

Coding Assignment (Monorepo Microservice for E-Commerce)

Scenario:

You are working on an e-commerce platform using a monorepo structure. The repository contains two main apps:

- Store Dashboard: For managing products, orders, and customer interactions (Next.js).
- **Store**: The customer-facing service (Next.js).

You need to create a simple microservice that:

- 1. Handles product inventory updates across both the store and the dashboard.
- 2. The service should interact with a **Postgres** database using **DB Queries or any ORM of your choice (Drizzle preferred)**.
- 3. The service should expose a REST API to:
 - Update inventory when an order is placed.
 - Fetch inventory details for the store front.

Task:

- 1. Set up a basic microservice using **TypeScript**, and **Drizzle ORM** that:
 - Receives a POST request to update inventory when a product is purchased.
 - Receives a GET request to return the current inventory of a product.
- Assume the database structure is as follows:
 - o products table:
 - id (uuid, primary key)
 - name (varchar)
 - inventory_count (integer)
- 3. Upload this task in a git repository and share the same on

Key Constraints:

- Implement efficient error handling, particularly for cases where inventory updates would fail (e.g., inventory count going negative).
- Implement unit tests to test your functions. The code should be easy to interpret.
- A function should be less than 60 lines of code. Please avoid any duplication of code.
- Please don't add any kind of authentication, just a simple counter on store for the current inventory and an input on the dashboard side.
- Show how the microservice would be integrated into a **Turbo** monorepo with both dashboard and store running simultaneously.
- You are not expected to create a user interface neither you'd be judged on it, however, it would be good for presentation purposes.