Couture Closet

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Project description

Couture Closet is a:

web application that promotes fashion inspiration and direct product discovery. Our platform combines the visual curation aspects of mood board apps (like Pinterest) with immediate actionable shopping capabilities, allowing users to discover, organize, and share their style consisting of publically accessible products

- **Product Discovery**: Browse a curated catalog of items with detailed descriptions: images, prices, colors, sizes, brands, and category

- **Product Filtering**: Search products by brand, category, gender, and color to find exactly what you're looking for

- **Closet Organization**: Create and manage multiple digital "closets" to group saved outfits by theme, aesthetic, or occasion

- **Direct Retailer Links**: Every product maintains its original source URL, enabling users to easily navigate to retailer websites

- **Social Sharing**: Share their style expression through public profiles -> other users view and be inspired by your taste

- **User Authentication**: Secure user accounts with email/password and Google OAuth integration for personalized experiences

Project goals

Building a Complete Full-Stack Application: Developing a production ready web application from scratch, integrating and managing tools for our frontend, backend, database, and third party services into a cohesive system

• **Fulfilling User Needs**: Addressing the gap in the fashion tech space, combining curation with direct shopping from 3rd party brands, easier for users to go from inspiration to possible purchase

• **Scalable Data Management**: Creating an automated product catalog system that can handle thousands of products with proper deduplication, categorization, and filtering -> add to and modify if needed

• **Creating a Social Fashion Platform**: Enabling personal style expression while providing a space where users can discover new fashion ideas from others' collections

Project justification

Fashion and technology are two rapidly evolving industries, since its' birth technology has pushed different forms of fashion to a wider audience . This project allows us to combine our technical skills to a domain that can be used by many users.

Challenges: 1. balancing aesthetic appeal while still being intuitive and functional 2.making fashion discovery both inspiring and direct

This project leverages relevant strengths:

Full Stack Development: We're applying our knowledge to modern web building technologies (Next.js, React, Node.js, PostgreSQL) to build a complete application

Database Design: Creating efficient schemas and query patterns for relationships (products, brands, categories, users, closets) -> JSONB fields, indexing -> query optimization

API Development: Designing RESTful APIs that handle authentication, data retrieval, filtering, and user management; connecting database -> practicing system management across web tools to meet project goals

Web Scraping & Data Formatting: Building Python based crawlers to automatically collect and structure product data from various sources

UI/UX Design: Creating an intuitive, visually appealing interface that makes looking through user feeds enjoyable and efficient

Problem Solving: Tackling challenges like image handling, data deduplication, real time filtering, and user authentication

This project integrates knowledge from across our CS curriculum while pushing us to learn new technologies/tools to create a real world product in a collaborative agile team environment

Project Operation Scenarios

Scenario 1:

Don't know your aesthetic? Download *Couture Closet* today to help sort through styles and create curated collages. Think of Pinterest meets e-commerce, shop all styles just one click away!
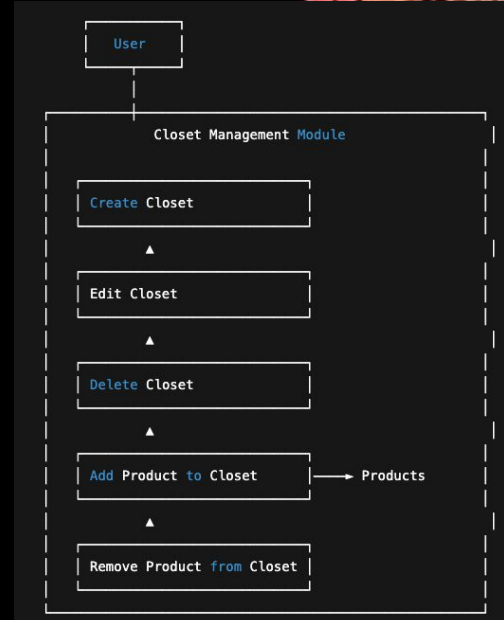
Scenario 2:

Are you a stylist, creative, or just a shopaholic? *Couture Closet* will be your best friend! No drama or chaos, just a seamless shopping experience that's home to a variety of your favorite brands. Make mood boards for clients, events, and more! Build your timeless wardrobe today with *Couture Closet*!
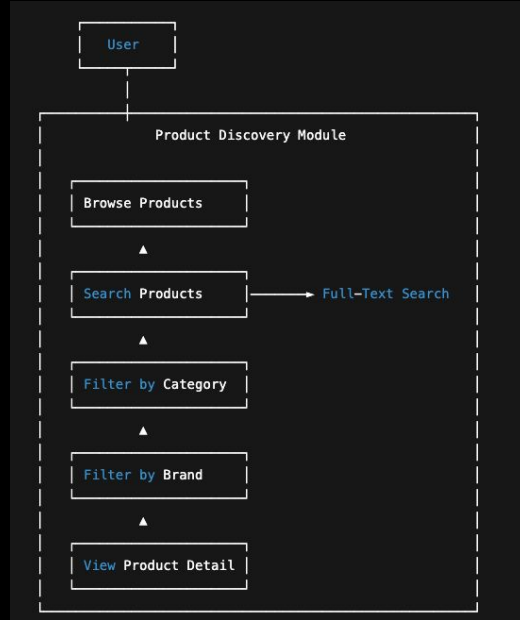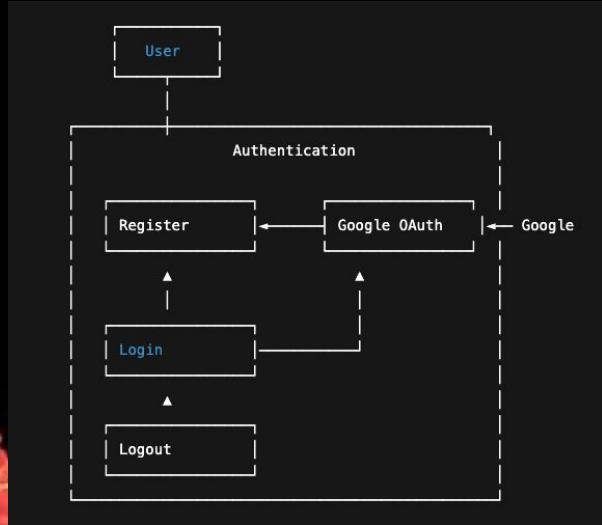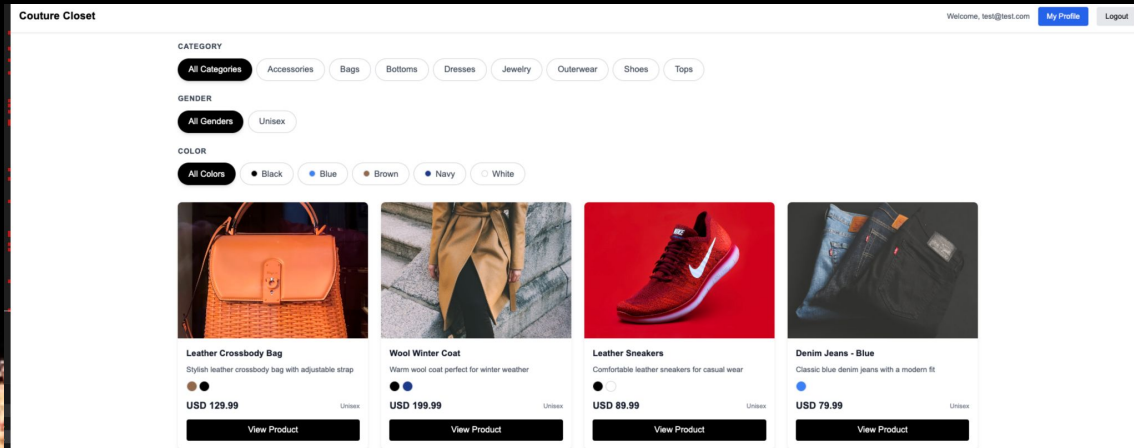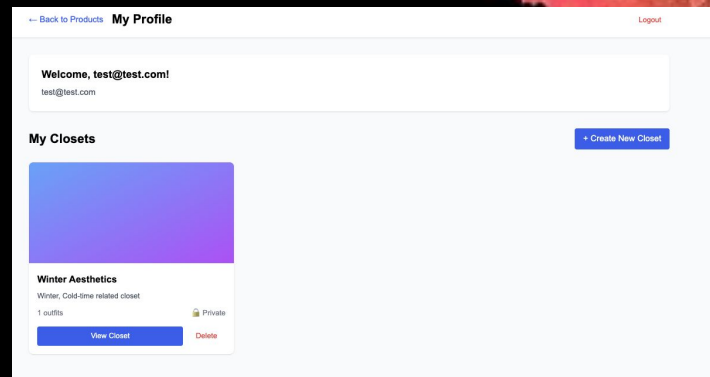
Scenario 3:

The rise of influencer fashion is at its peak, want to be at the forefront? Download *Couture Closet* today to share your outfits with your supporters. Each piece will be linked directly to the board, making it easy for all age ranges to shop. Influencers will be able to get deals and sponsorships from our locally hosted brands and can even provide their followers with codes for up to 10% off!
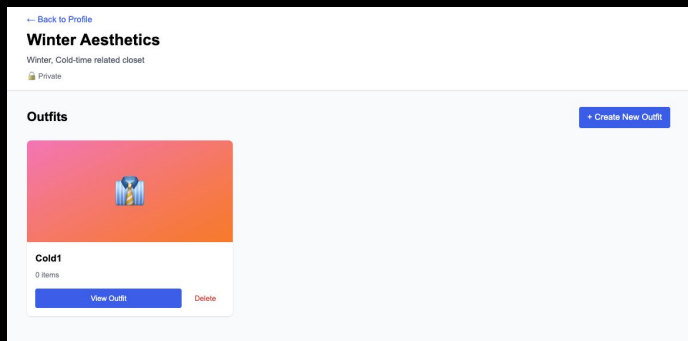
CASE DIAGRAM

Authentication

User

Register — Google OAuth ← Google

Login

Logout

Product Discovery Module

User

Browse Products

Search Products → Full-Text Search

Filter by Category

Filter by Brand

View Product Detail

Closet Management Module

User

Create Closet

Edit Closet

Delete Closet

Add Product to Closet → Products

Remove Product from Closet

USER INTERFACE

DETAILED DIAGRAMS

| User |

Closet Management Module

Create Closet

▲

Rename / Edit Closet

▲

Delete Closet

▲

Add Product to Closet ——→ Product Catalog

▲

Remove Product from Closet

| User |

Outfit Builder Module

Start New Outfit

▲

Drag Item to Canvas

▲

Move / Resize Items

▲

Save Outfit

▲

Edit or Delete Outfit
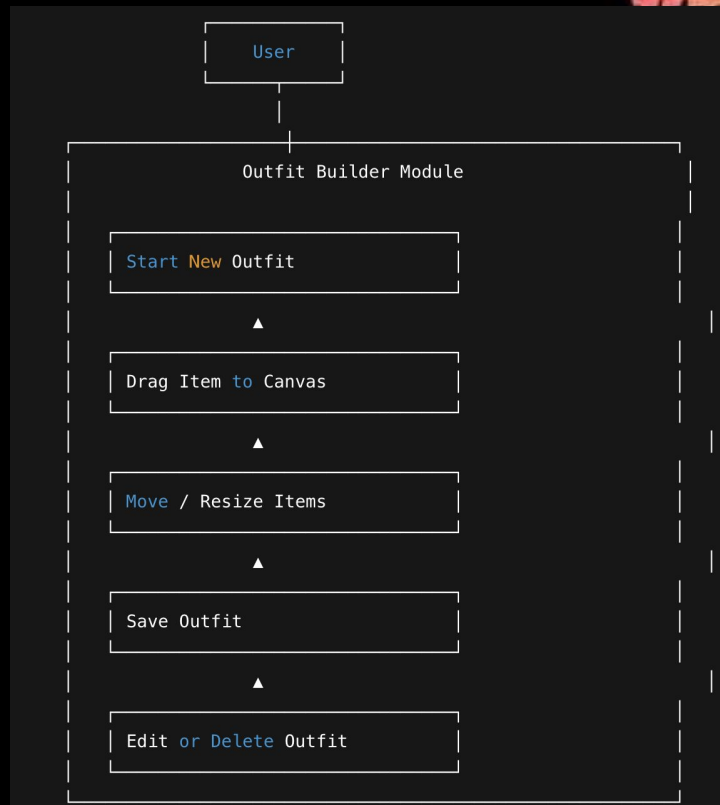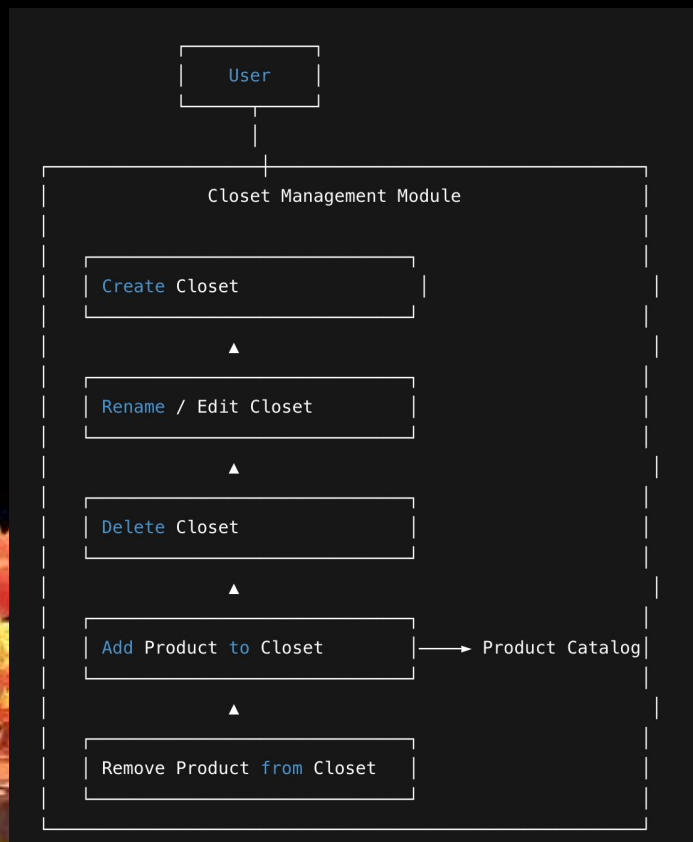
DEMONSTRATION:

Project challenges

Challenges:

-Finding retailers/brands that produce mass amounts of garments in all different styles to create diversity and scalability

-Finding an efficient way to retrieve and store product images (from outside sources)

-Using only a certain amount of websites that are compatible with our database

-Creating a layout that feels fresh and authentic while also prioritizing practicality for our users

-Trying to compete with other merchandise retailer apps that have been in the game for years

Status update

Completed:

- backend authentication works and the front end sign in
- added a product filter on the home page
- We added the saving outfit and closet feature onto the profile page
- We cleared the db and got pictures for some test products to show up on the front end

In Progress:

- We still have to add products and their images in that format
- Making endpoints for viewing each product individually once someone clicks on it
- Still need to create the user experience that includes the sign in and saving products to their profile to work to have our MVP
- We will still have time to add some more features like the social aspect
- ML Recommendation system

Thank you and questions!