🧠 Mock Test Generator — Project Documentation

📌 Project Overview

Mock Test Generator is a responsive and intelligent web application that allows users to create customized mock tests using React and AI APIs (Gemini/OpenAI) or any other ai via api. It offers an intuitive interface for test-taking, real-time evaluation, and insightful performance analytics.

🎯 Features

Custom Test Configuration

- - Select one or more topics (e.g., React, DSA, Math, etc.)
- - Choose difficulty level: Easy, Medium, Hard
- - Choose question type: Single correct / Multiple correct
- - Enable/disable negative marking
- - Set number of questions and test duration

AI-Powered MCQ Generation

- - Uses Gemini or OpenAI API or any other api key to dynamically generate relevant MCQs
- - Supports math symbols and LaTeX via MathJax

Real-Time Test Environment

- - Clean UI with a timer that supports pause/resume
- - Navigation between questions
- - Auto-submission on time expiration

Performance Result Dashboard

- - Displays total score and percentage
- - Topic-wise accuracy with color-coded indicators
- - Performance classification: Excellent, Good, Needs Practice
- - Full review panel showing correct/wrong answers with highlights

💻 Tech Stack

Layer	Tools Used
Frontend	React, Bootstrap 5, MathJax
Routing	React Router DOM

Styling	Bootstrap 5 + Custom CSS
API Layer	Gemini / OpenAI/any other ai api key (via generateMCQs() helper)
State Mgmt	React Hooks (useState, useEffect)

Setup Instructions

1. Step 1: Clone the Repository

git clone https://github.com/GauravAttri422/mock-test-generator.git

cd mock-test-generator

2. Step 2: Install all Dependencies

npm install

3. Step 3: Add Your API Key

Create a file named .env in the project root and add:

REACT_APP_GOOGLE_API_KEY=your_gemini_or_chatgpt_api_key

4. Step 4: Start the Application

npm start

Visit: http://localhost:3000

Folder Structure

```
mock-test-generator/
├── public/
│   └── index.html
├── src/
│   ├── components/
│   ├── pages/
│   ├── utils/
│   ├── styles/
│   └── App.jsx
├── .env
└── README.md
```

License

Author

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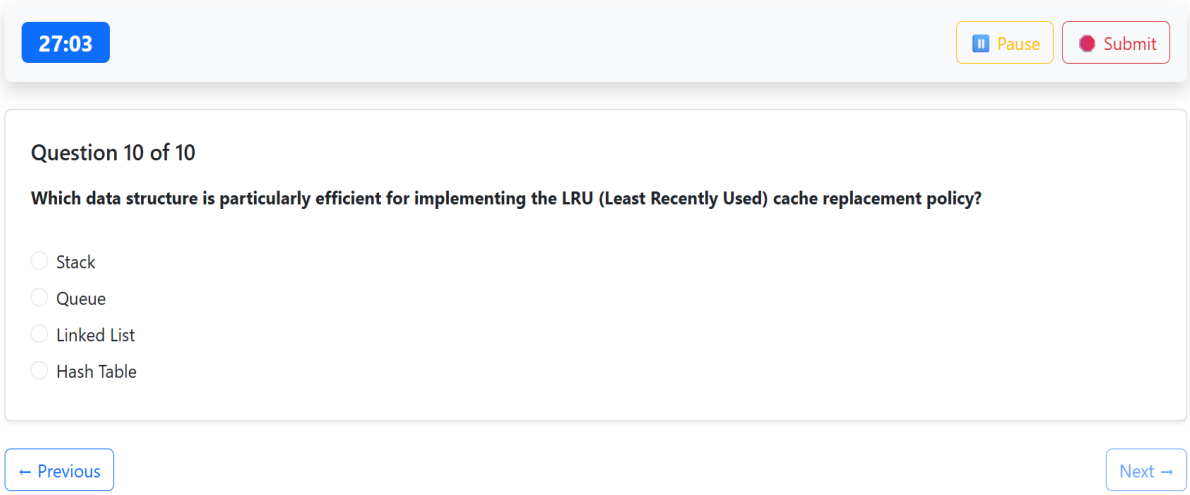
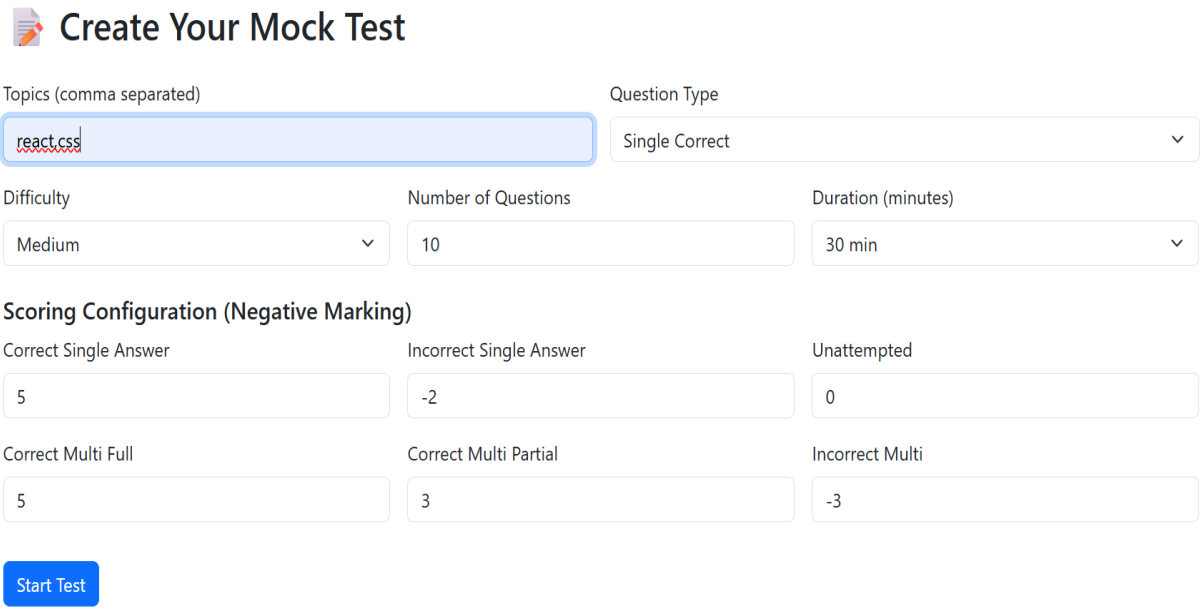
Screenshoots of the projects





Topic-wise Accuracy 📈

CSS 40.0%

Review Question 1 of 10

Which CSS property controls the space between the content of an element and its border?

- padding
- margin
- border-spacing
- width

← Previous Next →

🔄 Retake Test

📊 Test Results

Overall Score

12 out of 50 correct (24.00%)

Quiz Analytics Dashboard

Overall Performance 🧮

50.0% Correct

Keep practicing!

Correct	Incorrect	Unattempted
4	4	2