

SYNOPSIS ON

Online Quiz Platform

**Submitted By: Submitted To:**

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Department: TD

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# Title of the Project:

Online Quiz Platform

# Objective:

The main objective of this project is to build an online quiz platform that allows users to create and take quizzes on various topics, with scoring and leaderboards.

# Scope:

The project will cover the design and implementation of the online quiz platform core features, including user authentication. This platform will enable users to both create and participate in quizzes covering a wide range of topics. It will feature scoring systems to assess quiz performance and leaderboards to showcase the top performers, creating an engaging and competitive environment for users.

# Methodology:

Programming Languages: HTML, CSS, JavaScript, Nodejs, Express js, React js. Software: MongoDB for database management, Git for version control Tools: RESTful API, Passport.js

Hardware: Standard server infrastructure for hosting

# Proposed System:

The proposed system is an online quiz platform developed using the MERN (MongoDB, Express, React, Node.js) stack. The core idea of this platform is to provide users with an interactive and engaging environment for creating and participating in quizzes on a variety of topics. The system will offer features like scoring and leaderboards to enhance the competitive aspect of quiz-taking. Here's an overview of how the system will function:

# Features:

User Authentication and Authorization Quiz Creation

Scoring and Timing Leaderboards

# Implementation Plan:

Phase 1: Project Planning (1-2 weeks)

Phase 2: Backend Development (6-8 weeks)

Phase 3: Frontend Development (8-10 weeks) Phase 4: Testing and Quality Assurance (4-6 weeks)

Phase 5: Deployment and Launch (2-4 weeks) Phase 6: Post-Launch and Maintenance (Ongoing) **Team Members:**

Front-end Developer: Govind Sharma Back-end Developer: Kanishk Patel Database Administrator: Palak Dhakrey

Quality Assurance Specialist: Ritik Chauhan

# Resources Required:

Development environment or IDEs (VS Code) Version Control (Git and Git clients) Database Management (MongoDB Compass) Web Development Tools (Postman) Deployment Tools (Netlify or Heroku) **References:**

**Frontend:** [**https://www.w3schools.com/whatis/whatis\_frontenddev.asp**](https://www.w3schools.com/whatis/whatis_frontenddev.asp)

**NODEJS:** [NodeJS Quiz App - CodeSandbox](https://codesandbox.io/s/nodejs-quiz-app-l5hig)

**REACT JS:** [Create a Quiz App using ReactJS - GeeksforGeeks](https://www.geeksforgeeks.org/create-a-quiz-app-using-reactjs/)

# Expected Outcomes:

The primary tangible outcome of this project is a fully operational and user-friendly online quiz platform that provides a rich user experience, encourages learning and engagement, and meets the project's objectives and requirements. This platform will be ready for public use and can serve as an educational and entertaining resource for users interested in quizzes and knowledge-sharing.

# Project Supervisor:

**Mr. Mohd. Aslam Conclusion:**

Our project’s aims to develop an interactive and feature-rich online quiz platform using the MERN stack technology. The primary goals of this project are to provide users with a platform where they can both create and participate in quizzes on a wide range of topics, while also incorporating scoring systems and leaderboards to make the experience competitive and engaging. Key points of the project include:

1. Building a MERN stack application for creating, discovering, and participating in quizzes.
2. User-friendly registration and authentication mechanisms for secure access.
3. Quiz creation and management tools, allowing users to contribute their own quizzes.
4. Scoring and leaderboards to enhance competition and motivation.
5. User profiles with statistics and achievements to boost engagement.
6. Potential inclusion of social features like sharing results and discussions.
7. Prioritizing security, data privacy, and data integrity.
8. Rigorous testing and quality assurance.
9. Deployment to a production environment and hosting for public use.