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COMPLETED THE PROJECT NAMED AS

PHASE 3 TECHNOLOGY PROJECT NAME:

INTERATIVE FORM VALIDATION

SUBMITTED BY KAVYA S

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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.