

Xeno FDE Internship Assignment – 2025

Hi there! 🙌

Thanks for applying to the **Forward Deployed Engineer (FDE) Internship** position at Xeno. We're excited to get to know you through this hands-on assignment that reflects the kind of customer-facing engineering challenges our FDEs solve every day.

Assignment Goal

Build a **multi-tenant Shopify Data Ingestion & Insights Service** that simulates how Xeno helps enterprise retailers onboard, integrate, and analyze their customer data.

Scope of Work

✓ 1. Shopify Store Setup

- Create a **free Shopify development store**.
 - Add **dummy products, customers, and orders** to it.
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✓ 2. Data Ingestion Service

- Build a service that connects to Shopify APIs (Or other way round where your APIs are hit by Shopify) and ingests:
 - Customers
 - Orders
 - Products
 - (Bonus) Custom events like cart abandoned, checkout started

- Store this data into your database (Use any RDBMS here as we'd ask SQL questions on this during interviews)
- Ensure the service can be configured for **multiple tenants (stores)**, with data isolated using a **tenant identifier**.

Reference links for Shopify integration documentation

<https://github.com/Shopify/shopify-app-template-remix>

<https://shopify.dev/docs/apps/build/cli-for-apps>

✓ 3. Insights Dashboard

- Create a simple UI (backed by email authentication) to visualize ingested data like:
 - Total customers, orders, and revenue.
 - Orders by date (with **date range filtering**).
 - Top 5 customers by spend.
 - Add different metrics and their trend charts to reflect business performance - go creative!
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✓ 4. Documentation (2–3 Pages)

- Assumptions you made.
 - High-level architecture diagram.
 - APIs and data models used.
 - Next steps to productionize your solution.
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✓ Other asks

- Deploy the service (Heroku, Render, Railway, Vercel).
 - Add a **scheduler** or **webhooks** to keep Shopify data in sync.
 - Use an **ORM (Sequelize, Prisma, Hibernate)** for cleaner multi-tenant handling.
 - Add **basic authentication** for tenant onboarding.
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Preferred Tech Stack

- **Backend:** Node.js (Express.js) or Java (Spring Boot)
 - **Frontend:** React.js or Next.js
 - **Database:** MySQL or PostgreSQL
 - **Optional:** Redis / RabbitMQ for async ingestion
 - **Optional:** Charting library (Recharts, [Chart.js](#) or anything else) for dashboards
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Evaluation Criteria

We'll be assessing on:

- **Problem Solving:** Did you structure the solution to handle real-world complexity (multi-tenancy, data sync)?
 - **Engineering Fluency:** API integrations, DB schema design, and working dashboard.
 - **Communication:** Clarity of documentation and demo explanation (Mandatory - In your own voice and video).
 - **Ownership & Hustle:** Completeness, deployability, and overall polish.
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Submission Requirements

- ✓ Public GitHub repo with clean, well-structured code.
- ✓ Deployed service (Heroku, Render, Railway, or Vercel).
- ✓ Demo video (max 7 mins) in your own voice and video explaining:

- Features implemented.
- How you approached the problem.
- Any trade-offs made.

- ✓ README.md including:

- Setup instructions.
 - Architecture diagram.
 - API endpoints and DB schema.
 - Known limitations or assumptions.
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Submission Deadline

Submit here by **Sep 15, 2025**:

👉 [\[Link\]](#)

✨ Let's Go!

Curious what it's like working with us? Check out what our past interns have to say 🗣️

This is your chance to show not just what you know — but how you **integrate, adapt, and deliver** in real-world messy environments.

We're excited to see what you build! 🚀

Check us out at: <https://www.getxeno.com>