

## Multitenant Ordering System

### Overview:

Build a Django-based multi-tenant application where each company manages its own orders and products.

Implement soft-deletion and enforce appropriate access controls.

### Baseline Requirements

#### Data Models:

##### Company:

name

##### Extend User Class:

Belongs to exactly one Company

Role: admin | operator | viewer

##### Product:

- company, name, price, stock
- created\_by, created\_at (immutable)
- last\_updated\_at
- is\_active

##### Order:

- company (inferred via user)
- product, quantity
- created\_by, created\_at (immutable)
- status (pending, success, failed)
- shipped\_at (set when status = success)

### URLS & Views:

#### Pages:

/ – index page

#### APIs:

- GET /api/products/ – List active products for the user's company
- POST /api/orders/ – Create one or more orders
- DELETE /api/products/ – Soft-delete one or more products
- GET /api/orders/export/ – Export company's orders (CSV)

#### Data Isolation

Data is scoped to the authenticated user's Company.

### Django Admin:

#### Products Admin:

Bulk action: mark selected products inactive

#### Orders Admin:

Action: export orders as CSV

### Simple HTML Interface (index page):

Product creation form (auto-fill company, user, timestamp)

Below the form, a table listing added products

### Constraints:

- Orders may include only products where is\_active = True.
- Prevent order creation if requested quantity exceeds available stock.
- viewer users cannot place orders.
- operator users may edit only orders created today.
- On order success simulate send a confirmation email to the order's creator by logging to file with appropriate details.

### Tech Stack:

project is fully dockerized

- mysql 5.7

- django 4.x.X

- python 3.10 or up

- use any extra packages needed
- serve the application on 0.0.0.0

Deliverables:

A GitHub repository or ZIP of the Django project  
README with setup & run instructions  
add demo data for testing