



Interview Preparation App - *AI* powered learning

(Built using Flutter, Firebase & Hugging Face AI)

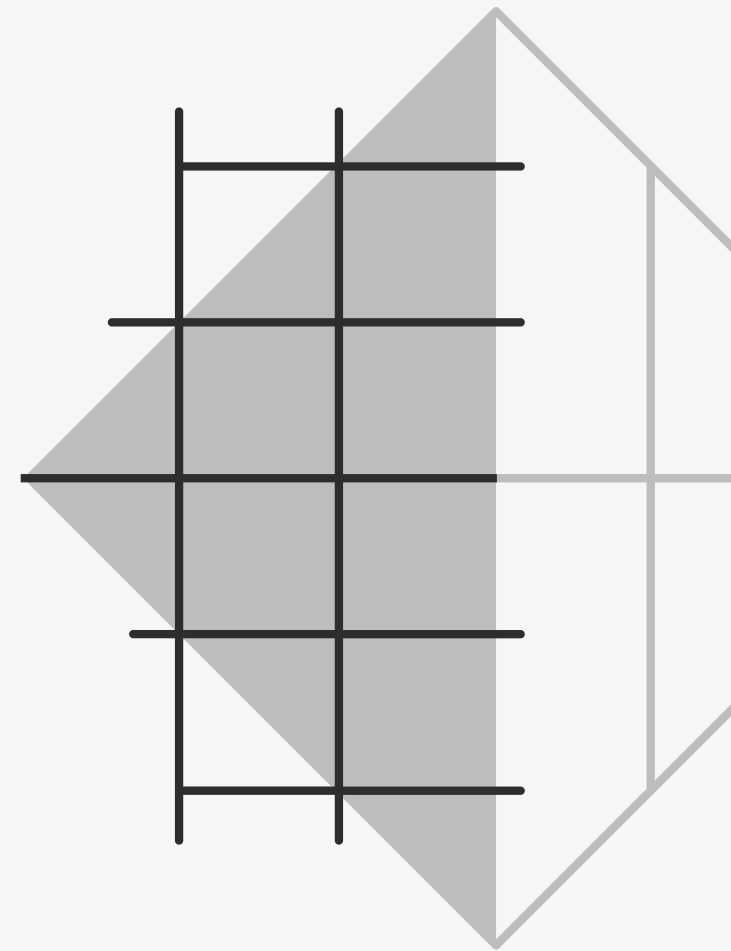
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Swathi V



Problem Statement

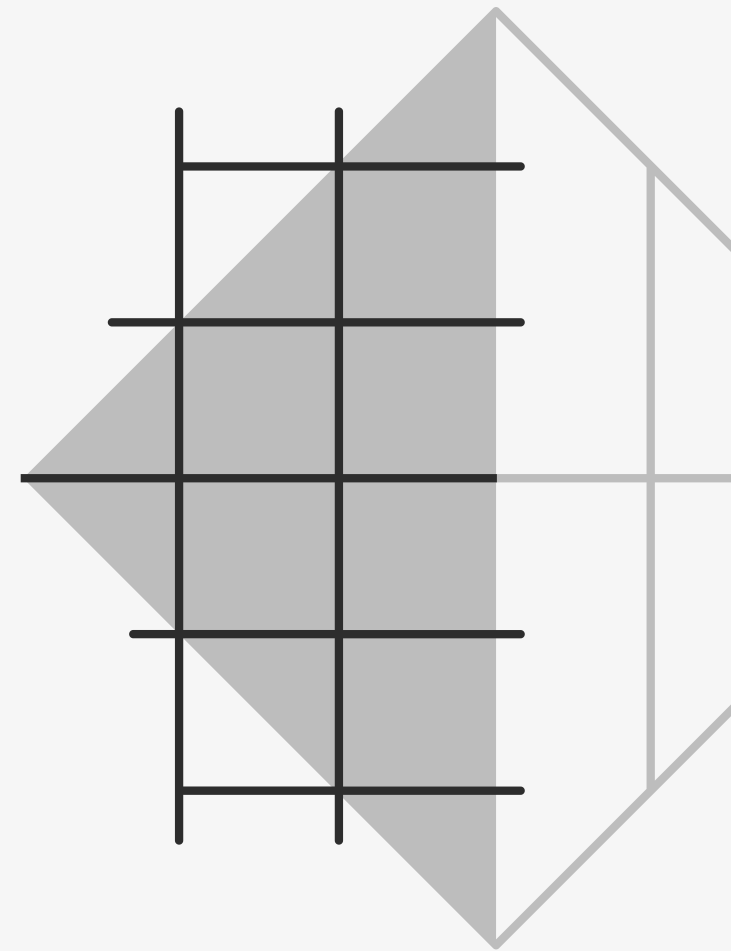
- **Unstructured Interview Preparation** – Engineering candidates struggle to find relevant coding, aptitude, and English-speaking questions in one place, making preparation inefficient.
- **Lack of AI-Driven Question Generation** – Most apps rely on static question banks that require manual updates and do not generate real-time questions.
- **No Seamless Saving** – Users lack an easy way to save questions for later, making it difficult for them to revise.





Proposed Solution

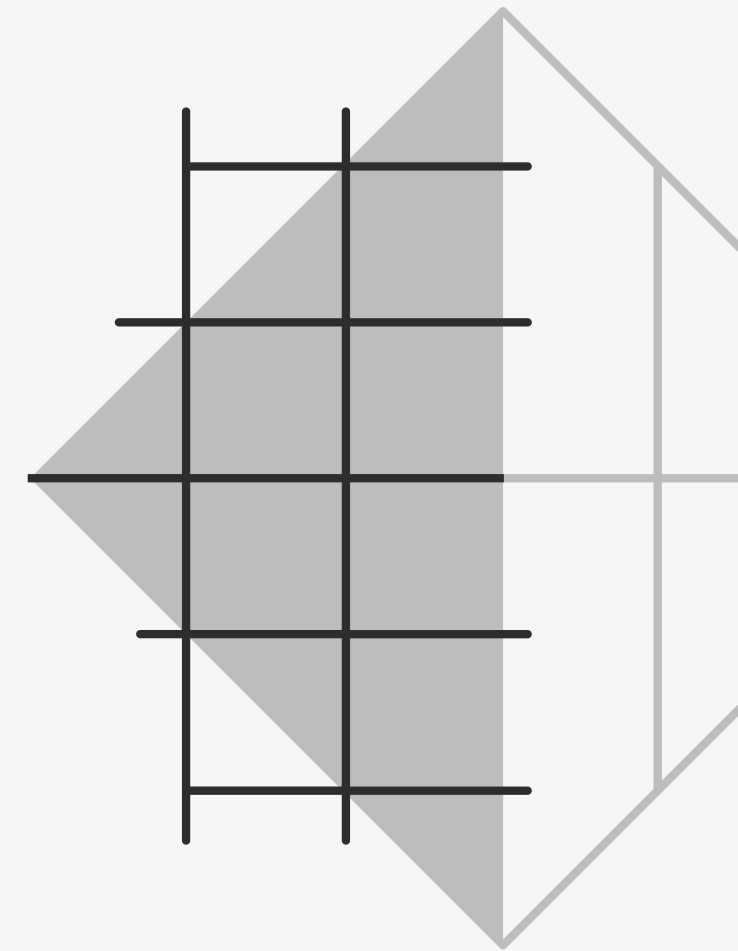
- **All-in-One Interview Preparation** – A single platform providing coding, aptitude, and English-speaking questions for structured and efficient learning.
- **AI-Powered Question Generation** – Real-time question generation using Hugging Face AI model API call, ensuring fresh and relevant content for each category.
- **Seamless Saving & Organization** – Users can save important questions to review later, improving retention and structured revision.





Tech Stack Used

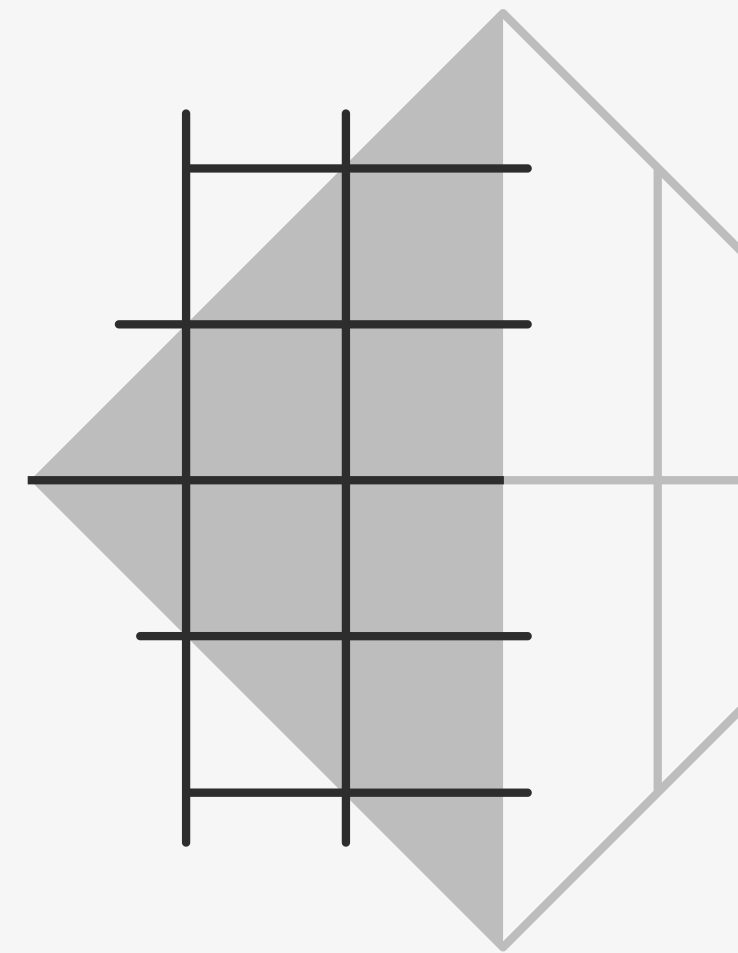
- **Flutter** – Used for building a cross-platform mobile application that runs seamlessly on both Android and iOS.
- **Hugging Face API** – Integrated for AI-powered question generation.
- **Firestore** – A cloud database used to store users' saved questions. It allows users to access their important questions anytime and from any device.
- **JSON Localization** – Implemented to support multiple languages. By storing translations in JSON files, users can switch between languages easily.





App Features & Workflow

- **Select a Category** – Users choose from Coding, Aptitude, or English Speaking questions.
- **Generate AI Questions** – The app sends a request to HuggingFace AI model to fetch a fresh question.
- **Interact with Questions** – Users can attempt, regenerate, or save questions for later.
- **Review Saved Questions** – Users can access saved questions anytime from the Saved Questions section.
- **Multi-Language Support** – Users can switch between English, Hindi, Tamil, and Telugu via the home drawer.





Hugging Face AI Model - Mistral-7B



API Request:

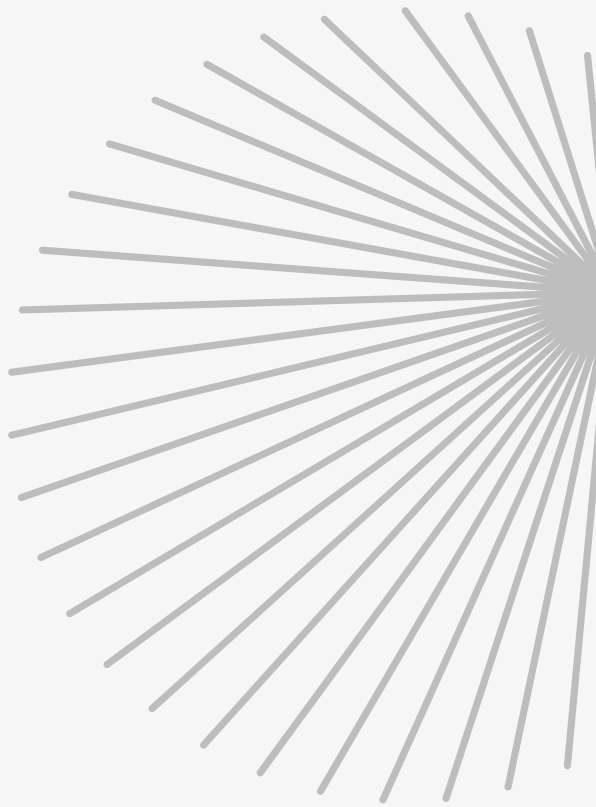
- Sends a request to Mistral-7B-Instruct-v0.2 AI model via Hugging Face API key.
- Prompt varies according to each categories of our app.

Response Handling:

- AI processes the request and returns a newly generated question.

Display in App:

- The question appears on-screen.
- Users can attempt, regenerate, or save it for later.





Firestore Database - Saving & Retrieving Questions

Saving Questions:


- Users can save important questions to Firestore for revision using the “Save for later” button.
- Each saved question includes category, timestamp, and content.

Retrieving Saved Questions:

- Fetches stored questions from Firestore when users open the Saved Questions screen.
- Ensures easy access to past questions anytime.

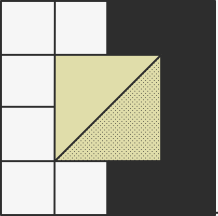


Localization - Multi-Language Support

 Supports Four Languages: English (en), Hindi (hi), Tamil (ta), and Telugu (te).

- App loads language-specific JSON files for translations.
- Users can switch languages from the settings.
- Text updates dynamically based on the selected language.





Thank you!

