jeeny

Case Study

Instructions

Smart Task Manager

📘 Scenario:

You are hired as a Software Engineer at a startup that aims to help individuals stay productive. The product team has proposed a **"Smart Task Manager"** app that allows users to:

- Add, update, and delete tasks.
- Set deadlines and get notified when deadlines are near.
- Mark tasks as completed.
- Organize tasks by categories (e.g., Work, Personal, Learning).
- Optionally sync data across multiple devices.

Your task is to **design and implement a basic prototype** of this application.

🧠 What We Expect From You:

1. Architecture & Design

- Define the tech stack you'd use (e.g., Java/Kotlin/Node.js/React/PHP).
- Explain **why** you picked that stack.
- Share a high-level **architecture diagram** (can be hand-drawn or in a tool).
- Describe your **database schema** (ER diagram or basic schema if using NoSQL).

2. Implementation

- Build a **minimal working version** with the following:
  - Add/Edit/Delete Tasks
  - Deadline and Reminder system (at least as text info for now)
  - Categorization of tasks
  - List filtering by category or deadline

- API-based or local app is fine (depending on chosen stack).

3. Bonus (Optional for Extra Points)

- User authentication (e.g., login/logout)
- Real-time sync or offline capability
- UI polish or mobile responsiveness
- Unit tests or sample test cases
- Use of Git for version control

4. Documentation

- Short README explaining:
  - How to run the project
  - Assumptions made
  - Improvements if you had more time

💡 Evaluation Criteria:

Area	Weight	Notes
Problem Understanding	10%	Clear grasp of the problem
Technical Implementation	30%	Clean code, proper architecture
Code Quality & Structure	20%	Readability, modularity, use of best practices
Creativity & Improvements	10%	Any bonus or innovative ideas
Documentation	10%	Easy to understand and run
Communication	20%	Explains ideas clearly during the presentation/interview