

Home Project Test for Backend Engineer at Goapp

Task: Create Omni Channel Commerce System

Platform: Python/Django

Business Requirements

- Aggregate orders from external channels (marketplace, shopify, POS, etc.)
- Realtime stock synchronization across all channels
- User can process order from multiple channel at once
- Channel monitoring tools (order update, push stock)

Technical Requirements

- Create multiple Django app, at least separate main app and channel app.
- Main App: main commerce app
- Marketplace Channel App: Handle integration MP channel and sync to commerce app
- Note: In the future, there could be other channel as well

Task 1: Design Django models and relations. No need to create complete fields. If possible, add all main fields and relations.

Example:

- Commerce ex: Product, Stock, Order, Delivery, Channel, etc.
- Marketplace ex: Account, StockUpdate, etc.

Task 2: Create simple product list views and upload process

- Product List, Form and Detail View
- Product Upload View with async process on background

Task 3: Create simple task to process order updates fro MP

- API to handle webhook from MP
- Process order update from MP on background

Notes:

- Write only simple codes to demonstrate each tasks. No need to show complete fields or validations
- Upload product (1k dummy records) support async process with progress bar
- Use Django generic view and form
- Use API to communicate between app
- (Optional) Use mixins and custom components
- (Optional) Micro-service architecture