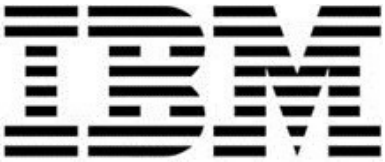

COLLEGE CODE :9623

COLLEGE NAME :AMRITA COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT :COMPUTER SCIENCE AND ENGINEERING

STUDENT NM-ID :697894EDF0B26DA823C412CE5C9118E1

ROLL NO autcs00038

DATE :22/09/2025

COMPLETED THE PROJECT NAMED AS

PHASE 3 TECHNOLOGY PROJECT NAME:

INTERATIVE FORM VALIDATION

SUBMITTED BY HARSHA A B

MOBILE N0 9361649753

📌 Project title: Interactive form validation

📌Phase 3 – MVP Implementation

📌Project Setup

Initialize GitHub repo (main + dev branches).

Setup React.js frontend + Node.js backend boilerplate.

Configure MongoDB/Postgres connection.

Install dependencies: React Hook Form, Yup, Express, Joi, crypt, etc.

📌Core Features

Implementation

Frontend:

Signup/Registration form with real-time validation.

Inline error messages (e.g., “Email format invalid”, “Password must be at least 8 characters”).

Responsive design with Tailwind CSS.

Backend:

API Endpoints:

POST /form/validate → Validate field-level & full form data.

POST /form/submit → Accept only valid data, store in DB.

GET /form/submissions → Fetch stored submissions for admin.

Joi schema validation to reject invalid inputs.

Password hashing with bcrypt before

storing.

📌 Data Storage (Local State / Database)

Local State (Frontend): Tracks live validation errors before API call.

Database (Backend): Stores only validated user submissions.

Invalid attempts logged but not saved.

📌Testing Core Features

Frontend Testing

Try invalid inputs (e.g., wrong email, weak password).

Confirm inline error messages show instantly.

Backend Testing

API rejects invalid data with 400 Bad Request.

Confirm secure storage of valid data only.

Cross-check: Ensure frontend + backend validation rules match.

📌Version Control (GitHub)

Commit for each milestone (setup → validation → API → DB → testing).

Branch structure:

main → Stable version.

dev → Active development.

feature/form-validation → Specific modules/features.

README with setup instructions + screenshots of working form.

✅Deliverable at end of

Phase 3

A working Interactive Form Validation System where:

Users see real-time validation feedback.

Backend re-validates and stores only correct data.

GitHub repo shows development history.

Core features tested and functional.