College Code: 9111

College Name: SRM Madurai college for engineering and technology

Department: Information technology

Student NM ID: CD7664F3F8C9B49AC4A4D39E764A810D

**Roll No** : 23IT38

**Date:** 15.9.25

Phase: Phase 2 Technology

Project Name: Interactive Form Validation

Submitted By: Priya dharshini M

**Mobile number :** 8778555137

## 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)

## THAM YOU