"QUIZ PORTAL"

A

Project Presentation

submitted

in partial fulfillment

for the award of the Degree of

Bachelor of Technology

in Department of Information Technology

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Session 2024-2025

INTRODUCTION

- Online Examination will reduce the huge work done by teachers, administrators and also students.

- Response of the candidates will be checked automatically and instantly.

- Reduce paper work.

- Result will be shown immediately that will reduce student anxiety.

- Can be used anywhere anytime as it is a web based application.

- Useful for teachers for managing exams.

- It can be conduct any time.

Online QUIZ System Vs Manual Examination System

- Time Saving
- Increased efficiency
- Allows neat handling of data rather than error prone records.
- Decreases overhead
- Accurate

PROBLEM STATEMENT

► Many colleges and schools still use manual methods or basic tools like Google Forms to conduct and manage exams. These methods have limited features and can't handle large numbers of students or complex exam systems. Tasks like creating quizzes, assigning tests, checking answers, and managing results become time-consuming and confusing.

► During the COVID-19 pandemic, when everything moved online, it became even more difficult to conduct exams smoothly. Many institutions faced problems like data loss, delayed results, lack of security, and difficulty in managing student records. As the number of students and exams increases, manual or basic systems are not enough. This leads to errors, slow processes, and poor exam experiences for both teachers and students.

► That's why there is a need for a proper digital Quiz Portal. It can automate the entire exam process, save time, reduce mistakes, provide secure access, and make online exams simple and organized for everyone.

PROPOSED SOLUTION

▶ The proposed solution is a web-based Quiz Portal developed using Spring Boot for the backend and Angular for the frontend. Unlike tools like Google Forms, this system is designed to be user-friendly, secure, and customizable for educational needs.

▶ It includes features like secure login, role-based access (admin and student), quiz creation, exam taking, and result viewing. The backend uses REST APIs for fast and secure data handling, while the Angular frontend provides a smooth and interactive user experience.

▶ The system follows a modular structure, making it easy to maintain and expand.

TECHNOLOGY USED

- **Frontend:** Angular – For building a responsive and dynamic user interface.

- **Backend:** Spring Boot – For handling business logic, authentication, and API services.

- **Database:** MySQL – To store user details, questions, quiz results, and logs.

Features and Functionality

▶ **Secure Login: Role-based login system for Admins and Students to ensure secure access.**

▶ **Admin Dashboard: Displays total quizzes, Category Add Option, Manage Quiz, Question managed.**

▶ **User Management: Admins can manage student accounts and assign quizzes as needed.**

▶ **Quiz Management: Admins can create, update, and delete quizzes with multiple questions.**

▶ **Exam Participation: Students can view available quizzes and take exams with in a given time limit.**

▶ **Result Generation: Automatic evaluation of quizzes and instant result display after submission.**

Flow Diagram
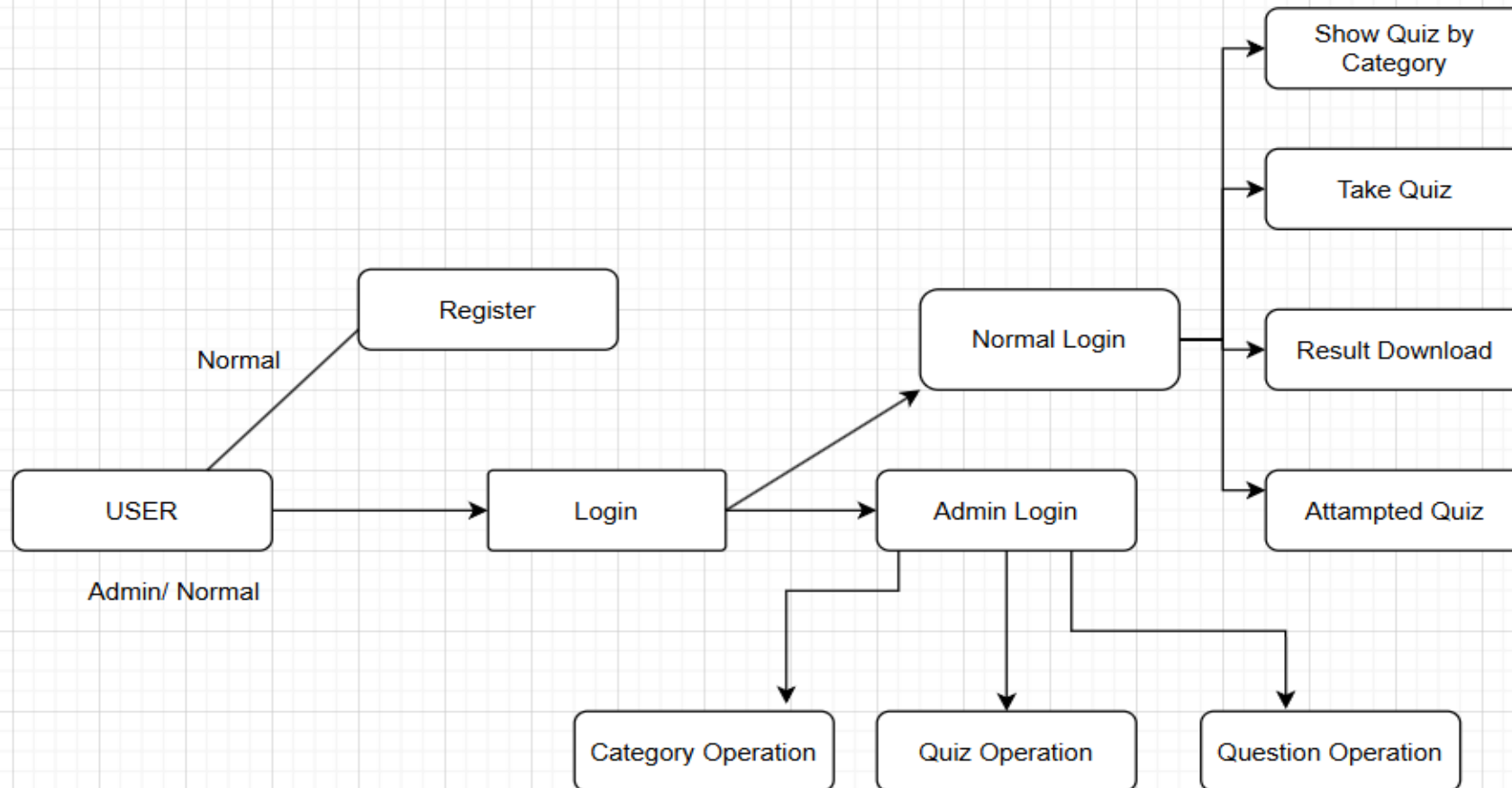
Data Security

- Only admin have the authority to change the data.
- No chances of leak like the traditional examination system
- Only admin can change, add, delete the questions of the examination.
- Student access to database and question are secured by this database.

System Architecture

The system follows a **Client-Server Architecture**, where:

▶ The **frontend (Angular)** sends requests to the backend.

▶ The **backend (Spring Boot)** processes the requests, interacts with the **database (MySQL)**, and sends responses.

▶ Role-based authentication ensures that only authorized users can access respective functionalities.
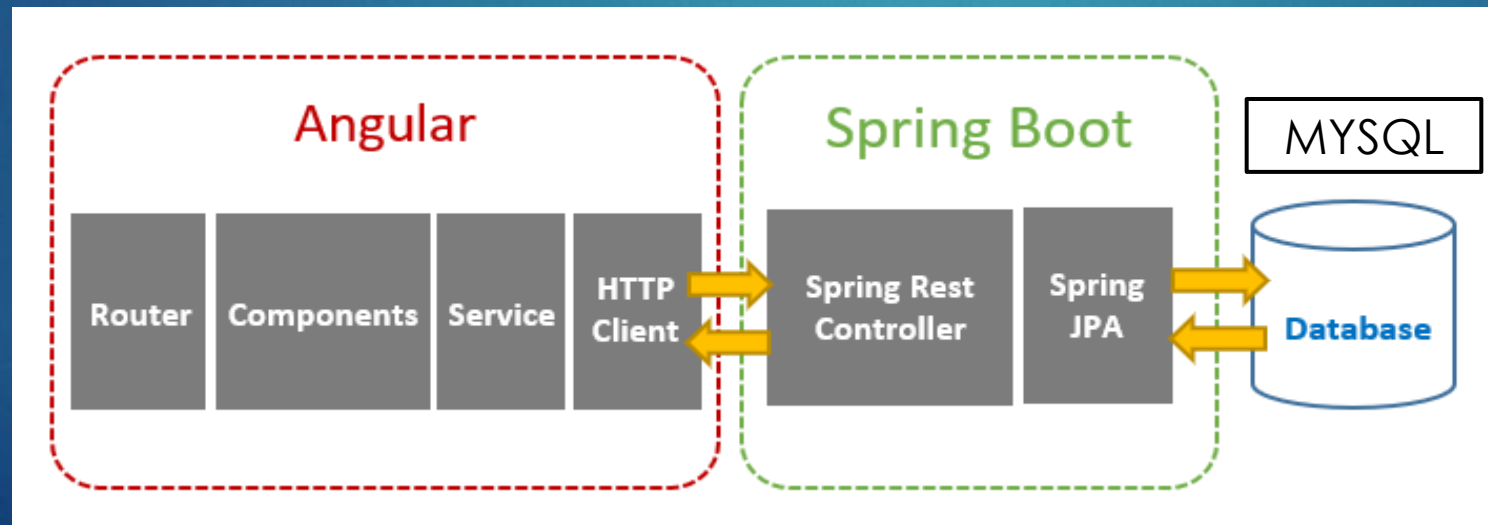
REGISTRATION & LOGIN PAGE

WELCOME PAGE FOR ADMIN
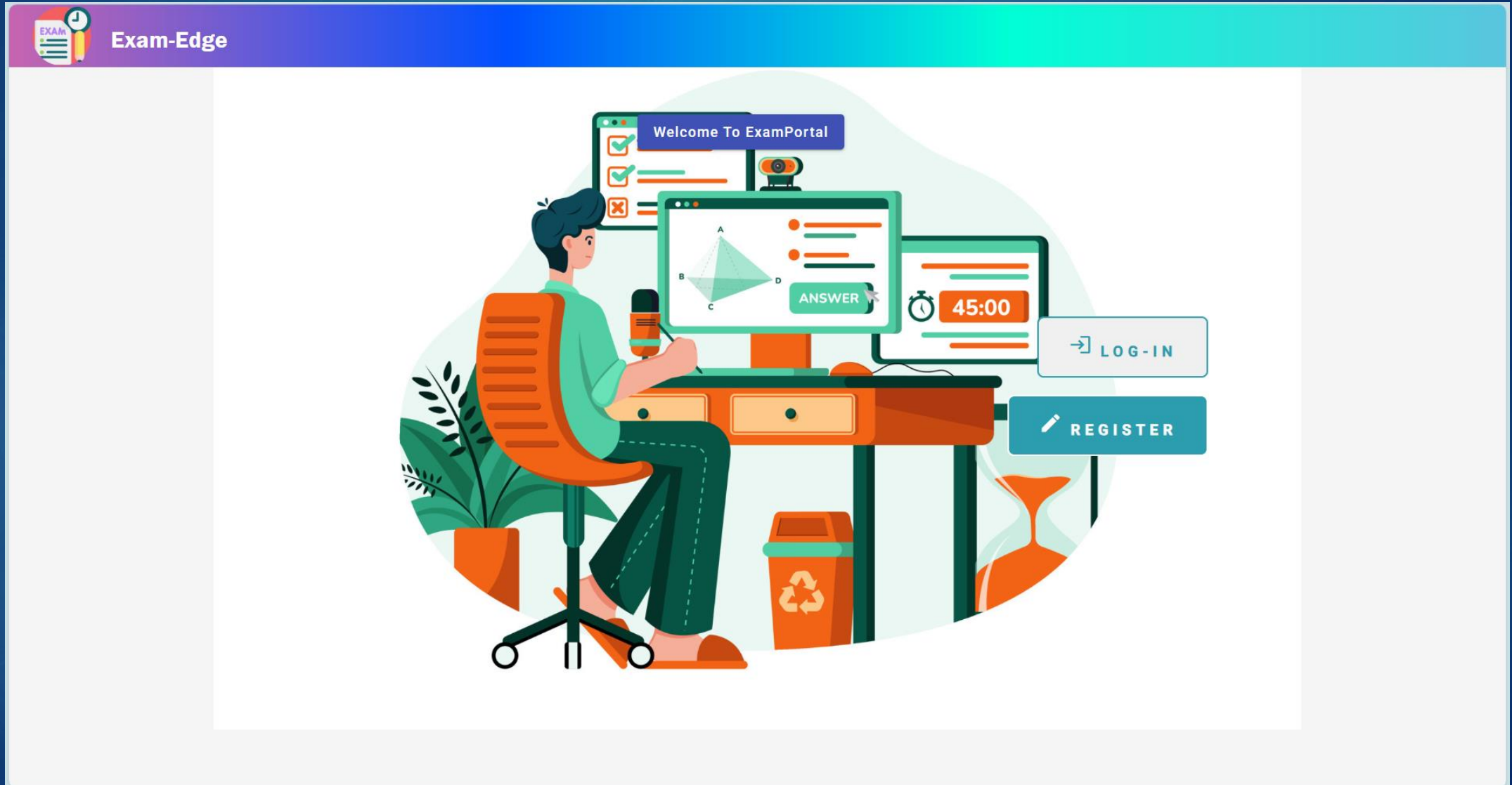
PROJECT SCREENSHORT
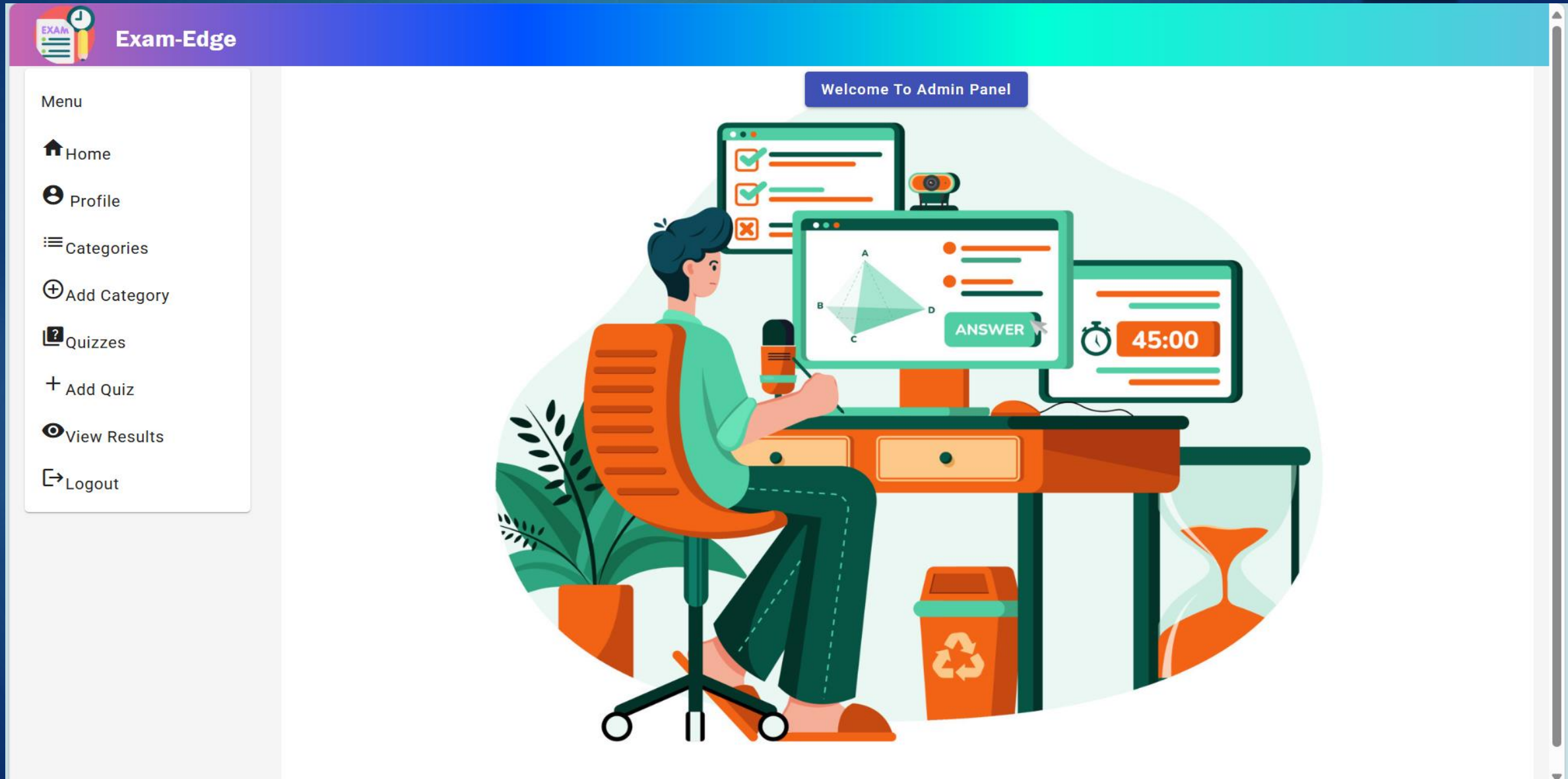
ADD CATEGORY

ADD QUIZ

Available Quiz

Exam-Edge

Back !   Home

Available Quizzes

C++
C++ Quiz

C++ Quiz

View   Questions: 10   Max Marks: 10

SpringBoot
SpringBoot

This is SpringBoot Quiz.

View   Questions: 15   Max Marks: 15

Java
Java Quiz

This is Java Mcq based test.

View   Questions: 10   Max Marks: 10

Opps Quiz
Opps Quiz

Opps Quiz

View   Questions: 5   Max Marks: 10

Networking Quiz
Networking Quiz

This is Networking Quiz

View   Questions: 5   Max Marks: 10

Angular Quiz
Angular Quiz

This is Angular Quiz

View   Questions: 10   Max Marks: 10

DSA Test
DSA

DSA Test.

View   Questions: 10   Max Marks: 20

CONCLUSION

► The Quiz Portal successfully provides a secure, efficient, and user-friendly plat-form for conducting online exams. It simplifies the entire examination process-from quiz creation to result generation-making it easier for both administrators and students.

► By automating tasks and reducing manual work, the portal helps save time, minimize errors, and improve overall exam management. It also ensures data security, real-time evaluation, and a better exam experience.

► This project not only solves current problems faced during online exams but also has the potential for future improvements like analytics, email notifications, and support for subjective questions.

Future Enhancements

▶ **AI-based Question Generation:** Automatically generate personalized quizzes based on student performance

▶ **Randomized Questions:** To prevent cheating, randomization of question order and answer choices.

▶ **Real-time Proctoring:** AI-based monitoring to ensure integrity during exams.

REFERENCES

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- ▶ 2.https://angular.dev/overview
- ▶ 3.https://www.geeksforgeeks.org/spring-boot/

Thank you