COLLEGE CODE	:9623
COLLEGE NAME	:AMRITA COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT	:COMPUTER SCIENCE AND ENGINEERING
STUDENT NM-ID	:752E80CE0530AB3B286425E0EC83A2E0
ROLL NO	:962323104018
DATE	:12-09-2025

COMPLETED THE PROJECT NAMED AS

PHASE1 TECHNOLOGY PROJECT

NAME:INTERATIVE FORM VALIDATION

SUBMITTED BY,

M.S.Anush kumari

MOBILE N0:9790054171

Edit with WPS Office

📌 Project Title: Interactive Form Validation

Phase 1 – Problem Understanding & Requirements

🔷 Problem Statement

Forms are an essential part of most applications, but poorly validated forms lead to bad user experience, security risks, and incorrect data collection. This project aims to design and implement an interactive form validation system with a clean UI on the frontend and a REST API backend to handle validation, submission, and storage.

🔷 Users & Stakeholders

End Users: People filling out forms (e.g., signup, feedback, application forms).

Admin/Business Owner: Ensures accurate data collection and prevents spam/invalid inputs.

Stakeholders: Product managers, developers, QA engineers.

Edit with WPS Office

🔹 User Stories

1. As a user, I want real-time validation feedback while filling out the form so I can correct errors immediately.

2. As a user, I want error messages to be clear and specific so I understand what to fix.

3. As a user, I want the form to reject invalid data (e.g., wrong email format, weak password).

4. As a user, I want my data to be securely sent and stored so I feel safe providing information.

5. As an admin, I want to view validated form submissions to analyze user data.

Edit with WPS Office

🔹 MVP Features

Real-time validation for required fields (email, password, phone, etc.)

Inline error messages with hints (e.g., “Password must include 8+ characters, 1 number, 1 special character”)

REST API for form submission & server-side validation

Data storage with validation status

Responsive and user-friendly form UI

🔹 Wireframes / API Endpoint List

Wireframes:

Signup / Registration form page

Success / Error submission state

Edit with WPS Office

API Endpoints (REST):

POST /form/validate → Validate form data (field-level or full form)

POST /form/submit → Submit validated data

GET /form/submissions → Fetch all stored form submissions (admin use)

🔹 Acceptance Criteria

✅ Real-time field validation on the frontend (before submission)

✅ Server-side validation (backend double-checks inputs)

✅ Clear error/success messages visible to users

✅ Valid data stored in the database

✅ Form UI responsive and matches wireframes

Edit with WPS Office