

Dept. of Computer Science and Engineering (Data Science)

Adichunchanagiri Institute of Technology, Chikkamagaluru

Mini-Project Synopsis

TITLE: Smart Quiz Arena

Problem Statement: Most online quiz and coding platforms lack real-time competitions, feedback, and smooth multiplayer mode. Delayed updates of results, limited performance efficiency, and competitiveness. Hence, there is a need for an AI-powered platform that offers real-time competitions, results, and a seamless multiplayer experience.

Description: This project aims to develop an AI-powered Real-Time Quiz and Coding Competition Platform that allows users to participate in quizzes or coding challenges individually or in multiplayer mode. The system will generate quiz questions dynamically using the Gemini API and display them in real time, enabling response tracking and live score updates. For coding challenges, players will solve predefined problems, and the system will evaluate code efficiency, accuracy, and submission time to determine results. The platform will categorize questions into easy, medium, and hard levels and ensure smooth synchronization between players using WebSockets. All player data, scores, and performance metrics will be securely stored in a backend database, providing users with detailed analytics and an engaging, competitive experience.

Expected Outcomes:

- AI-generated quiz question categorized into easy, medium, hard.
- Real time multiplayer quiz competition and score update.
- Coding competitions where players can solve and submit code.
- Feedback and performance analytics.
- User friendly web interface.
- Enhanced learning and competitiveness.

Technologies and Tools:

- **Programming Language:** Python, javascript
- **Framework :** Django
- **Database:** SQLite
- **AI Integration:** Gemini API
- **Frontend :** HTML, CSS
- **Backend:** Django, WebSocket

Team Members:

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Signature of the Guide with date:**Signature of the Coordinators with date:**