



sarvam

SDE Assignment

I. **Introduction**

This assignment is designed to assess your creative problem-solving skills, technical proficiency in designing systems and exposure to modern software development tools. It aims to ensure mutual alignment—helping you evaluate whether our organization is the right fit for you while allowing us to gauge your technical and creative abilities.

II. **Assignment**

Develop an end-to-end voice AI-based web or mobile application. Your solution should include service(s) that interact with one or more databases and incorporate a user interface (UI). Additionally, explore and integrate AI models and APIs that address the problems you aim to solve.

Key Constraint: Only AI models with fewer than 10B parameters may be used.

III. **Theme: Indic Voice AI**

The theme for the assignment is to solve real-world problems. Below are suggested topics but feel free to pick up any problem that fits the theme:



IITM Placements SDE 2024

Updated automatically every 5 minutes

You are encouraged to use [Sarvam APIs](#) (credits provided for everyone), though their use is optional

IV. **Important things to keep in mind:**

Interviews: We will conduct a deep dive into your implementation during the interview process to understand your approach.

Resources: You are free to leverage any publicly available resources.

Backend: The backend must be implemented in Python.

Frontend: Any framework is allowed, provided you justify your choice.

Honor code: Submission must be original; plagiarism checks will be done against available content, repos and can result in disqualification.

V. **Deliverables:**

System Architecture Diagram: Clearly depict all system components and their interactions.

Codebase: Submit a well-structured, thoroughly documented codebase adhering to best practices. Make sure the **README.md** has adequate information with below contents:

- Technical Architecture Overview: Highlight the technical components and their integration.
- Setup Instructions: Provide clear steps for setting up the application for local development.
- Future Scope: Mention how you can extend the application in the future.

Application Walkthrough: Showcase a screen recording (5 minutes maximum)

VI. **Evaluation Criteria:**

- Technical Architecture
- Functionality
- Code Quality
- Innovation & Practicality

VII. **Deadline:** The submission form will close at 1:00 PM.



IITM Placements SDE 2024

Updated automatically every 5 minutes