

Clothing online store. You can reference urbanoutfitters.com as a sample for categories, products, etc..

What the application consists of:

- 2 main sections of the application: women's clothing, men's clothing.
- System of categories and subcategories, for example shoes -> sandals. In different sections there are different categories and subcategories, respectively, as an example, only women have a section for dresses and skirts. However some of the categories can be shared for example shoes -> sandals is a common category for both women and men sections.
- Product brand - common for all sections. Should be unique across the platform.
- Product itself.
- Support for submitting an order. Order has a couple of statuses (for example: In Review, In Delivery, Completed) where Completed is the final one.
- Ability to leave a review with a rating and a comment.
- Customer's account with the ability to add personal data (email, phone) and delivery address.
- Admin panel for managing the store.

The list of required domain entities and operations on it:

- Section (women, men)
 - Add new section
 - Update existing section (rename)
- Category (subcategories as well)
 - Add new category
 - Add new subcategory
 - Rename category/subcategory
 - Link category to existing section
 - Link subcategory to existing category

- Consider the case when a subcategory is linked to a category but should not be shown for all sections. For example shoes => sneakers are common for men/women sections but shoes => high heels are only for women.
- Brand
 - Add new brand
 - Update brand
 - Assign/unassign product to a brand
- Product (price, quantity, description, image)
 - Add new product
 - Update product
 - Check product availability
 - Quantity is limited (product was sold out => available quantity is 0 => out of stock)
- Order
 - Create order for customer
 - Add/Remove product to an order
 - Submit order
 - Support order status transition. For example: In Review => In Delivery => Completed)
- Review (rating + comment)
 - Add new review with star rating and comment
- User (with phone and address if customer)
 - Register new user
 - Login as a new user
 - Update user personal information