

Project Responsibility Document (Frontend vs Backend)

Project Stack

- Frontend: Next.js (React, Tailwind, API Fetch, SEO)
- Backend: Django REST Framework (APIs, Razorpay, Tally, CRM, Shipping)

1. Third-Party Integrations

1.1 Tally Integration

Backend Responsibilities:

- Implement Tally XML API communication.
- Pull data from Tally into Django.
- Push order & invoice data from Django to Tally.
- Make Tally-driven fields non-editable.

Frontend Responsibilities:

- None (Frontend only consumes API data).

1.2 Payment Gateway

Frontend Responsibilities:

- Razorpay Checkout UI.
- Capture payment data and send to backend.

Backend Responsibilities:

- Create Razorpay order.
- Verify payment signature.
- Update order status.

1.3 Google Analytics

Frontend: Add GA script, configure tracking.

Backend: No work.

1.4 CRM Integration (Zoho / Salesforce)

Backend: Push inquiries & orders to CRM.

Frontend: No CRM logic.

1.5 JSME Molecular Structure Editor

Frontend: Integrate JSME, generate SMILES.

Backend: Perform structure search using RDKit/OpenBabel.

1.6 Barcode Scanning

Frontend: Integrate barcode scanner (Quagga/ZXing).

Backend: Use existing search API.

1.7 UPS / FedEx Shipping API

Backend: Shipping labels, rates, tracking.

Frontend: Display tracking info.

2. SEO Implementation

Frontend: Handle all SEO: titles, meta tags, keywords, breadcrumbs, structured data.

Backend: No SEO responsibilities.

3. Responsibility Summary Table

Frontend Tasks: Razorpay UI, GA, JSME, Barcode, SEO, Product UI, Payment UI, Categories.

Backend Tasks: Tally, Razorpay backend, CRM, Structure search, Shipping API, PDFs, Secure docs.

4. Final Summary

Frontend handles: UI, customer interactions, analytics, SEO.

Backend handles: Business logic, integrations, secure processing.

Module	Frontend Time	Backend Time	Total
Tally Integration	0 days	10–14 days	10–14 days
Payment Gateway	2 days	3 days	5 days
Google Analytics	2 days	0 days	2 days
CRM Integration	0 days	5 days	5 days
JSME Molecular Search	2 days	8 days	10 days
Barcode Scanning	3 days	0 days	3 days
UPS/FedEx	1 day	6 days	7 days
SEO Implementation	7–10 days	0 days	7–10 days
Testing & Deployment	2–3 days	3 days	5–6 days