

IT #301 - Form Builder

Frontend

Dashboard

- **Form Management:** Create, edit, delete, duplicate forms
- **Form List View:** Display all forms with status (draft/published), submission count, creation date
- **Form Builder:** Drag-and-drop interface for adding field types (text, email, select checkbox, radio, textarea, file upload)
- **Field Configuration:** Set validation rules, required fields, placeholder text, options for select/radio
- **Form Settings:** Title, description, custom thank you message, submission limits
- **Analytics:** Submission count, response charts, export to CSV
- **Preview Mode:** Test form before publishing

Form Submission

- **Public Form Pages:** Responsive form rendering with validation
- **File Upload:** Support for image/document uploads
- **Success/Error Handling:** Custom messages and redirects
- **Progress Indicators:** For multi-step forms (optional)

Backend

API Endpoints

- **Forms:** CRUD operations (/api/forms)
- **Submissions:** Create and retrieve (/api/forms/:id/submissions)
- **File Upload:** Handle file storage (/api/upload)
- **Analytics:** Submission stats (/api/forms/:id/analytics)

Core Features

- **Validation:** Server-side form validation
- **File Storage:** Local or cloud storage for uploads
- **Rate Limiting:** Prevent spam submissions
- **CORS:** Enable cross-origin form submissions
- **Error Handling:** Structured error responses

Technical Stack

- **Frontend:** React 18, TypeScript, shadcn/ui, React Hook Form, Axios
- **Backend:** Node.js, Express, MongoDB/PostgreSQL, Multer (file uploads)
- **Deployment:** Docker-ready, environment configuration