- College Code:9111
- College Name: SRM Madurai college for engineering and technology
- Department: Infromation technology
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- Roll No:23IT58
- Date:15.9.25
- Phase: Phase 2
- Technology Project Name: To-Do List Application
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INTRODUCTION

Solution Design is the phase where the overall structure of the project is planned. It involves selecting technologies, designing UI and API schemas, and planning how data will be handled throughout the application.

TECH STACK SELECTION

- The appropriate technologies are selected based on project requirements, scalability, and ease of development.
- Frontend: HTML, CSS, JavaScript, React.js
- Backend: Node.js with Express.js
- Database: MongoDB / MySQL
- Version Control: Git and GitHub
- Tools: Postman for API testing, Figma for UI design

UI STRUCTURE / API SCHEMA DESIGN

- UI Structure:
- Wireframes and layout designed using Figma or Canva
- Key pages: Login, Dashboard, Data Entry, Reports
- API Schema Design:
- RESTful APIs following standard HTTP methods (GET, POST, PUT, DELETE)
- Example: POST /login, GET /users
- Data format: JSON

DATA HANDLING APPROACH

- Frontend: Local State Management (useState/useContext or Redux)
- Backend: Data validation, CRUD operations
- Database: Data normalization and indexing
- API: Data transferred in JSON format

COMPONENT / MODULE DIAGRAM

- Break down app into components/modules
- e.g., Auth Module, User Module, Admin Dashboard
- Explain responsibilities of each module
- Tip: Use a diagram for visual representation (you can draw it in draw.io or PowerPoint SmartArt)

BASIC FLOW DIAGRAM

- Illustrate user interaction flow
- e.g., Login → Dashboard → Data Entry → Submit
- Show how front end communicates with backend and database
- Tip: Use arrows and blocks for clear flow chart

TOOLS USED

- Figma – UI Design
- Visual Studio Code – Coding
- GitHub – Version Control
- Postman – API Testing
- draw.io / Canva – Diagrams

SUMMARY / CONCLUSION

- Designed full architecture for MVP
- Selected tech stack based on project needs
- Created scalable and maintainable design
- Set strong foundation for development in next phase

THANK YOU!!