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**ROLL NO : aut9623CS0018**  
**DATE :22/09/2025**  
**COMPLETED THE PROJECT NAMED AS**  
**PHASE 3 TECHNOLOGY PROJECT NAME:**  
**INTERATIVE FORM VALIDATION**  
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☐ **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.**