College Code : 9111

College Name : SRM Madurai college for engineering and technology

Department: Information technology

Student NM ID : 6AF6A507C81A5A1B0A842198852F12D6

Roll No : 23IT50

Date : 15.9.25

Phase : Phase 2 Technology

Project Name : Interactive Form Validation

Submitted By : Srika K

Mobile number : 6380419626

INTRODUCTION

- The project Form is a structured data collection and management system.
- The purpose of Phase 2 is to design the solution architecture for the project.
- Key objectives:
  - Select the technology stack
  - Define UI structure and API schema
  - Plan data handling approach
  - Create diagrams for components and workflow

TECH STACK SELECTION

1)Frontend:

HTML, CSS, JavaScript (React)

2)**Backend:**

Node.js with Express framework

3)**Database:**

MongoDB or MySQL

4)**Version Control:**

GitHub

5)**Deployment Platform:**

IBM Cloud / Heroku

UI STRUCTURE & API SCHEMA

UI Structure:

- Simple form with input fields for data collection
- Client-side validation to ensure correct entries
- Submit button for sending data

API Schema:

- POST /submit Form → Save form data
- GET /get Forms → Retrieve stored form data
- PUT /update Form/:id → Update existing form entry
- DELETE /delete Form/:id → Delete form entry

DATA HANDLING APPROACH

Frontend:

- State management using React Hooks / Context API

Backend:

- REST API processes client requests and communicates with database

Database:

- Stores submitted form entries in structured format

Validation:

- Both client-side (in UI) and server-side (API level)

COMPONENT / MODULE DIAGRAM

1) Frontend Module:

    Form UI, validation of inputs

2) API Module:

    Provides endpoints for CRUD operations

3) Database Module:

    Handles data storage and retrieval

BASIC FLOW DIAGRAM

- User fills the form in UI
- Data is sent to the backend API
- API processes and stores data in the database
- Response is sent back to the user (success or error message)

THANK YOU