

Project Report - QuickQuiz

1. Introduction

QuickQuiz is an AI-assisted quiz generator and performance tracker built as a demo project for VITyarthi coursework. It sho

2. Problem Statement

Creating quizzes and tracking student performance is time-consuming. QuickQuiz automates quiz generation and provides

3. Functional Requirements

- User Management (register/login)
- Quiz generation (prompt-based)
- Quiz taking and scoring
- Analytics Dashboard

4. Non-functional Requirements

- Performance: responsive UI
- Security: simple role checks
- Usability: clean UI and minimal steps
- Maintainability: modular code
- Resource efficiency: lightweight SQLite or in-memory

5. System Architecture

Frontend (React) <-> Backend (Express) <-> Database (SQLite/file)

6. Design Diagrams

Included: architecture.svg, usecase.svg

7. Implementation Details

Backend: Node.js/Express routes in /backend/routes

Frontend: React app in /frontend/src

Quiz generation: stub function to be replaced with AI API

8. Testing

Manual testing instructions in README. Unit tests can be added using Jest or Mocha.

9. Future Enhancements

- Plug in a real AI API for quiz generation
- Persistent DB and authentication
- Detailed analytics and export