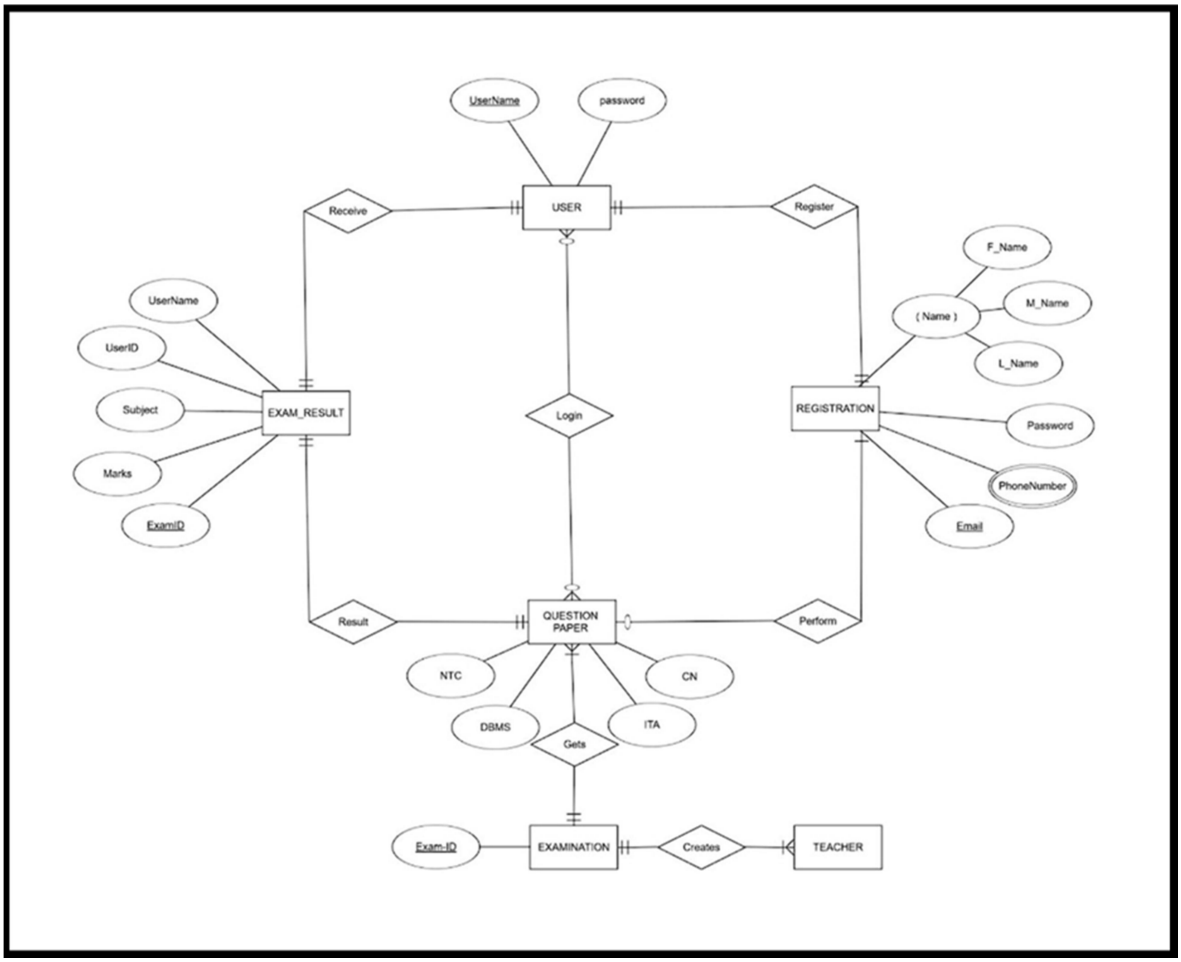
3. LIST OF GENERAL AND UNIQUE SERVICES

- User registration and authentication
- Test creation and management
- Question bank management
- Test scheduling and availability
- Randomization of questions and answers
- Real-time monitoring and remote proctoring
- Timer and countdown management
- Instant feedback and scoring
- Result generation and analysis
- Secure and encrypted data transmission and storage
- Artificial intelligence-based grading and analysis
- Collaboration tools for group exams
- Ability to add multimedia elements to questions and answers

4. ARCHITECTURE DIAGRAM



5. ER DIAGRAM


UserName
password
USER
Receive
Register
F_Name
M_Name
(Name)
L_Name
UserName
UserID
Subject
Marks
ExamID
EXAM_RESULT
Login
REGISTRATION
Password
PhoneNumber
Email
Result
QUESTION PAPER
Perform
NTC
CN
DBMS
ITA
Gets
Exam-ID
EXAMINATION
Creates
TEACHER

6. LITERATURE SURVEY

An proposed online examination system is a software application that allows educational institutions and organizations to conduct examinations online. The system typically includes features such as:

1. **User authentication**: Students and faculty members are required to log in with their credentials to access the system.

2. **Test creation**: Faculty members can create and edit tests with different types of questions, including multiple choice, true/false, and essay questions.

3. **Test-taking**: Students can take tests online and submit their answers electronically.

4. **Grading and reporting**: The system automatically grades objective questions and provides reports to faculty members, including scores and analysis of student performance.

5. **Security**: The system ensures the integrity of the examination by preventing cheating and maintaining the confidentiality of the exam questions and answers.

6. **Accessibility**: The system is designed to be accessible to all students, including those with disabilities, and provides accommodations as needed.

7. **Technical support**: The system offers technical support to faculty members and students, such as troubleshooting and assistance with software or hardware issues.

Overall, an proposed online examination system provides an efficient, secure, and accessible way to conduct examinations, saving time and resources for educational institutions and organizations.

While existing online examination systems offer many useful features, there are still some features that are missing or could be improved. Some of the features that are missing in existing online examination systems includes. Personalization, many existing online examination systems do not provide personalized assessments that take into account a student's learning style, strengths, and weaknesses.

Personalized assessments could help students achieve better outcomes. Collaboration, some online examination systems do not support collaborative assessments, which could be useful for group projects and assignments. Interactivity, existing online examination systems are often limited in terms of interactivity, which could be improved through the use of multimedia, simulations, and interactive assessments.

7.1. FRONT-END SOFTWARE USED

The front-end (UI) design of an online examination system should be user-friendly, visually appealing, and intuitive.

- HTML, CSS, and JavaScript: These are the basic building blocks of front-end web development. They are easy to learn and use, and there are plenty of online resources and tutorials available to help you get started.
- Bootstrap: Bootstrap is a popular front-end framework that provides a set of pre-built components and styles that can be easily customized to create a responsive and mobile-friendly design. It is easy to use and can help you create a professional-looking interface quickly.
- Font Awesome: Font Awesome is a free icon library that provides a set of scalable vector icons that can be used to enhance the visual design of your interface.
- CSS is the language we use to style an HTML document. CSS describes how HTML elements should be displayed. This tutorial will teach you CSS from basic to advanced.
- Responsive Design: It is important to ensure that the interface is responsive and can adapt to different screen sizes and devices. This can be achieved by using media queries and responsive design techniques.

7.2. FRONT END DESIGN

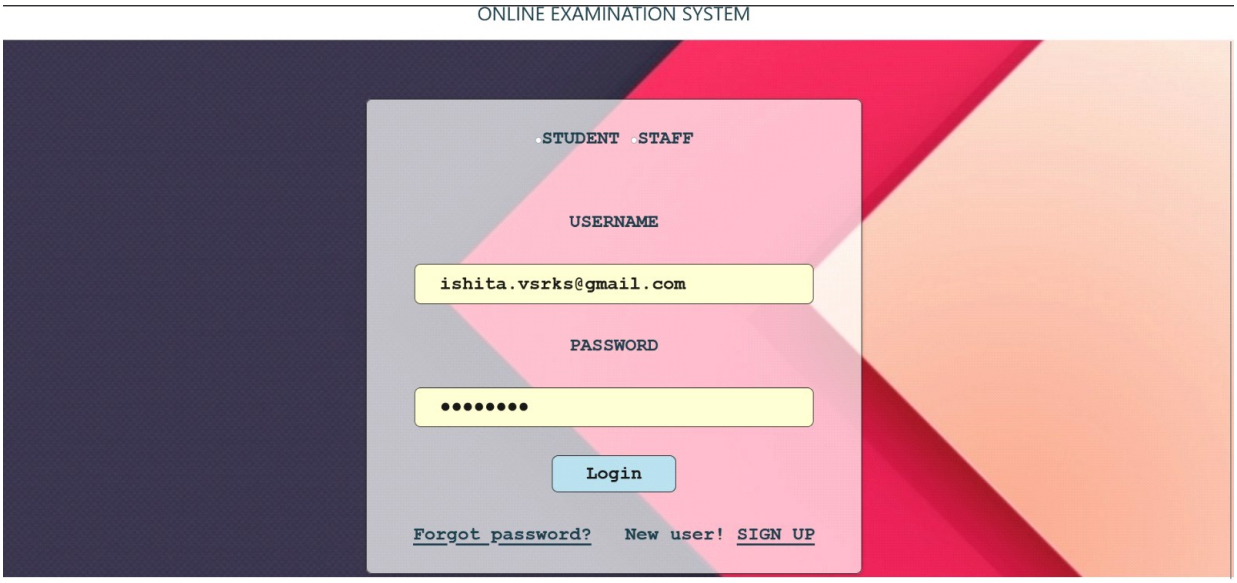


Fig 1. Login page of website

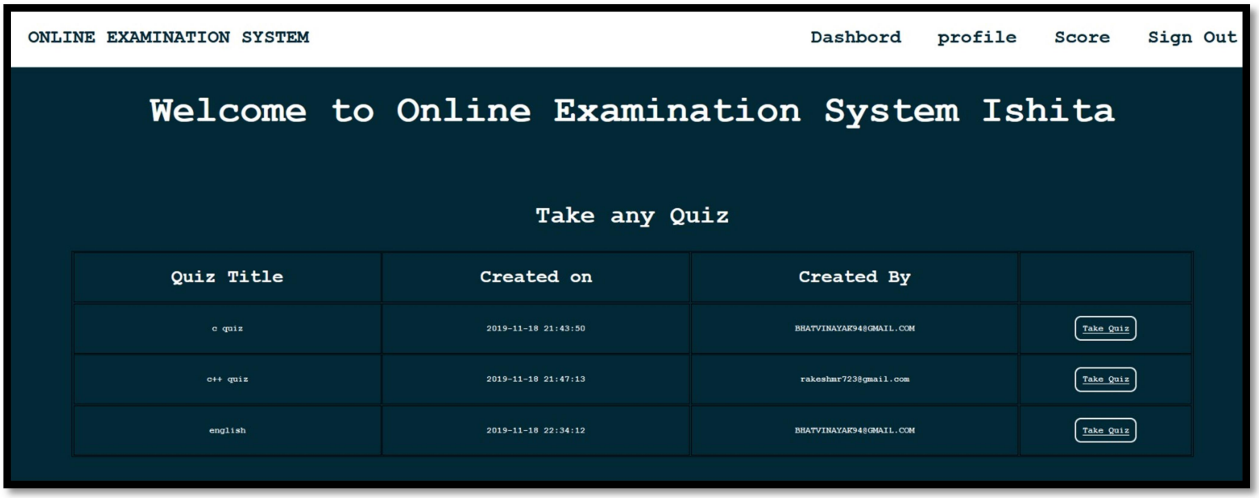


Fig 2. Dashboard of student

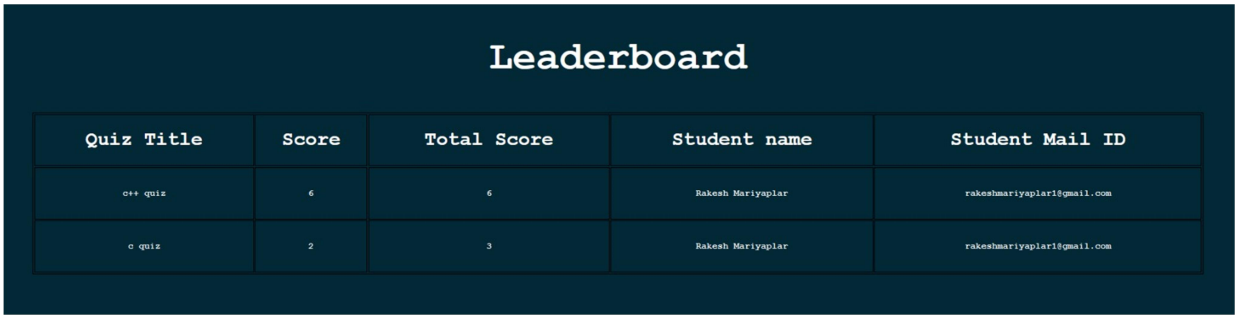


Fig 3. Leaderboard in student profile

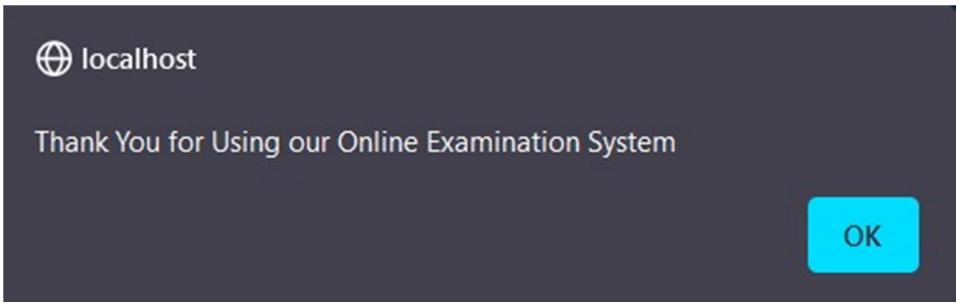


Fig 4. Notification when signing out

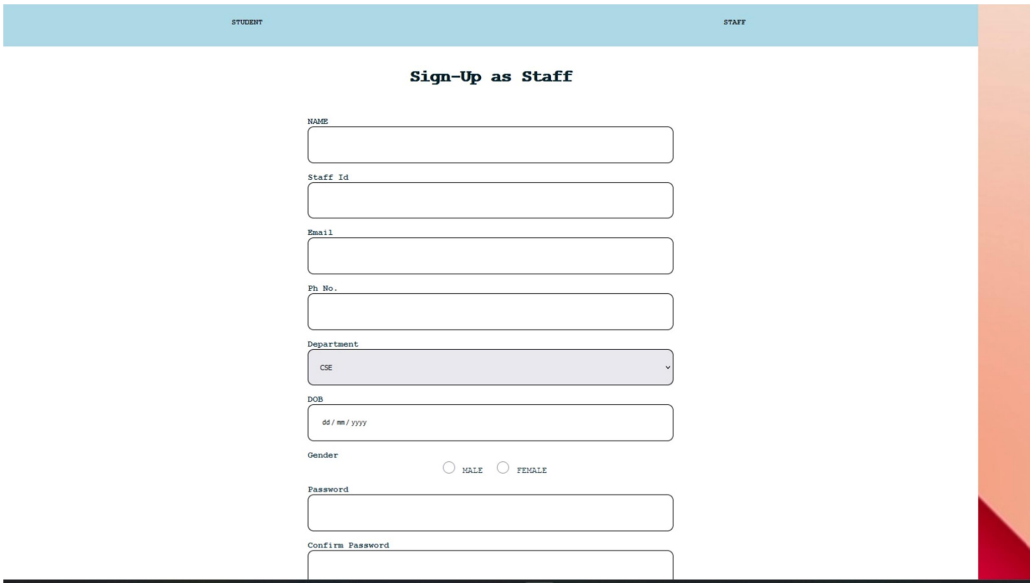


Fig 5. Sign-up page for staff and similar page for student as well

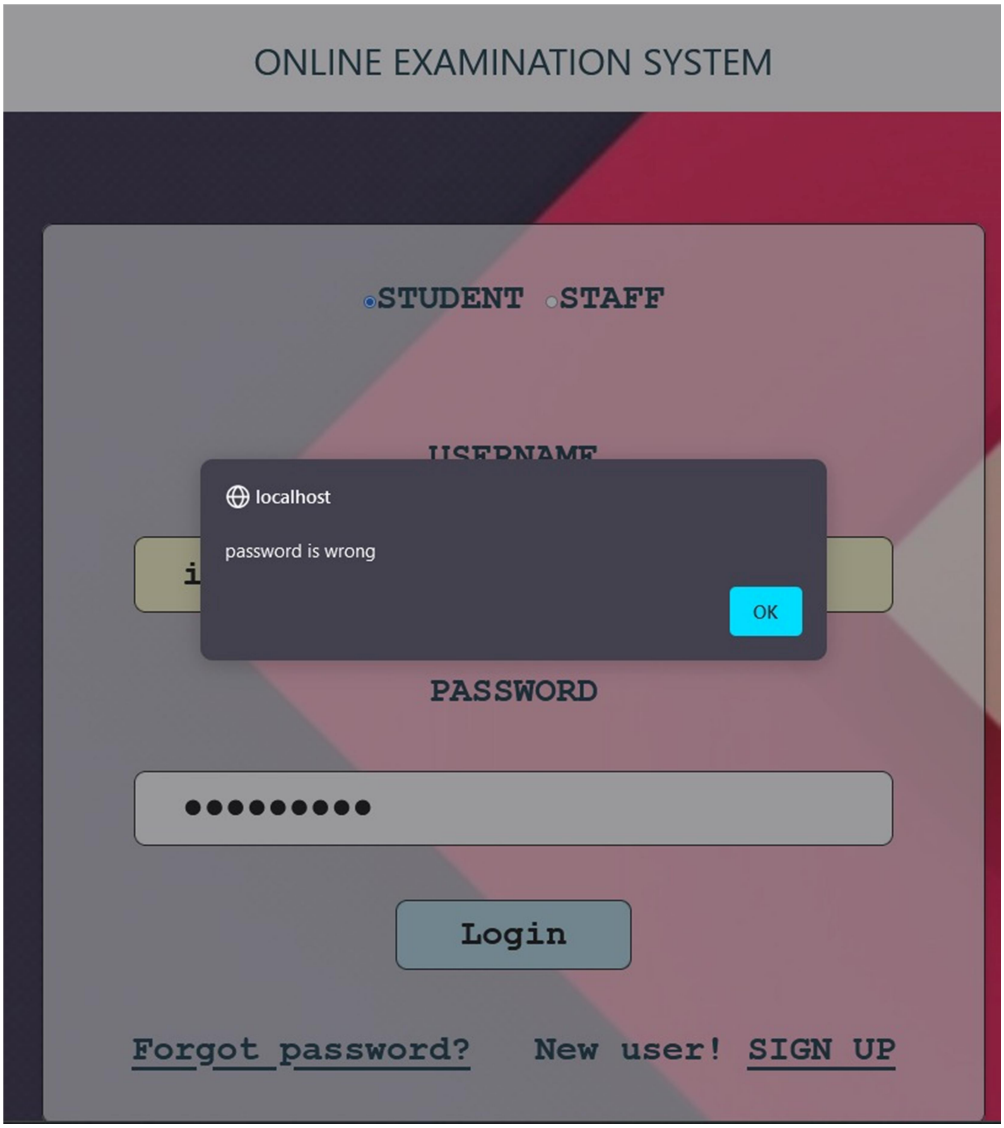


Fig 6. Loging in when password is wrong

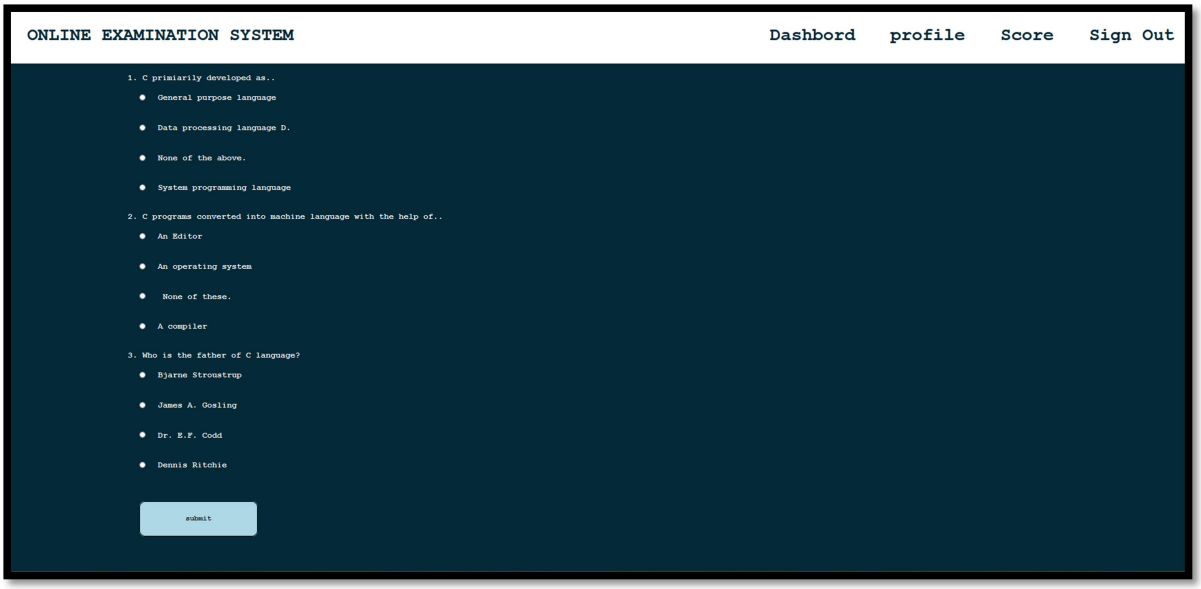


Fig 7. Once the student clicks on Take Quiz and submits his/her test the score is displayed immediately.

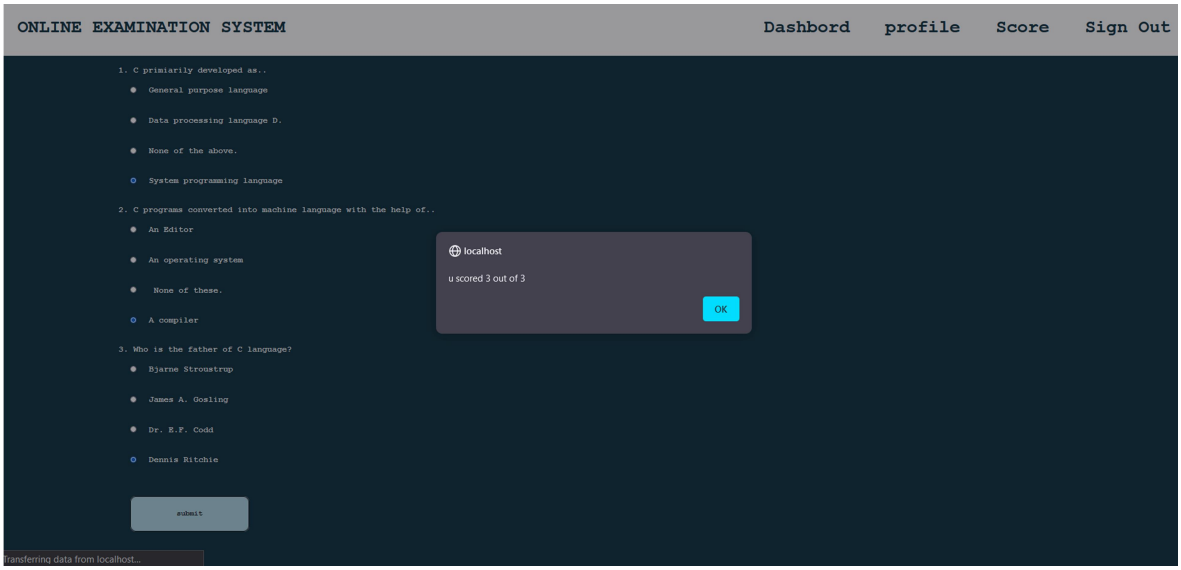
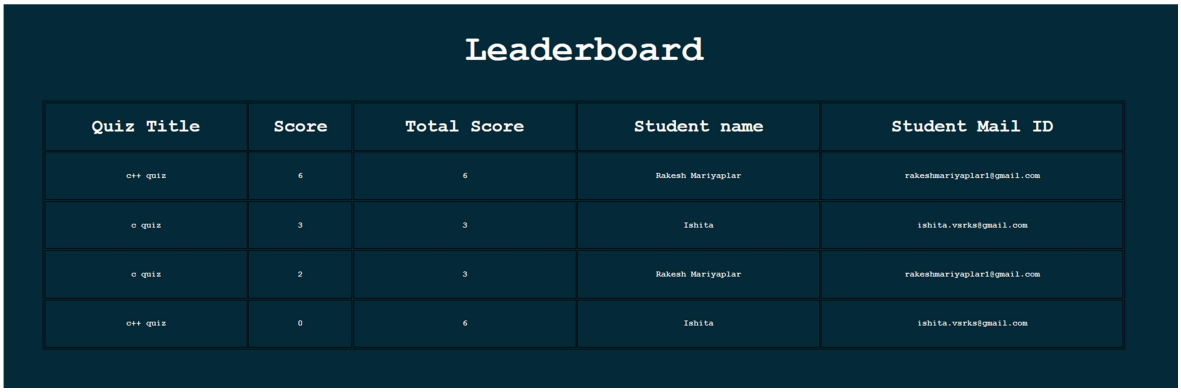


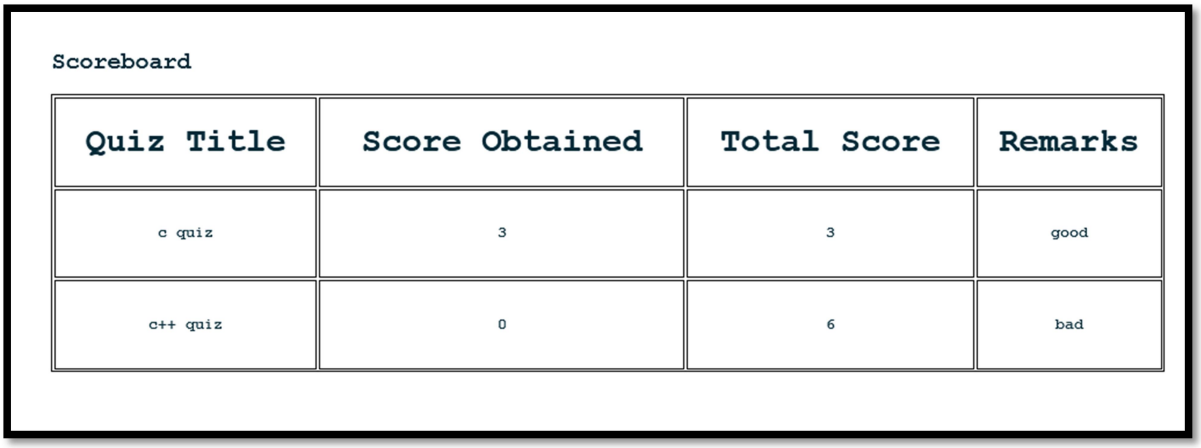
Fig 8. Scores are released immediately after submitting quiz



Leaderboard

Quiz Title	Score	Total Score	Student name	Student Mail ID
c++ quiz	6	6	Rakesh Mariyaplar	rakeshmariyaplar1@gmail.com
c quiz	3	3	Ishita	ishita.vsrks@gmail.com
c quiz	2	3	Rakesh Mariyaplar	rakeshmariyaplar1@gmail.com
c++ quiz	0	6	Ishita	ishita.vsrks@gmail.com

Fig 9. Leaderboard is also updated once student scores in a quiz



Scoreboard

Quiz Title	Score Obtained	Total Score	Remarks
c quiz	3	3	good
c++ quiz	0	6	bad

Fig 10. The score of the student individually can also be checked in the score content

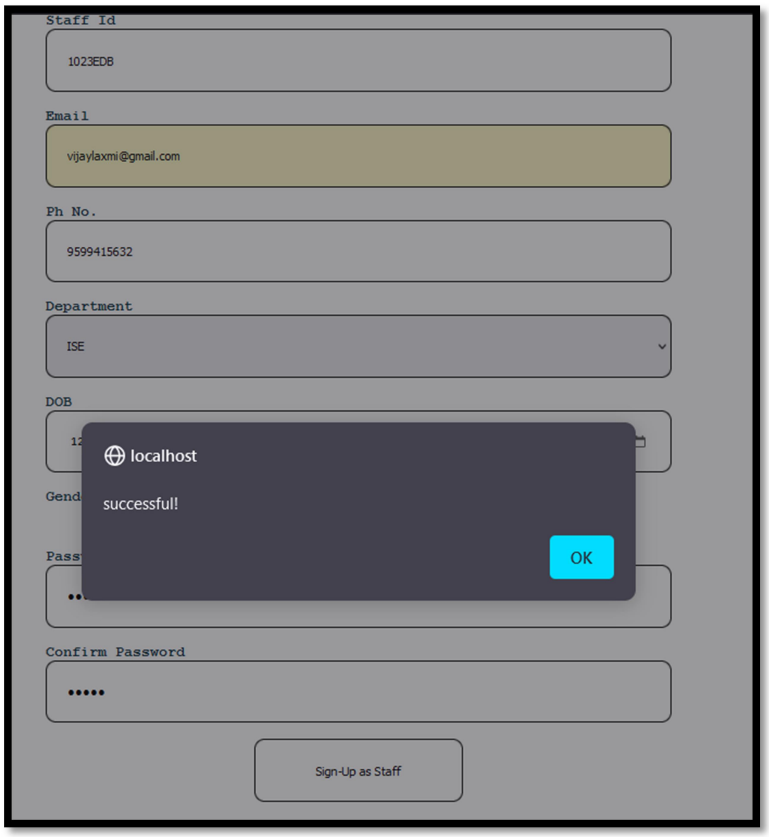


Fig 11. Once the sign-up is completed successful notification pops-up

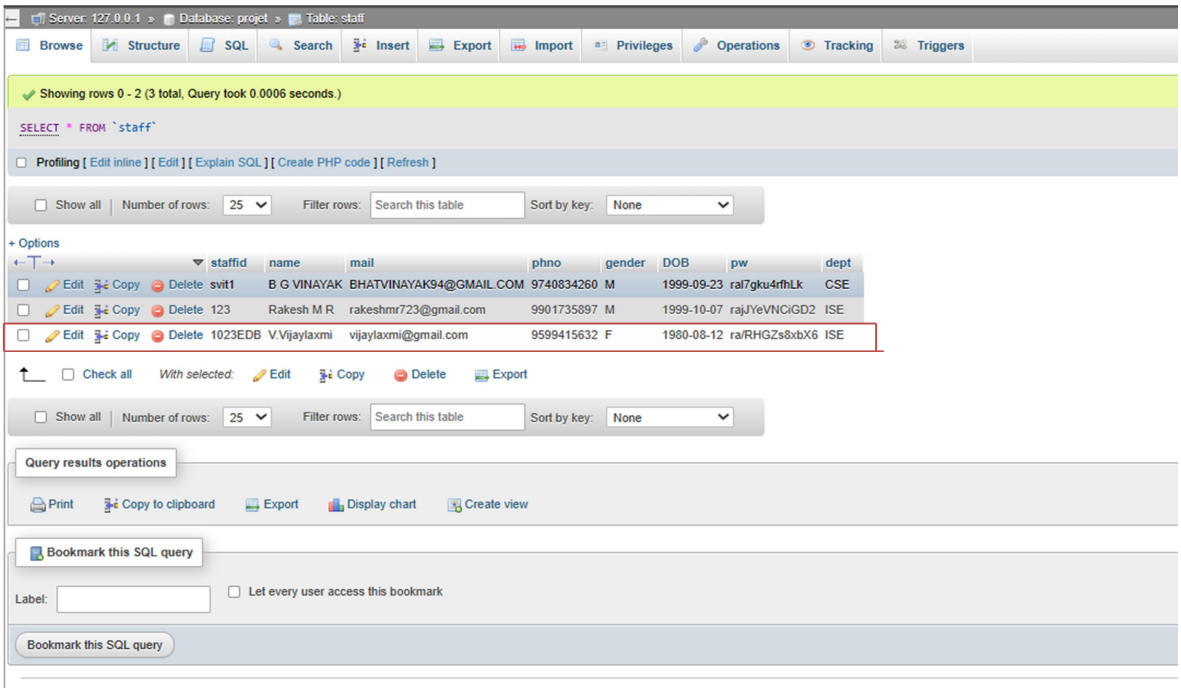


Fig 12. As soon as staff sign-up his/her data is also added in the DB

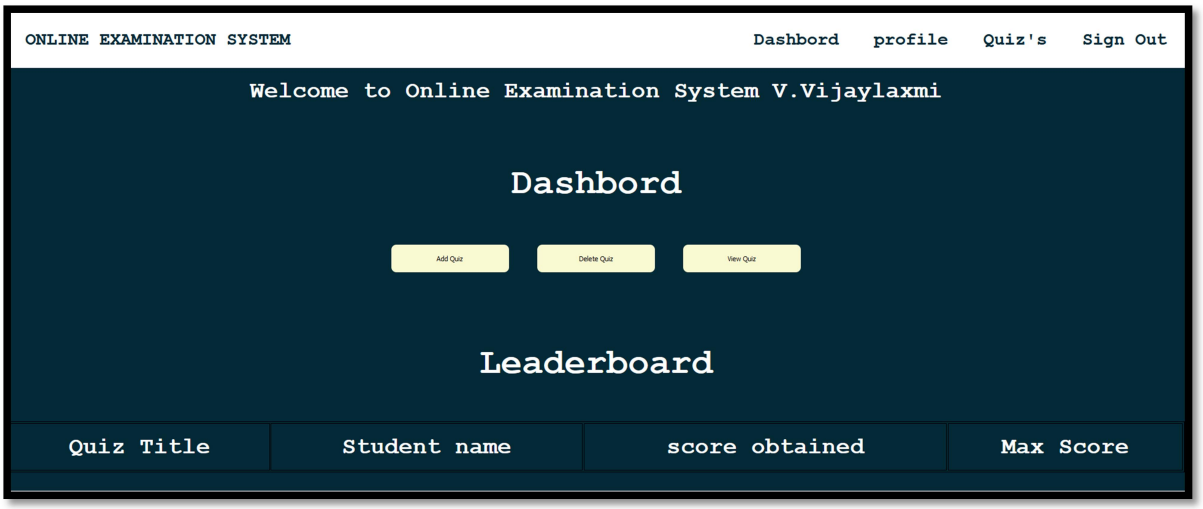


Fig 13. Dashboard for staff/faculty

Fig 14. Under view quiz option staff can see the quiz created

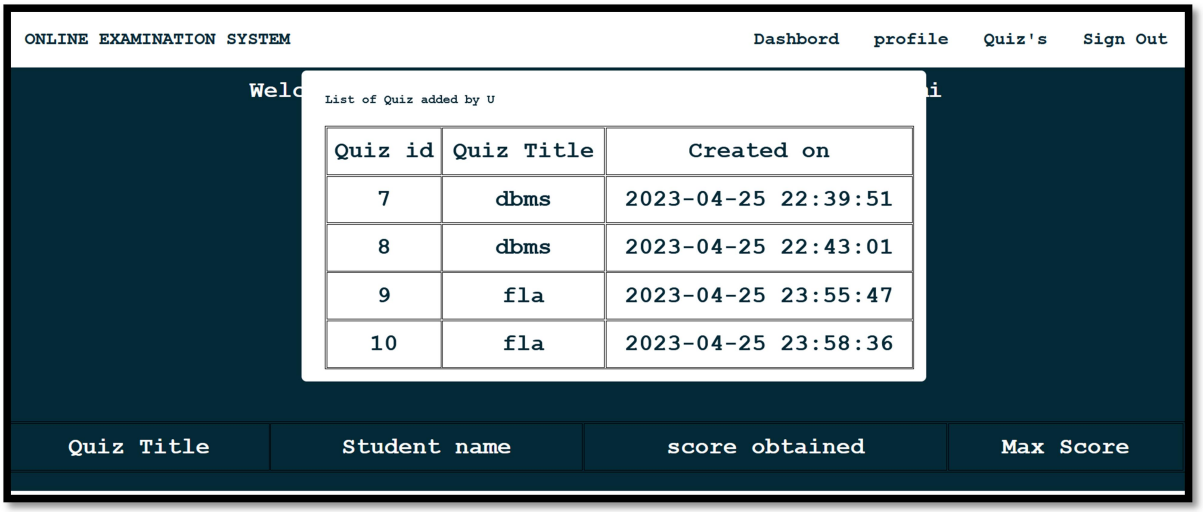


Fig 15. List of quiz's created

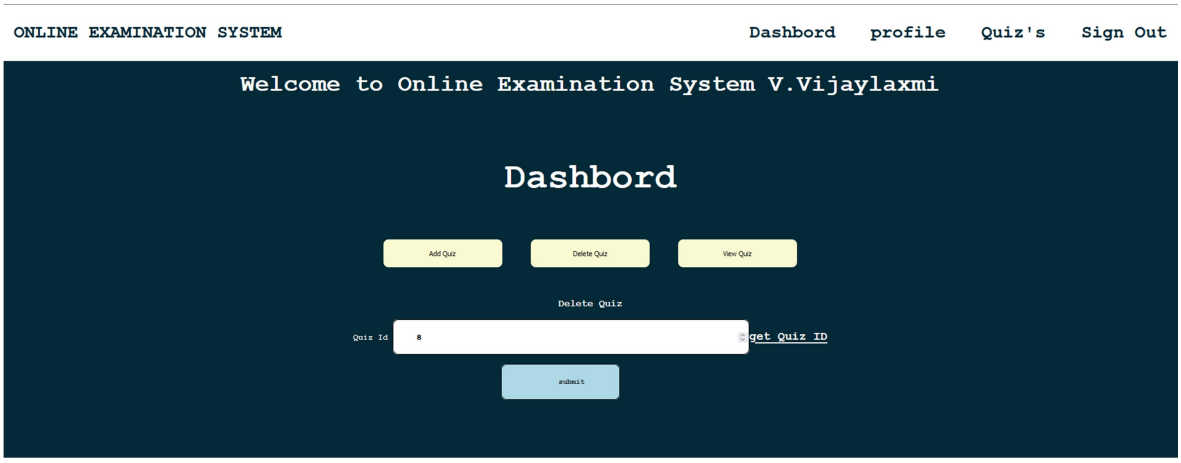


Fig 16. Quiz can also be deleted by the staff if any wrong/duplicate quiz was created by mistake

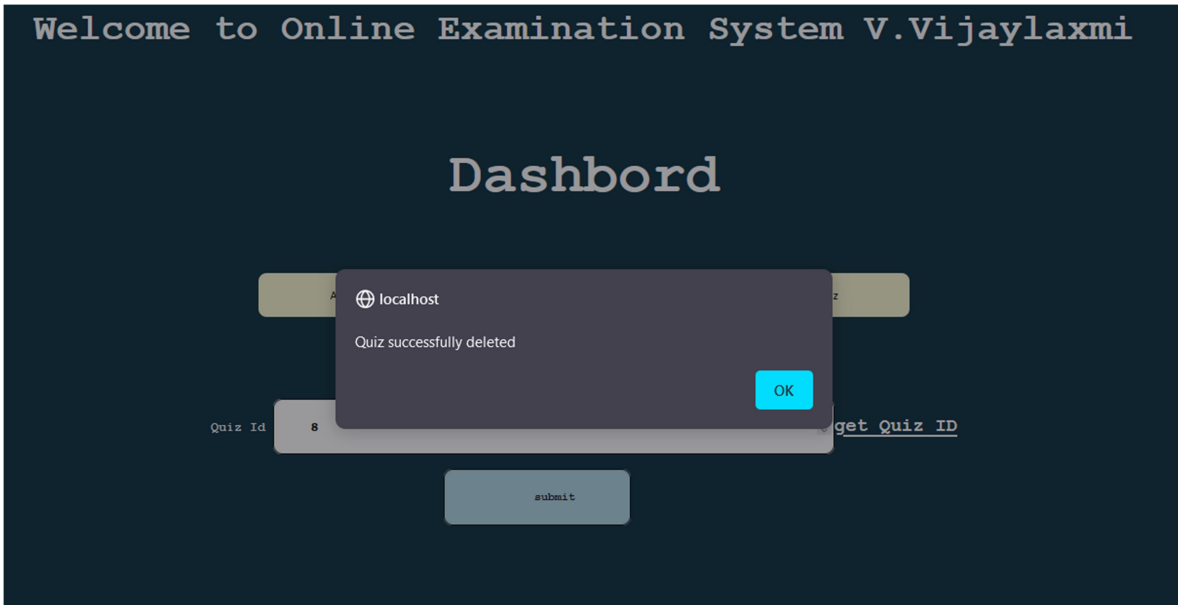


Fig 17. Under delete quiz option staff can delete the quiz by mentioning the id

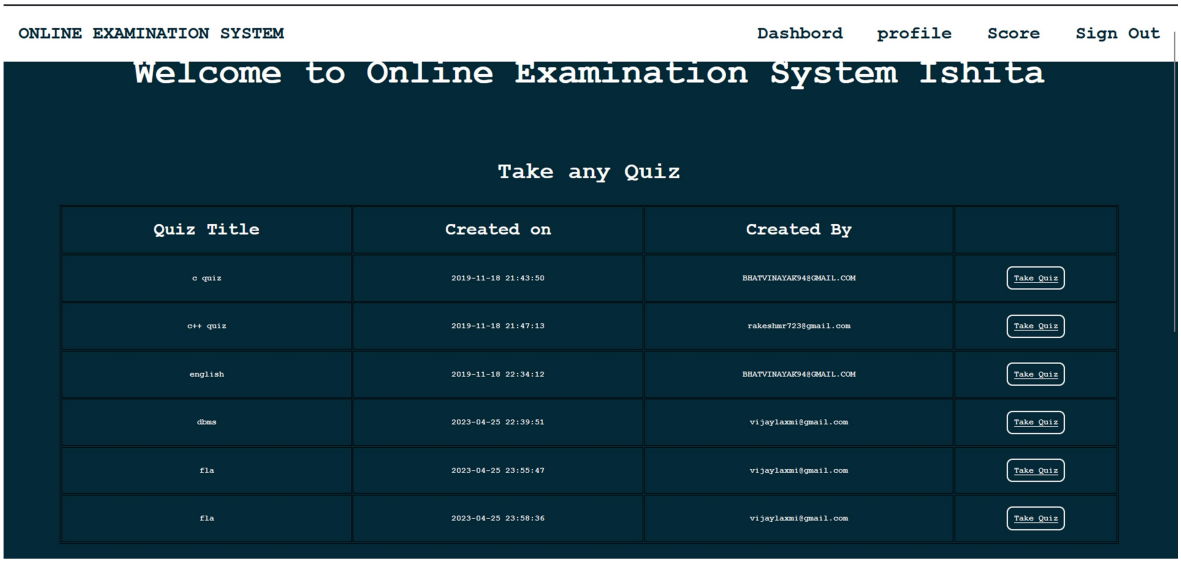


Fig 18. Whichever quiz created by the faculty is immediately updated in the student dashboard

8.1. BACK-END SOFTWARE USED

In our project we have used MySQL and PHP to handle backend of our project

MySQL: MySQL is an open-source relational database management system (RDBMS) that is widely used for web applications. It is scalable, easy to use, and supports various data types, making it a popular choice for web developers. Here are some reasons why MySQL could be a good choice for our project:

- Reliability
- Scalability
- Performance
- Compatibility
- Security

PHP: It is a popular programming language that is often used for building web applications, including online examination systems. Here are some reasons why PHP couldbe a good choice for our project:

- Easy to Learn
- Scalability
- Flexibility
- Cost-effective

Here are the basic steps to use PHP and MySQL for an online examination system:

Set up a MySQL database: Create a database to store the questions, answers, and other relevant information.

Create a PHP script for registration and login: Create a PHP script that allows students to register and login to the system.

Develop a user interface for the exam: Create an interface that allows students to take the exam. This may include displaying questions, multiple-choice answers, and a timer.

Connect the user interface to the database: Use PHP to connect the user interface to the MySQL database, so that questions and answers can be retrieved and saved.

Create a grading script: Create a PHP script that can grade the exam once it is submitted. This script will compare the answers submitted by the student with the correct answers in the database.

Generate reports: Once the grading script has been run, generate reports that display the student's score, the questions they answered correctly, and the questions they answered incorrectly.

Implement security features: Implement security features such as password protection, session management, and encryption to ensure the integrity and confidentiality of the exam and student information.

Test the system: Test the system thoroughly to ensure that it works correctly and is free of bugs.

By following these steps, you can create an online examination system using PHP and MySQL that is secure, reliable, and efficient.

8.2. BACK-END DESIGN

DATA DICTIONARY/ TABLES

---

projet

dept

Column	Type	Null	Default	Links to	Comments	Media type
dept_id *(Primary)*	int(11)	No				
dept_name	varchar(3)	Yes	*NULL*			

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	dept_id	4	A	No	

questions

Column	Type	Null	Default	Links to	Comments	Media type
qs	varchar(200)	No				
op1	varchar(30)	No				
op2	varchar(30)	No				
op3	varchar(30)	No				
answer	varchar(30)	No				
quizid	int(11)	No				

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
qs	BTREE	Yes	No	qs	12	A	No	
quizid	BTREE	No	No	quizid	6	A	No	
quizid_2	BTREE	No	No	quizid	6	A	No	
quizid_3	BTREE	No	No	quizid	6	A	No	

quiz

Column	Type	Null	Default	Links to	Comments	Media type
quizid *(Primary)*	int(11)	No				
quizname	varchar(20)	No				
date_created	timestamp	No	current_timestamp()			
mail	varchar(30)	Yes	*NULL*	staff -> mail		

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	quizid	3	A	No	
mail	BTREE	No	No	mail	3	A	Yes	

score

Column	Type	Null	Default	Links to	Comments	Media type
slno *(Primary)*	int(11)	No				
score	int(11)	No				
quizid	int(11)	No		quiz -> quizid		
mail	varchar(30)	Yes	*NULL*	student -> mail		
totalscore	int(11)	Yes	*NULL*			
remark	varchar(20)	Yes	*NULL*			

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	slno	2	A	No	
quizid	BTREE	No	No	quizid	2	A	No	
mail	BTREE	No	No	mail	2	A	Yes	

staff

Column	Type	Null	Default	Links to	Comments	Media type
staffid	varchar(10)	No				
name	varchar(20)	No				
mail *(Primary)*	varchar(30)	No				
phno	varchar(10)	No				
gender	varchar(1)	No				
DOB	varchar(10)	No				
pw	varchar(200)	No				
dept	varchar(3)	Yes	*NULL*			

Indexes

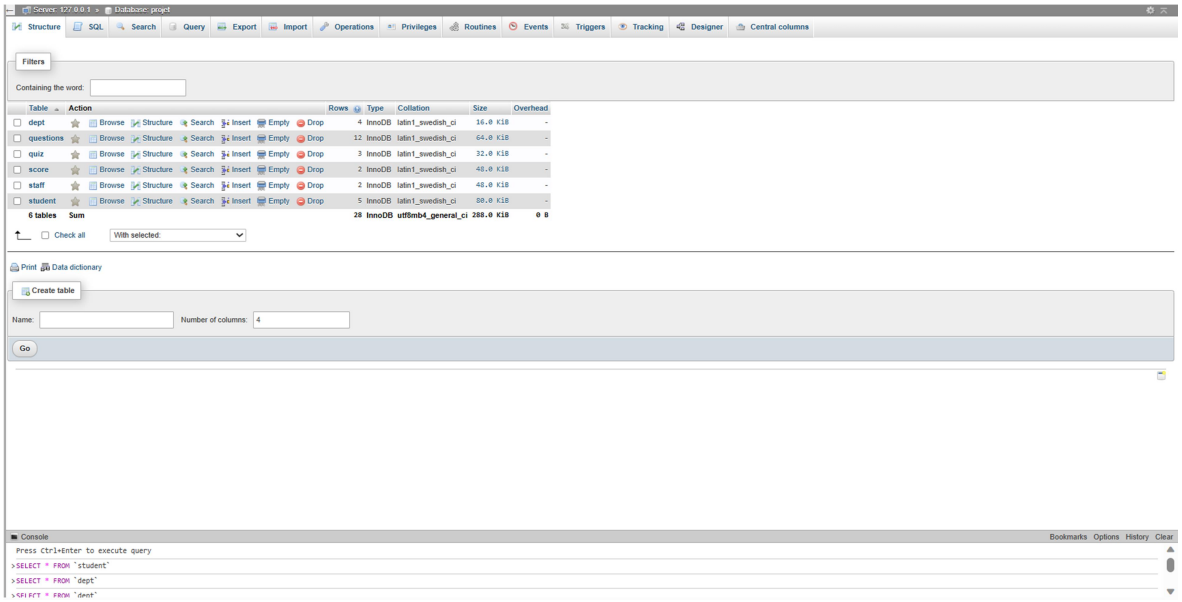
Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	mail	2	A	No	
mail	BTREE	Yes	No	mail	2	A	No	
				phno	2	A	No	
staffid	BTREE	Yes	No	staffid	2	A	No	

student

Column	Type	Null	Default	Links to	Comments	Media type
usn	varchar(10)	No				
name	varchar(20)	No				
mail *(Primary)*	varchar(30)	No				
phno	varchar(10)	No				
gender	varchar(1)	No				
DOB	varchar(10)	No				
pw	varchar(200)	No				
dept	varchar(3)	Yes	*NULL*			

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	mail	5	A	No	
mail	BTREE	Yes	No	mail	5	A	No	
phno	BTREE	Yes	No	phno	5	A	No	
usn	BTREE	Yes	No	usn	5	A	No	
dept	BTREE	No	No	dept	2	A	Yes	



Data stored in DB:

```
Type of User : student

NAME : Ishita

EMAIL : ishita.vsrks@gmail.com

Ph No. : 9599415130

USN : is8299

GENDER : F

DOB : 2012-03-20

Dept. : CSE
```

9. TYPE OF CONNECTIVITY USED

- When building an online examination system, we need to connect to a database to store and retrieve data.
- In our project we are using JDBC (Java Database Connectivity).
- JDBC (Java Database Connectivity) is a connectivity option that allows Java programsto connect to a relational database like MySQL, Oracle.
- It is an API (Application Programming Interface) provided by Java to allow Java programs to interact with relational databases like MySQL, Oracle.
- It allows you to establish a connection between your Java program and the database, and then perform various operations on the database such as adding, updating, and retrieving data.

10. LIST OF MODULES AND FUNCTIONALITIES

Module	Functionalities
Authentication Module	• Login page for students and administrators • Password reset functionality • User registration page for new students
Exam Management Module	• Create, edit and delete exams • Set exam time limit • Add, edit, and delete questions • Randomize question and answer order • Set passing criteria and grading rules
Results Module	• Automatically grade exams • Generate score reports and display the results to thestudents • Show the correct answer for each question • Allow students to view their past exam scores andreports
Administration Module	• Manage user accounts and roles • Monitor exams in progress • View student scores and reports • Generate exam reports and statistics • Export exam data to CSV or Excel formats
Communication Module	• Messaging and notification system • Chat support and feedback system • Email and SMS integration

11. CODING AND TESTING

sql.php

DBMS-MINI-Project-master > sql.php

```php
<?php

//Your Mysql Config
$servername = "localhost";
$username = "root";
$password = "";
$dbname = "projet";

//Create New Database Connection
$conn = new mysqli($servername, $username, $password, "projet");

//Check Connection
if($conn->connect_error) {
    die("Connection Failed: ". $conn->connect_error);
}
```

index.php

DBMS-MINI-Project-master > index.php

```php
<?php session_start(); ?>
<html>

<head>
    <title>Online Examination System</title>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
        <link rel="stylesheet" href="https://www.w3schools.com/w3css/4/w3.css">
</head><?php
        if (isset($_POST['login'])) {
            if (isset($_POST['usertype']) && isset($_POST['username']) && isset($_POST['pass'])) {        require_once 'sql.php';
                $conn = mysqli_connect($servername, $username, $password, "projet");if (!$conn) {
                    echo "<script>alert(\"Database error retry after some time !\")</script>";
                }
                $type = mysqli_real_escape_string($conn, $_POST['usertype']);
                $username = mysqli_real_escape_string($conn, $_POST['username']);
                $password = mysqli_real_escape_string($conn, $_POST['pass']);
                $password = crypt($password, 'rakeshmariyaplarrakesh');
                $sql = "select * from " . $type . " where mail='{$username}'";
                $res =   mysqli_query($conn, $sql);
                if ($res == true) {
                    global $dbmail, $dbpw;
                    while ($row = mysqli_fetch_array($res)) {
                        $dbpw = $row['pw'];
                        $dbmail = $row['mail'];
                        $_SESSION["name"] = $row['name'];
                        $_SESSION["type"] = $type;
                        $_SESSION["username"] = $dbmail;
                    }
                    if ($dbpw === $password) {
                        if ($type === 'student') {
                            header("location:homestud.php");
                        } elseif ($type === 'staff') {
                            header("Location: homestaff.php");
                        }
                    } elseif ($dbpw !== $password && $dbmail === $username) {
                        echo "<script>alert('password is wrong');</script>";
                    } elseif ($dbpw !== $password && $dbmail !== $username) {
```

```
                    echo "<script>alert('username name not found sing up');</script>";
                }
            }
        }
    }
    ?>
<style>
    @media screen and (max-width: 620px) {
        input {
            height: 6vw !important;
        }

        .seluser {
            display: grid;
        }

        .sub {
            width: 20vw !important;
        }
    }

    .inp {
        box-sizing: content-box !important;
        width: 30vw;
        height: 3vw;
        border-radius: 10px;
        border: 2px solid black;
        padding-left: 2vw;
        font-weight: bolder;
        outline: none;
    }

    ::placeholder {
        font-weight: bold;
        font-family: 'Courier New', Courier, monospace;
    }
```

DBMS-MINI-Project-master > index.php

```

    label {
        font-weight: bolder;
        font-size: 1.5vw;
    }

    form {
        font-size: 1.5vw;
        margin: 0;
    }

    button:hover {
        background-color: #fff !important;
    }

    .bg {
        background-size: 100%;
    }

    a {
        color: #042A38;
    }
        .login{
            max-height: 70vh;
        }
</style>

<body style="margin:0;height: 100%;ouline:none;color: #042A38f !important;padding-botton:5vw;">
    <div class="bg" style="font-weight: bolder;background-image: url(./images/rakesh.png);background-repeat: no-repeat;padding: 0;margin: 0;backgrou
        <center>
            <h1 class="w3-container" style=" color:#042A38;text-transform: uppercase;width: auto;background:#fff;padding: 1vw;">ONLINE
                Examination System</h1>
        </center>
        <center>
            <div class="w3-card" class="login" style="color: #042A38;width: 40vw;background-color: #ffffffab;border: 2px solid black;padding: 2vw;fo
                <form method="POST">
                    <div class="seluser">
```

```
                        <input type="radio" name="usertype" value="student" required>STUDENT
                        <input type="radio" name="usertype" value="staff" required>STAFF
                    </div><br><br>
                    <div class="signin">

                        <label for="username" style="text-transform: uppercase;">Username</label><br><br>
                        <input type="email" name="username" placeholder=" Email" class="inp" required>
                        <br><br>
                        <label for="password" style="text-transform: uppercase;">Password</label><br><br>
                        <input type="password" name="pass" placeholder="******" class="inp" required>
                        <br><br>
                        <input name="login" class="sub" type="submit" value="Login" style="height: 3vw;width: 10vw;font-family: 'Courier New', Couri

                </form><br>
                <a href="reset.php">Forgot password?</a>   New user! <a href="signup.php">SIGN UP</a>
            </div>
    </div>
    </center>
    </div>
    <?php require("footer.php"); ?>
</body>

</html>
```

homestud.php

DBMS-MINI-Project-master > homestud.php

```
<html>

<head>
    <title>
        Onine examination System
    </title>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>
<?php
session_start();
require_once 'sql.php';
                $conn = mysqli_connect($servername, $username, $password, "projet");if (!$conn) {
    echo "<script>alert(\"Database error retry after some time !\")</script>";
}
?>
<style>
    li {
        margin: 1.5vw;
        font-size: 1.5vw !important;

    }

    ul {
        list-style: none;
        width: auto !important;
        font-weight: 2vw !important;
    }

    .navbar {
        background-color: white !important;
        font-size: 1.5vw !important;
    }

    .navbar>ul>li:hover {
        color: #042A38;
        text-decoration: underline;
        font-weight: bold;
```

```
        cursor: default;

    }

    .navbar>ul>li>a:hover {
        color: #042A38;
        text-decoration: underline;
        font-weight: bold !important;
    }

    a {
        text-decoration: none;
        color: #fff;
    }
    .prof,#score{
        top: 3vw;
        position: fixed;
            width: 50vw !important;
            margin-left: 25vw !important;
            margin-right: 25vw !important;
            background-color: #fff !important;
            display: none !important;
            border-radius: 10px;
            margin-top: 2vw;
            z-index: 1;
            padding: 1vw;
            padding-left: 2vw;
            color: #042A38;
        }
    @media screen and (max-width: 450px) {
        .navbar {
            display: initial !important;

        }

        .navbar>ul {
            display: initial !important;
```

```
            left: 25vw !important;
            text-align: center;
            right: 25vw !important;
        }

        .navbar>ul>li {
            background-color: orange !important;
        }

        section {
            text-align: center;
            margin-top: 0 !important;
            background-color: orange !important;
            width: 100vw;
            margin: 0 !important;
        }
        p{
            color:#042A38 !important;
        }

    }
    table{
        width: 90vw;
        margin-left: 5vw;
        margin-right: 5vw;
        align-content: center;
        border: 1px solid black;
    }
    thead{
        font-weight:900;
        font-size: 1.5vw;
    }
    td{
        width: auto;
        border: 1px solid black;
        text-align: center;
        height: 4vw;
```

```
        font-weight: bold;
    }
    #tq{
        text-decoration: underline;
        border: 3px solid #fff;
        padding: 0.5vw;
        border-radius: 10px;
    }
    #sc{
        width: 100% !important;
        margin: 0%;
        color: #042A38;
            }
            #le{
                margin-bottom: 2vw;
            }
</style>

<body style="color: #fff !important;font-weight:bolder;margin: 0 !important;font-weight: bolder !important;font-family: 'Courier New', Courier, mono
    <div style="background-color: #042A38;height: auto;">
        <div class="navbar" style="display: inline-flex;width: 100%;color:#042A38;position:fixed;">
            <section style="margin: 1.5vw;">ONLINE EXAMINATION SYSTEM</section>
            <ul style="display: inline-flex;padding: 0 !important;margin: 0;float: right;right: 0;position: fixed;width: 50vw;">
                <li onclick="dash()">Dashbord</li>
                <li onclick="prof()">profile</li>
                <li onclick="score()">Score</li>
                <li onclick="lo()">Sign Out</li>
            </ul>
        </div><br><br>
        <?php
        $type1 = $_SESSION["type"];
        $username1 = $_SESSION["username"];
        $sql = "select * from " . $type1 . " where mail='{$username1}'";
        $res =   mysqli_query($conn, $sql);
        if ($res == true) {
            global $dbmail, $dbpw;
            while ($row = mysqli_fetch_array($res)) {
```

```
                $dbmail = $row['mail'];
                $dbname = $row['name'];
                $dbusn = $row['usn'];
                $dbphno = $row['phno'];
                $dbgender = $row['gender'];
                $dbdob = $row['DOB'];
                $dbdept = $row['dept'];
            }
        }
        ?>
        <center><section style="width:100vw;margin:0vw;margin-top:5vw;font-size:3vw;">Welcome to Online Examination System <?php echo $dbname ?
        <section style="color:#fff !important"><br><br><br><br><br>
        <?php
            $sql ="select * from quiz";
            $res=mysqli_query($conn,$sql);
            if($res)
            {
                echo "<center><h1 style=\"font-size:2vw;\">Take any Quiz</h1></center>";
                echo "<center><table><thead><tr><td>Quiz Title</td><td>Created on</td><td>Created By</td><td>  </td></tr></thead>";
                while ($row = mysqli_fetch_assoc($res)) {
                    echo "<tr><td>".$row["quizname"]."</td><td>".$row["date_created"]."</td><td>".$row["mail"]."</td><td><a id=\"tq\" href='takeq.ph
                }
                echo "</table></center>";
            }
            ?>
        </section>
        <section class="prof" id="prof" style="display: none;color:#042A38;">
                <p><b>Type of User : <?php echo $type1 ?></b></p>
                <p><b>NAME : <?php echo $dbname ?></b></p>
                <p><b>EMAIL : <?php echo $dbmail ?></b></p>
                <p><b>Ph No. : <?php echo $dbphno ?></b></p>
                <p><b>USN : <?php echo $dbusn ?></b></p>
                <p><b>GENDER : <?php echo $dbgender ?></b></p>
                <p><b>DOB : <?php echo $dbdob ?></b></p>
                <p><b>Dept. : <?php echo $dbdept ?></b></p>
        </section>
        <section id="score" style="display:none;">
```

```php
        <?php
            $sql ="select * from score,quiz where score.mail='{$username1}' and score.quizid=quiz.quizid";
            $res=mysqli_query($conn,$sql);
            if($res)
            {
                echo "<h1>Scoreboard</h1>";
                echo "<table id=\"sc\"><thead><tr><td>Quiz Title</td><td>Score Obtained</td><td>Total Score</td><td>Remarks</td></tr></thead>";
                while ($row = mysqli_fetch_assoc($res)) {
                    echo "<tr><td>".$row["quizname"]."</td><td>".$row["score"]."</td><td>".$row["totalscore"]."</td><td>".$row["remark"]."</tr>";
                }
                echo "</table>";
            }
            else{
                echo " ".mysqli_error($conn);
            }
            ?><br><br><br>
            </section>
            <section style="color:#fff !important">
            <?php
            $sql="call leaderboard;";
            $res=mysqli_query($conn,$sql);
            if($res)
            {
                echo "<center><h1 style=\"font-size: 3vw\">Leaderboard</h1></center>";
                echo "<table id=\"le\"><thead><tr><td>Quiz Title</td><td>Score</td><td>Total Score</td><td>Student name</td><td>Student Mail ID</td>
                while ($row = mysqli_fetch_assoc($res)) {
                    echo "<tr><td>".$row["quizname"]."</td><td>".$row["score"]."</td><td>".$row["totalscore"]."</td><td>".$row["name"]."</td><td>".$
                }
                echo "</table><br><br><br>";
            }
            else{
                echo mysqli_error($conn);
            }
            ?>
        </section>
    </div>
```

```php
    <?php require("footer.php");?>

</body>
<?php
echo '<script>'.
"function prof(){".
"document.getElementById(\"prof\").style=\"display: block !important;\";".
"document.getElementById(\"score\").style=\"display: none !important;\";".
"}".
"function score(){".
"document.getElementById(\"prof\").style=\"display: none !important;\";".
"document.getElementById(\"score\").style=\"display: block !important;\";".
"}".
"function dash(){".
    "document.getElementById(\"prof\").style=\"display: none !important;\";".
    "document.getElementById(\"score\").style=\"display: none !important;\";".
    "}".
"function lo(){".
"alert(\"Thank You for Using our Online Examination System\");";
//session_unset();
//session_destroy();
echo "window.location.replace(\"index.php\");".
"}</script>";
?>

</html>
```

homestaff.php

DBMS-MINI-Project-master > homestaff.php

```php
<html>

<head>
    <title>
        Onine examination System
    </title>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>
<?php
session_start();
require_once 'sql.php';
                $conn = mysqli_connect($servername, $username, $password, "projet");if (!$conn) {
    echo "<script>alert(\"Database error retry after some time !\")</script>";
} else {
    $type1 = $_SESSION["type"];
    $username1 = $_SESSION["username"];
    $sql = "select * from " . $type1 . " where mail='{$username1}'";
    $res =   mysqli_query($conn, $sql);
    if ($res == true) {
        global $dbmail, $dbpw, $dbusn;
        while ($row = mysqli_fetch_array($res)) {
            $dbmail = $row['mail'];
            $dbname = $row['name'];
            $dbusn = $row['staffid'];
            $dbphno = $row['phno'];
            $dbgender = $row['gender'];
            $dbdob = $row['DOB'];
            $dbdept = $row['dept'];
        }
    }
    if (isset($_POST['submit'])) {
        $qname = strtolower($_POST['quizname']);
        $_SESSION["qname"]=$qname;
        $sql1 = "insert into quiz(quizname,mail) values('$qname','$username1')";
        $res1 = mysqli_query($conn, $sql1);
        if ($res1 == true) {
            $sql = "select quizid from quiz where quizname='" . $qname . "';";
            $res = mysqli_query($conn, $sql);
            if ($res == true) {
                header("location: addqs.php");
            } else {
                echo "<script>alert(\"some error occured\");</script>";
            }
        } else {
            echo "<script>alert(\"Already name exists\");</script>";
        }
    }
    if (isset($_POST['submit1'])) {
        $qid1 = strtolower($_POST['quizid']);
        $sql1 = "delete from quiz where quizid='{$qid1}'";
        $res1 = mysqli_query($conn, $sql1);
        if ($res1 == true) {
            echo "<script>alert(\"Quiz successfully deleted\");</script>";
        } else {
            echo "<script>alert(\"Unknown error occured during deletion of quiz\");</script>";

        }
    }
    if (isset($_POST['submit2'])) {
        $qid1 =$_POST['quizid'];
        $sql1 = "select quizid from quiz where quizid='{$qid1}'";
        $res1 = mysqli_query($conn, $sql1);
        if ($res1 == true) {
            echo "<script>window.location.replace(\"viewq.php?qid=".$qid1."\");</script>";
        } else {
            echo "<script>alert(\"Unknown error occured during viweing of quiz\");</script>";

        }
    }
}
?>
<style>
```

```
    #main{
        min-height: 100% !important;
    }
    table{
        border: 1px solid black;
        width: 100% !important;
        font-weight: bolder;
        font-size: 2vw;
        color: #042A38;
    }
    td{
        border: 1px solid black;
        width: 20%;
        font-weight: bolder;
        font-size: 2vw;

    }
    li {
        margin: 1.5vw;
    }

    ul {
        list-style: none;
        width: auto !important;
    }

    .navbar {
        background-color: #fff!important;
        font-size: 1.5vw;
    }

    .navbar>ul>li:hover {
        color: black;
        text-decoration: underline;
        font-weight: bold;

    }
```

```

    .navbar>ul>li>a:hover {
        color: black;
        text-decoration: underline;
        font-weight: bold !important;
    }

    a {
        text-decoration: none;
        color: #042A38;
    }

    .prof,
    #score {
        top: 3vw;
        position: fixed;
        width: 50vw !important;
        margin-left: 25vw !important;
        margin-right: 25vw !important;
        background-color: #fff!important;
        display: none !important;
        border-radius: 10px;
        margin-top: 2vw;
        z-index: 1;
        padding: 1vw;
        padding-left: 2vw;
        color: #042A38;
    }

    button {
        height: 5vh;
        width: 10vw;
        background-color: lightgoldenrodyellow;
        color: black;
        outline: none;
        border: none;
        border-radius: 10px;
```

```
        margin: 1vw;
    }

    input {
        width: 30vw;
        height: 3vw;
        border-radius: 10px;
        border: 2px solid black;
        padding-left: 2vw;
        font-weight: bolder;
        outline: none;
    }

    ::placeholder {
        font-weight: bold;
        font-family: 'Courier New', Courier, monospace;
    }

    label {
        font-weight: bolder;
    }

    button:hover {
        background-color: blueviolet !important;
    }

    .bg {
        background-size: 100%;
    }

    @media screen and (max-width: 450px) {
        .navbar {
            display: initial !important;

        }

        .navbar>ul {
```

```
            display: initial !important;
            left: 25vw !important;
            text-align: center;
            right: 25vw !important;
        }

        .navbar>ul>li {
            background-color: orange !important;
        }

        section {
            text-align: center;
            margin-top: 0 !important;
            background-color: orange !important;
            width: 100vw;
            margin: 0 !important;
        }

        p {
            color: #042A38 !important;
        }

    }
    table{
        width: 90vw;
        margin-left: 5vw;
        margin-right: 5vw;
        align-content: center;
        border: 1px solid black;
    }
    thead{
        font-weight:900;
        font-size: 1.5vw;
    }
    td{
        width: auto;
        border: 1px solid black;
```

addq.php

DBMS-MINI-Project-master > addq.php

```php
<html>

<head>
    <title>
        Onine examination System
    </title>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>
<?php
session_start();
require_once 'sql.php';
                $conn = mysqli_connect($servername, $username, $password, "projet");if (!$conn) {
    echo "<script>alert(\"Database error retry after some time !\")</script>";
} else {
    $type1 = $_SESSION["type"];
    $username1 = $_SESSION["username"];
    $sql = "select * from " . $type1 . " where mail='{$username1}'";
    $res =   mysqli_query($conn, $sql);
    if ($res == true) {
        global $dbmail, $dbpw, $dbusn;
        while ($row = mysqli_fetch_array($res)) {
            $dbmail = $row['mail'];
            $dbname = $row['name'];
            $dbusn = $row['staffid'];
            $dbphno = $row['phno'];
            $dbgender = $row['gender'];
            $dbdob = $row['DOB'];
            $dbdept = $row['dept'];
        }
    }
```

```php

    $qid=$_GET["qid"];
    if (isset($_POST['submit'])) {
        $qs = $_POST["qs"];
        $op1 = $_POST["op1"];
        $op2 = $_POST["op2"];
        $op3 = $_POST["op3"];
        $ans = $_POST["ans"];
        $sql = "insert into questions(qs,op1,op2,op3,answer,quizid) values('$qs','$op1','$op2','$op3','$ans','$qid');";
        $res =   mysqli_query($conn, $sql);
        if ($res == true) {
            echo '<script>history.pushState({}, "", "");</script>';
        } elseif ($res != true) {
            echo '<script>alert("Question already exsits");</script>';
        }
    }
    if (isset($_POST['submit1'])) {
        $qs = $_POST["qs"];
        $op1 = $_POST["op1"];
        $op2 = $_POST["op2"];
        $op3 = $_POST["op3"];
        $ans = $_POST["ans"];
        $sql = "insert into questions(qs,op1,op2,op3,answer,quizid) values('$qs','$op1','$op2','$op3','$ans','$qid');";
        $res =   mysqli_query($conn, $sql);
        if ($res == true) {
            header("Location: homestaff.php");
        } elseif ($res != true) {
            echo '<script>alert("Question already exsits");</script>';
        }
    }
}
```

addqs.php

DBMS-MINI-Project-master > addqs.php

```php
<html>

<head>
    <title>
        Onine examination System
    </title>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>
<?php
session_start();
require_once 'sql.php';
                $conn = mysqli_connect($servername, $username, $password, "projet");if (!$conn) {
    echo "<script>alert(\"Database error retry after some time !\")</script>";
} else {
    $type1 = $_SESSION["type"];
    $username1 = $_SESSION["username"];
    $sql = "select * from " . $type1 . " where mail='{$username1}'";
    $res =   mysqli_query($conn, $sql);
    if ($res == true) {
        global $dbmail, $dbpw, $dbusn;
        while ($row = mysqli_fetch_array($res)) {
            $dbmail = $row['mail'];
            $dbname = $row['name'];
            $dbusn = $row['staffid'];
            $dbphno = $row['phno'];
            $dbgender = $row['gender'];
            $dbdob = $row['DOB'];
            $dbdept = $row['dept'];
        }
    }
    $qname = $_SESSION['qname'];
    $sql = "select quizid from quiz where quizname='{$qname}'";
    $res =   mysqli_query($conn, $sql);
    if ($res == true) {
        global $qid;
        while ($row = mysqli_fetch_array($res)) {
            $qid = $row['quizid'];
        }
    }
    if (isset($_POST['submit'])) {
        $qs = $_POST["qs"];
        $op1 = $_POST["op1"];
        $op2 = $_POST["op2"];
        $op3 = $_POST["op3"];
        $ans = $_POST["ans"];
        $sql = "insert into questions(qs,op1,op2,op3,answer,quizid) values('$qs','$op1','$op2','$op3','$ans','$qid');";
        $res =   mysqli_query($conn, $sql);
        if ($res == true) {
            echo '<script>history.pushState({}, "", "");</script>';
        } elseif ($res != true) {
            echo '<script>alert("Question already exsits");</script>';
        }
    }
    if (isset($_POST['submit1'])) {
        $qs = $_POST["qs"];
        $op1 = $_POST["op1"];
        $op2 = $_POST["op2"];
        $op3 = $_POST["op3"];
        $ans = $_POST["ans"];
        $sql = "insert into questions(qs,op1,op2,op3,answer,quizid) values('$qs','$op1','$op2','$op3','$ans','$qid');";
        $res =   mysqli_query($conn, $sql);
        if ($res == true) {
            header("Location: homestaff.php");
        } elseif ($res != true) {
            echo '<script>alert("Question already exsits");</script>';
        }
    }
}
?>
```

signup.php

DBMS-MINI-Project-master > signup.php

```php
<html>

<head>
    <title>Online Examination System</title>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>
<?php

if (isset($_POST['studsu'])) {
    session_start();
    if (isset($_POST['name1']) && isset($_POST['usn1']) && isset($_POST['mail1']) && isset($_POST['phno1']) && isset($_POST['dept1']) && isset($_POS
        require_once 'sql.php';
        $conn = mysqli_connect($servername, $username, $password, "projet");       if (!$conn) {
            echo "<script>alert(\"Database error retry after some time !\")</script>";
        }
        $name1 = mysqli_real_escape_string($conn, $_POST['name1']);
        $usn1 = mysqli_real_escape_string($conn, $_POST['usn1']);
        $mail1 = mysqli_real_escape_string($conn, $_POST['mail1']);
        $phno1 = mysqli_real_escape_string($conn, $_POST['phno1']);
        $dept1 = mysqli_real_escape_string($conn, $_POST['dept1']);
        $dob1 = mysqli_real_escape_string($conn, $_POST['dob1']);
        $gender1 = mysqli_real_escape_string($conn, $_POST['gender1']);
        $password1 = mysqli_real_escape_string($conn, $_POST['password1']);
        $cpassword1 = mysqli_real_escape_string($conn, $_POST['cpassword1']);
        $password1 = crypt($password1,'rakeshmariyaplarrakesh');
        $cpassword1 = crypt($cpassword1,'rakeshmariyaplarrakesh');
        if ($password1 == $cpassword1) {
            $sql = "insert into student (usn,name,mail,phno,dept,gender,DOB,pw) values('$usn1','$name1','$mail1','$phno1','$dept1','$gender1','$dob1
            if (mysqli_query($conn, $sql)) {
                echo "<script>
                alert('successful!');
                window.location.replace(\"index.php\");</script>";
                session_destroy();
            } else {
                echo "<script>
                alert('Data enter by you alreay exist in Database please Sign In');
                window.location.replace(\"index.php\");</script>";
                session_destroy();
            }
        } else {
            echo "<script>
                alert(' Password should be same');
                window.location.replace(\"singup.php\");</script>";
            session_destroy();
        }
    }
}

if (isset($_POST['staffsu'])) {
    session_start();
    if (isset($_POST['name2']) && isset($_POST['staffid']) && isset($_POST['mail2']) && isset($_POST['phno2']) && isset($_POST['dept2']) && isset($_
require 'sql.php';
        $conn = mysqli_connect($host, $user, $ps, $project);        if (!$conn) {
            echo "<script>alert(\"Database error retry after some time !\")</script>";
        }
        $name2 = mysqli_real_escape_string($conn, $_POST['name2']);
        $usn2 = mysqli_real_escape_string($conn, $_POST['staffid']);
        $mail2 = mysqli_real_escape_string($conn, $_POST['mail2']);
        $phno2 = mysqli_real_escape_string($conn, $_POST['phno2']);
        $dept2 = mysqli_real_escape_string($conn, $_POST['dept2']);
        $dob2 = mysqli_real_escape_string($conn, $_POST['dob2']);
        $gender2 = mysqli_real_escape_string($conn, $_POST['gender2']);
        $password2 = mysqli_real_escape_string($conn, $_POST['password2']);
        $cpassword2 = mysqli_real_escape_string($conn, $_POST['cpassword2']);
        $password2 = crypt($password2,'rakeshmariyaplarrakesh');
        $cpassword2 = crypt( $cpassword2,'rakeshmariyaplarrakesh');
        if ($password2 == $cpassword2) {
            $sql = "insert into staff (staffid,name,mail,phno,dept,gender,DOB,pw) values('$usn2','$name2','$mail2','$phno2','$dept2','$gender2','$d
            if (mysqli_query($conn, $sql)) {
                echo "<script>
                alert('successful!');
                window.location.replace(\"index.php\");</script>";
                session_destroy();
            } else {
```

```
                echo "<script>
                alert('Data enter by you alreay exist in Database please Sign In');
                window.location.replace(\"index.php\");</script>";
                session_destroy();
            }
        } else {
            echo "<script>
                alert(' Password should be same');
                window.location.replace(\"signup.php\");</script>";
            session_destroy();
        }
    }
}
?>
<style>
    button {
        height: 4vw;
        width: 40vw;
        margin: 0px;
        font-family: 'Courier New', Courier, monospace;
        font-weight: bolder;
        outline: none;
        background-color: lightblue;
        border: none;
    }

    button:active {
        background-color: lightblue;
        color: #fff;
    }

    button:focus {
        background-color: #042A38;
        color: #fff;
    }

    .staff {
        display: none;
    }

    label {
        float: left;
        margin-left: 25vw;
        font-weight: bolder;
    }

    input,
    .selc {
        width: 30vw !important;
        outline: none;
        height: 3vw;
        border: 2px solid black;
        border-radius: 10px;
        padding: 1vw;
    }

    .gen {
        width: 2vw !important;
    }

    form>button {
        width: 20vw;
        height: 2vw;
    }
    a{
        color: #042A38;
        margin: 2vw;
    }
    .su {
        width: 10vw !important;
        background-color: #fff;
        margin-bottom: 1vw;
    }
```

```
    .formname {
        text-shadow: 2px 0px black;
    }

    @media screen and (max-width: 620px) {

        input,
        .selc {
            height: 5vw !important;
        }
    }
</style>

<body style="margin: 0;padding: 0;outline: none;height: 100%;min-height: 100%;color: #042A38 !important">
    <div style="font-family: 'Courier New', Courier, monospace;margin: 0;padding: 0;background-color: #fff;height: 100%;width: 100%;padding-bottom:
        <center>
            <h1 style="text-transform: uppercase;padding: 2vw;background-color: #fff;color: #042A38;margin-top:0;">ONLINE
                Examination System</h1>
        </center>
        <div class="seluser">
            <center> <button onclick="stud()">STUDENT</button><button onclick="staff()">STAFF</button></center>
        </div>
        <div class="stud" id="stud">
            <center>

                <form name="student" method="POST" style="width: 80vw;background-color:#fff;"><br>
                    <h1 class="formname">Sign-Up as Student</h1><br><br>
                    <label for="name1">NAME</label><br>
                    <input type="text" name="name1" required><br><br>
                    <label for="usn">USN</label><br>
                    <input type="text" name="usn1" required><br><Br>
                    <label for="mail1">Email</label><br>
                    <input type="email" name="mail1" required><br><Br>
                    <label for="phno1">Ph No.</label><br>
                    <input type="tel" name="phno1" required><br><Br>
                    <label for="dept1">Department</label><br>
                    <select name="dept1" class="selc" required>
```

```
                    <select name="dept1" class="selc" required>
                        <option value="CSE">CSE</option>
                        <option value="ISE">ISE</option>
                        <option value="ECE">ECE</option>
                        <option value="EEE">EEE</option>
                    </select><br><br>
                    <label for="dob1">DOB</label><br>
                    <input type="date" name="dob1" required><br><Br>
                    <label for="gender1">Gender</label><br>
                    <input type="radio" name="gender1" value="M" class="gen" required style="height: 1vw !important;">MALE
                    <input type="radio" name="gender1" value="F" class="gen" required style="height: 1vw !important;">FEMALE<br><Br>
                    <label for="password1">Password</label><br>
                    <input type="password" name="password1" required><br><Br>
                    <label for="cpassword1">Confirm Password</label><br>
                    <input type="password" name="cpassword1" required><br><Br>
                    <input type="submit" class="su" name="studsu" value="Sign-Up as Student">
                </form>

            </center>
        </div>
        <div class="staff" id="staff">
            <center>

                <form name="staffSIGNUP" method="POST" style="width: 80vw;background-color:#fff;"><br>

                    <h1 class="formname">Sign-Up as Staff</h1><br><br><label for="name">NAME</label><br>
                    <input type="text" name="name2" required><br><br>
                    <label for="staffid">Staff Id</label><br>
                    <input type="text" name="staffid" required><br><Br>
                    <label for="mail2">Email</label><br>
                    <input type="email" name="mail2" required><br><Br>
                    <label for="phno2">Ph No.</label><br>
                    <input type="tel" name="phno2" required><br><Br>
                    <label for="dept2">Department</label><br>
                    <select name="dept2" class="selc" required>
                        <option value="CSE">CSE</option>
                        <option value="ISE">ISE</option>
```

```
                    <select name="dept2" class="selc" required>
                        <option value="CSE">CSE</option>
                        <option value="ISE">ISE</option>
                        <option value="ECE">ECE</option>
                        <option value="EEE">EEE</option>
                    </select><br><br> <label for="dob2">DOB</label><br>
                    <input type="date" name="dob2" required><br><Br>
                    <label for="gender2">Gender</label><br>
                    <input type="radio" name="gender2" value="M" class="gen" required style="height: 1vw !important;">MALE
                    <input type="radio" name="gender2" value="F" class="gen" required style="height: 1vw !important;">FEMALE<br><Br>
                    <label for="password2">Password</label><br>
                    <input type="password" name="password2" required><br><Br>
                    <label for="cpassword2">Confirm Password</label><br>
                    <input type="password" name="cpassword2" required><br><Br>
                    <input type="submit" name="staffsu" class="su" value="Sign-Up as Staff">
                </form>
            </center>
        </div>
        <center><a href="index.php" style="color:#fff !important;">Cancel</a></center>
    </div>
    <?php require("footer.php");?>

</body>
<script>
    function stud() {
        document.getElementById('stud').style = "display:initial";
        document.getElementById('staff').style = "display:hidden";
    }

    function staff() {
        document.getElementById('stud').style = "display:hidden";
        document.getElementById('staff').style = "display:initial";
    }
</script>

</html>
```

12. RESULTS AND DISCUSSIONS

Online Examination System is a web application. The key concept is to minimize the amount of paper and convert all forms of documentation to digital form. It can be observed that the information required can be obtained with ease and accuracyin the computerized system. The user with minimum knowledge about computer can be able to operate the systemeasily. The system also produces brief result required by the management.

Developments in software technology are continuing dynamically. This has forced developers to look for new approaches to design and development. In order to face this situation, the modules in a package should be upgraded any time. The modules in this package can be subjected to further enhancements.

Efficient Management: The online examination system can effectively manage the examination process, including the registration of students, creation and management of questionnaires, and grading of exams.

Time-saving: The online examination system saves a lot of time for both the students and the instructors. It eliminates the need for physical exam papers and the time-consuming process of checking each paper manually.

Increased Accuracy: The online examination system can help reduce the possibility of human errors in the grading process, as the system is automated and can perform calculations accurately.

Improved Security: The online examination system can ensure the security of exams by providing features such as authentication, encryption, and anti-cheating measures.

Data Analysis: The system can also generate reports and provide insights into the performance of students, which can help instructors to identify areas where students need improvement.
Overall, the online examination system based on the DBMS project can bring several benefits to the education sector by providing a secure, efficient, and accurate way of conducting exams.

13. FUTURE ENHANCEMENT

Some possible future works or enhancements for an online examination system for a DBMS project could include:

Adaptive testing: An adaptive testing system adjusts the difficulty level of the questions based on the performance of the student. It can help to identify the strengths and weaknesses of the student more accurately and improve their learning experience.

Mobile application: A mobile application can make the online examination system more accessible and convenient for students. They can take exams on their smartphones or tablets from anywhere, anytime.

Integration with learning management systems (LMS): Integration with LMS can help to manage the entire learning process, including course materials, assignments, quizzes, and exams, in a single platform.

Gamification: can make the online examination system more engaging and interactive. It can motivate students to learn and improve their performance by providing rewards, points, or badges for completing exams or achieving specific goals.

Artificial intelligence (AI) and machine learning (ML): AI and ML can help to personalize the learning experience of the students by analyzing their performance data and providing customized recommendations for improvement.

Blockchain technology: Blockchain technology can provide secure and transparent record-keeping of exam results and credentials, preventing fraud and enhancing the value of the degrees earned by the students.

In conclusion, the future works of an online examination system for a DBMS project can include various technologies and features that enhance the learning experience of the students, increase the security and reliability of the system, and provide more personalized and transparent evaluation and record-keeping.

14. CONCLUSION AND SUMMARY

The conclusion of an online examination system for a DBMS project can be:

Efficient and time-saving: An online examination system is more efficient and time-saving compared to a traditional pen-and-paper exam. It reduces the workload of the faculty and saves time in the evaluation process.

Fairness and transparency: The online examination system ensures fairness and transparency in the evaluation process. It eliminates the possibility of human error and bias, which can be present in traditional methods of evaluation.

Secure and reliable: The online examination system is secure and reliable as it uses various measures to prevent cheating, such as randomization of questions, time limits, and anti-plagiarism software.

Accurate and consistent: The online examination system provides accurate and consistent results as it uses automated evaluation techniques, which eliminates the possibility of errors in the evaluation process.

Enhanced learning: The online examination system can enhance the learning experience of the students by providing instant feedback and detailed analysis of their performance. It helps them identify their strengths and weaknesses and improve their overall performance.

Cost-effective: An online examination system is cost-effective as it eliminates the need for paper-based exams and reduces the workload of the faculty.

In conclusion, an online examination system for a DBMS project can offer many benefits, including efficiency, fairness, security, accuracy, consistency, enhanced learning, and cost-effectiveness.

The summary works of an online examination system for a DBMS project can include:

Designing and developing a user-friendly interface for the online examination system that allows students to easily access and take exams. Creating a secure and reliable system that prevents cheating and ensures fairness and transparency in the evaluation process. Developing automated evaluation techniques to provide accurate and consistent results, including instant feedback and detailed analysis of the student's performance.

Generating various reports such as student details, exam details, exam score, rank list, performance analysis, question-wise analysis, certificates, feedback, and analytics. Ensuring the scalability and performance of the system, especially during high traffic periods such as exams. Integrating the system with other learning management systems, mobile applications, or gamification features to enhance the learning experience of the students.

In summary, the online examination system for a DBMS project involves designing and developing a secure, reliable, and efficient platform that provides accurate and consistent results and enhances the learning experience of the students. It requires careful planning, design, implementation, and testing to ensure its effectiveness and success.

15. REFERENCES

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