

Online Examination System

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Examination System Documentation

1. Overview/Introduction

• Project Title: online Examination System

Description:

- The Online Quiz Management System is a web-based platform that enables:
- instructors to create exams, manage questions and answers, and grade students efficiently.
- Students to take quizzes and receive grades instantly.

• Tech Stack:

Frontend: HTML, CSS, Sass, JavaScript, JQuery

Backend: PHP

Database: MySQL

• Features:

- User authentication (Admin/Student roles)
- Add, edit, and delete quizzes and questions
- Automated grading
- User-friendly interface

2. Features

2.1 User Roles

- Teacher:
 - Create, edit, and delete exams.
- Student:
 - Take quizzes.
 - View grades.

2.2 Exam Management

- · Add new exams:
 - o Input exam name, duration, and creator.
- · Add questions:
 - Input question text, multiple answers, and mark the correct answer.
- Edit or delete questions.

2.3 Taking Exams

- · Students can select an exam.
- Answer questions and submit answers.
- Receive immediate feedback (grades).

3. Code Structure

3.1 Folder Organization

Connection.php # Database connection

SignUp # User registration

SignIn # Login functionality

Home # Admin/Student dashboard

ExamAction # Start, view, or delete exams

CerateExam # Exam preview and Creation

TakeExam # Students take exams

css # Stylesheets

js # JavaScript files

sql # Database schema and seed data

3.2 File Descriptions

- Connection.php: Handles database connection.
- **SignUp**: Contains forms and logic for user registration.
- SignIn: Contains forms and logic for user login.
- Home: Contains Dashboards and tabs for user interact.
- **ExamAction**: Contains buttons passed on roles to either create or take an exam.
- CreateExam: Allows admins to manage exams and questions.
- TakeExam: Displays questions and records student responses.

4. API/Database Design

4.1 Database Schema

Users Table:

o Columns: Id, Name, Email, Password, Role

Exams Table:

o Columns: Id, Name, Duration, CreatedBy

Questions Table:

o Columns: Id, ExamId, Text, Points, RightAnswer

Answers Table:

o Columns: Id, QuestionId, Text

• ExamsDegree Table:

o Columns: UserId, ExamId, Degree

4.2 Key Relationships

- Users.Id → Exams.CreatedBy, ExamsDegree.UserId
- Exams.Id → Questions.ExamId, ExamsDegree.ExamId
- Questions.Id → Answers.QuestionId

5. Testability

Test Case	Expected Results	Status
Non Completed data for SignUp	Error	Error
Wrong Email or Password when	Error	Error
SignIn		
Creating New Exam	Pass	Pass
Adding New Question	Pass	Pass
Editing Question	Pass	Pass
Deleting Question	Pass	Pass
Taking Exam	Pass	Pass

6. Functionality Description & GUI

- Signin:
 - o SignIn Page with inputs for the email & password

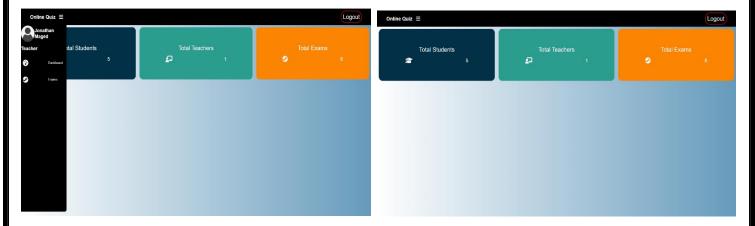


- SignUp:
 - SignUp Page with inputs for the Name & email & password & password Confirmation & role



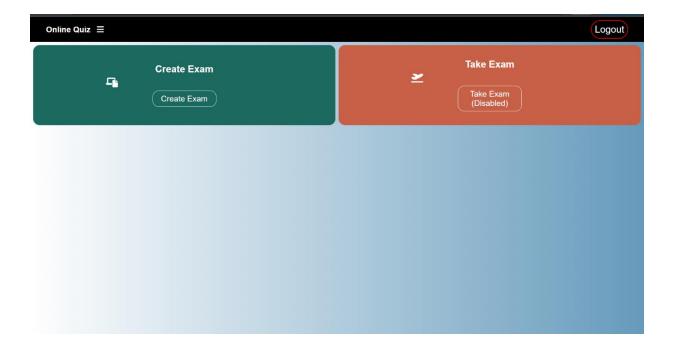
Home:

 Friendly User Interface page for showing the statistics of the system with a dashboard for dealing with exams



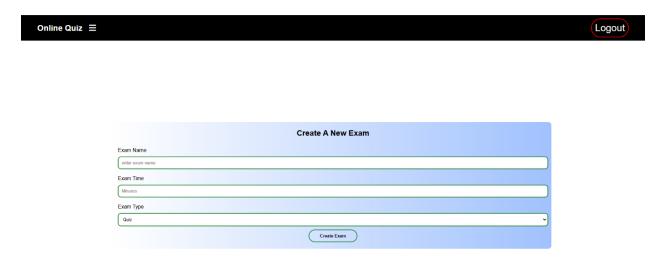
Exam Action:

 Page for Dealing with the exams based on the role of the user for Creation or Taking the Exam



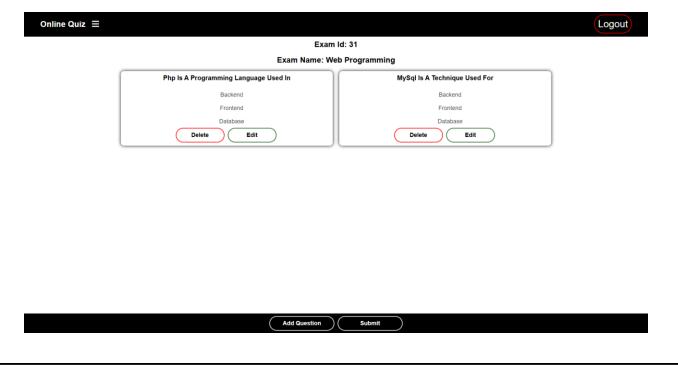
Create Exam:

 Friendly User Interface page for entering the main details of the exam



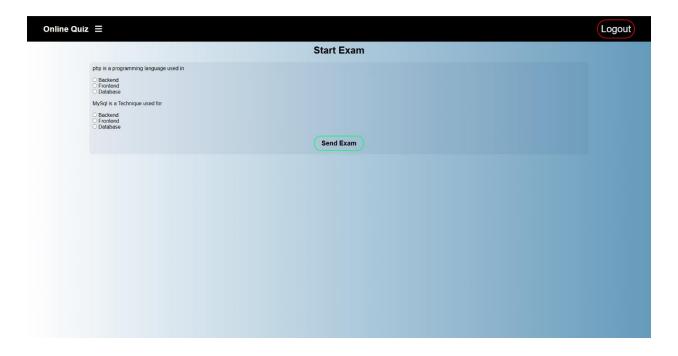
Preview Exam:

 Friendly User Interface page that shows the exam details to share and an easy buttons for adding editing and deleting questions



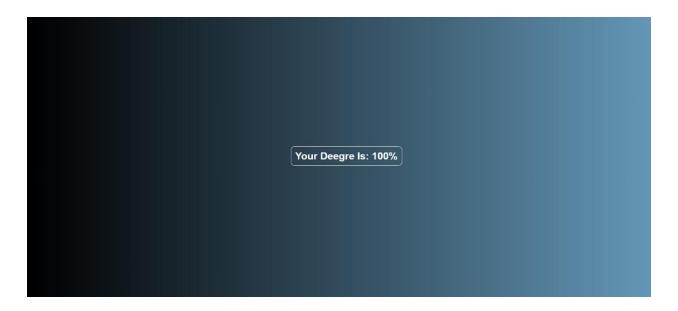
Take Exam:

 Friendly User Interface page that shows the exam for the student to solve it



• Degree ShowUp:

 Colorful page shows student Degree and percentage of success



7. Future Improvements

- Add exam categories & Subjects (e.g., Math, Science).
- Implement analytics for student performance.
- Allow bulk question uploads using CSV files.
- Allow Profiles for every Student & Teacher

8. Conclusion

The **Online Quiz Management System** is a robust, user-friendly platform designed to simplify the process of creating, managing, and taking online quizzes. With features tailored for both administrators and students, the system streamlines exam preparation, execution, and grading, fostering an efficient and engaging learning environment.

This project demonstrates the seamless integration of modern web technologies, including PHP, MySQL, JavaScript, and jQuery, to deliver a dynamic and scalable solution. Its intuitive interface and structured codebase ensure ease of use, maintainability, and future extensibility.

By automating manual tasks and providing instant feedback, this system enhances the productivity of educators while improving the learning experience for students. Moving forward, features like analytics, enhanced security, and advanced reporting can be incorporated to further elevate its capabilities.

We hope this project serves as a valuable tool for educational institutions and as a strong foundation for developers looking to create similar systems. Thank you for exploring this application, and we welcome any feedback or contributions to help us improve further.