



- **PROJECT: Quiz Question Creator App**
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## Abstract (Overview)

- The **Quiz Question Creator App** is a web-based tool that generates **MCQs (Multiple Choice Questions)** and **True/False questions** from a given PDF. The system extracts text from uploaded documents and uses **Google Gemini API** to generate questions automatically. This app helps teachers, students, and institutions save time in creating quizzes and assessments.

# Objectives

- Automate question creation from PDFs.
- Provide both **MCQs** and **True/False** questions.
- Simple, user-friendly web interface.
- Ensure accuracy by using **Gemini AI**

# System Requirements

## Software

- Python 3.10+
- Flask (Backend)
- HTML, CSS, JavaScript (Frontend)
- Google Gemini API
- PyPDF2

## Hardware

- Laptop/Desktop with at least 4GB RAM
- Internet Connection


# System Architecture (Flow)

Draw or explain a flow like this:

## Frontend (HTML/CSS/JS)

 Upload PDF → Send to Flask Backend

## Backend (Flask + Python)

 Extract text from PDF → Send prompt to Gemini API

## Gemini AI (Text Generation Model)

 Generate questions → Return JSON

## Frontend UI

 Display MCQs + True/False Questions

# Methodology

1. **Upload PDF** (user uploads notes/study material).
2. **Extract Text** using PyPDF2.
3. **Generate Questions** using Gemini API with a structured prompt.
4. **Parse Response** into JSON format.
5. **Display** quiz questions in the frontend.

# Implementation

- **Frontend Code Snippets** (HTML/CSS/JS)
- **Backend Code Snippets** (Flask, Gemini API call)
- Show how endpoints work (/generate-questions).

# Results

- Screenshot of PDF upload.
- Screenshot of generated quiz (MCQs + True/False).

# Advantages

- Saves time for teachers.
- Easy for students to practice quizzes.
- Scalable to different subjects.

# Limitations

- Works best with text-rich PDFs.
- Requires internet connection (API).
- Dependent on Gemini API quota.

# Future Scope

- Add **Fill-in-the-blank** and **Short-answer** questions.

- Integrate with **Google Classroom/Moodle**.
- Add **multiple language support**.
- Store quizzes in a **database**.

# Conclusion

Summarize:

This project successfully demonstrates how **AI (Gemini API)** can be used to create quizzes automatically from study material, reducing manual effort and improving efficiency in education.

# References

- Google Generative AI Documentation
- Flask Documentation
- Python PyPDF2 Documentation