

# Couture Closet: eCommerce Project Proposal

This document outlines the detailed project proposal for the development of Couture Closet, an online fashion platform for men, women, and children. This project, undertaken by Commerce Crew from WDD Development, aims to demonstrate our capabilities as a full-stack development studio by presenting this project to XYZ Marketing. By leveraging Laravel, PHP, JavaScript, AWS, and MySQL, we intend to build a robust, secure, user-friendly, and responsive website that showcases our technical and collaborative skills. The proposal encompasses the project scope, target audience, key features, technical stack, development team, and timeline, outlining the vision, technical approach, and collaborative roadmap to ensure successful implementation.

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# Target Audience & Market Analysis

Couture Closet is an eCommerce platform offering stylish and affordable clothing for men, women, and children. Our target audience seeks fashionable, comfortable, and durable clothing.

## Target Market Segments

- **Fashion-Forward Individuals:** Seeking the latest trends and styles.
- **Budget-Conscious Shoppers:** Prioritizing affordability without sacrificing quality.
- **Parents:** Looking for stylish, comfortable, and durable clothing for their children.

By catering to these segments, Couture Closet aims to be the go-to online destination for all clothing needs, providing a seamless shopping experience that combines quality, and affordability.



# Project Details:

Couture Closet will feature a range of functionalities to ensure a seamless and engaging shopping experience. Commerce Crew will track progress and meet delivery deadlines, striving to fulfill all client requirements. We will apply modern designs and technologies to enhance user satisfaction and ensure easy navigation. The site will be accessible to all age groups, compatible with both modern and older technologies. Returning customers can easily access their previous purchases, and social media links will promote the site. The homepage will showcase top-selling products.

The website will be responsive, ensuring usability on any device, including desktops, laptops, tablets, and mobile phones. It will be compatible with most browsers, including older versions (except those older than IE 8). Users can filter categories of their choice, focusing on marketing clothes from various brands.

# Functionality

## Front-End

- **Homepage (HOME):** Displaying featured products, new arrivals, and promotions.
- **Product Listing Page (SHOP):** Showing all products with filtering and sorting options.
- **Product Detail Page:** Detailed view of each product with images, descriptions, reviews, ratings, and available sizes.
- **Shopping Cart:** Allowing users to add, remove, and update product quantities.
- **Checkout Process:** Seamless checkout experience with multiple payment options.
- **Responsive Design:** Ensuring usability across various devices (desktops, tablets, and mobile phones).
- **Login/Register Functionality:** Secure user authentication and account management for new and returning users.

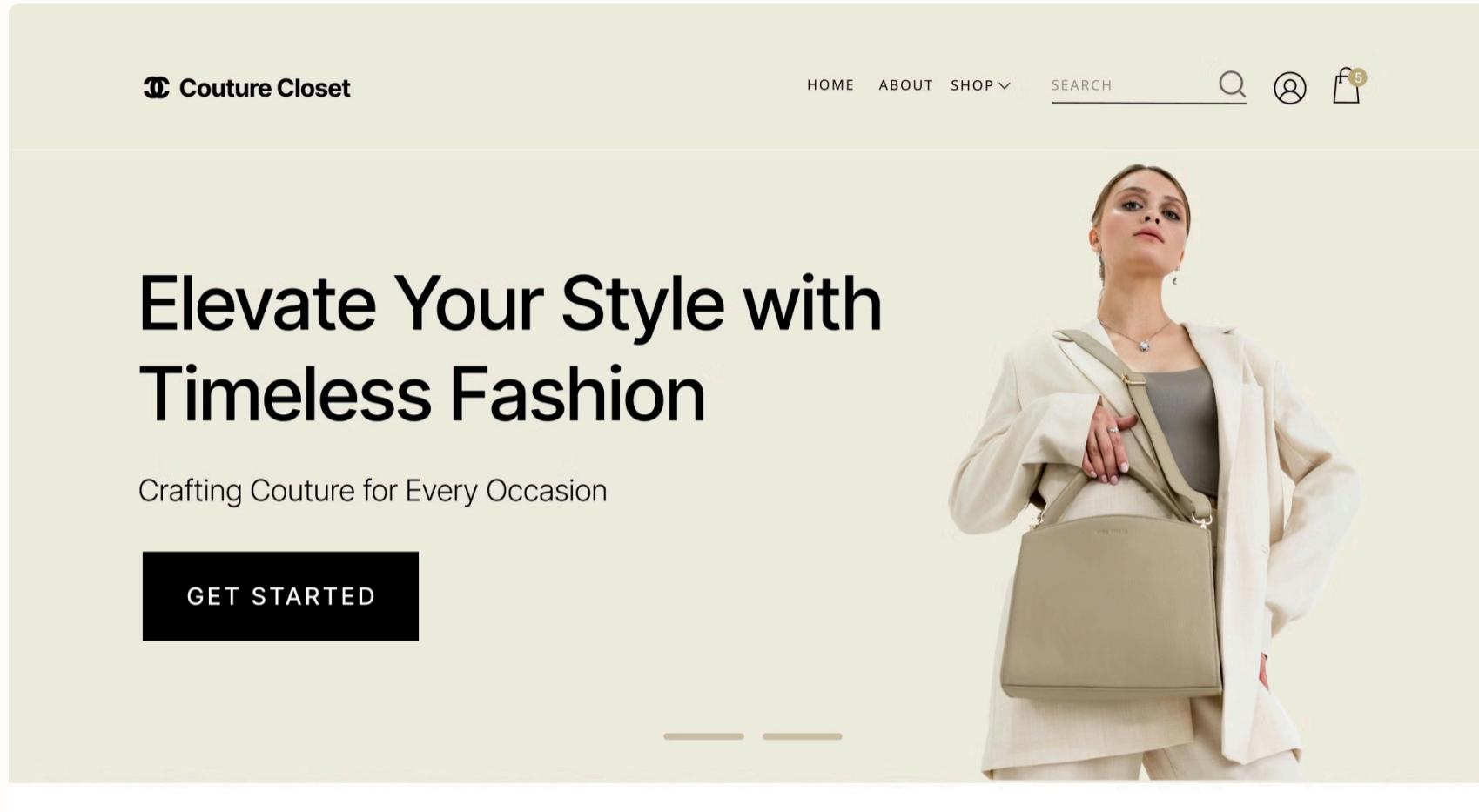
## Back-End

- **Admin Dashboard:** Managing products, categories, orders, and users.
- **Product Management:** Tracking product stock levels and updating quantities after purchases.
- **Category Management:** Men, Women, Kids.
- **Order Management:** Processing orders, updating order status, and handling returns (Admin only).
- **User Management:** Tracking list of customers with CRUD functionality.
- **Review Management:** Listing feedback, reviews, and ratings from users.

# Proposed Design Solution

## Home (Landing) Page

The landing page of couture closet will be used to showcase the main categories, and a list of our featured products. Along with slides and call to actions (CTA's) that will be used to get users to the Shop Listing and inner pages.



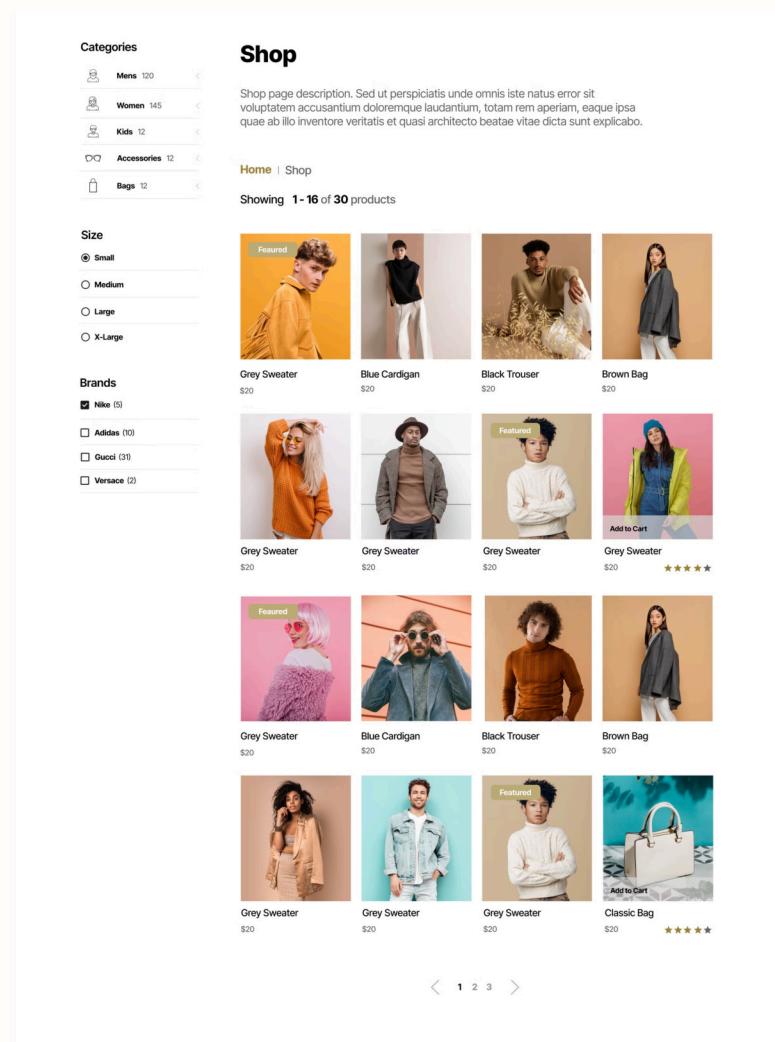
The grid displays the following sections:

- Top Left:** A mobile view of the homepage featuring a woman in a beige outfit, the slogan "Elevate Your Style with Timeless Fashion", and a "GET STARTED" button.
- Top Middle:** A desktop view of the homepage with a larger image of the same woman, the slogan, and a "GET STARTED" button.
- Top Right:** A section titled "Our Collection" with a grid of four featured products: Grey Sweater (\$20), Bluer Cardigan (\$20), Black Trouser (\$20), and Brown Bag (\$20). It includes a testimonial: "Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua."
- Middle Left:** A "Our Collection" section for men, showing a man in a denim jacket and a woman in a grey blazer, with a grid of products including Grey Sweater (\$20), Bluer Cardigan (\$20), Black Trouser (\$20), and Brown Bag (\$20).
- Middle Middle:** A "Our Collection" section for women, showing a woman in a grey blazer and a man in a denim jacket, with a grid of products including Grey Sweater (\$20), Bluer Cardigan (\$20), Black Trouser (\$20), and Brown Bag (\$20).
- Middle Right:** A "Our Collection" section for men, showing a man in a grey sweater and a woman in a grey sweater, with a grid of products including Grey Sweater (\$20), Bluer Cardigan (\$20), Black Trouser (\$20), and Brown Bag (\$20). It includes a testimonial: "Grey Sweater \$20 Grey Sweater \$20 Grey Sweater \$20 Grey Sweater \$20 ★★★★".
- Bottom Left:** A footer section with links for All Products, Men, Women, Kids, and Accessories, along with a testimonial and a grid of products.
- Bottom Middle:** A footer section with links for SHOP, ACCOUNT, and COMPANY, along with a testimonial and a grid of products.
- Bottom Right:** A footer section with links for SHOP, ACCOUNT, and COMPANY, along with a testimonial and a grid of products.

# Proposed Design Solution

## Shop Page (List View)

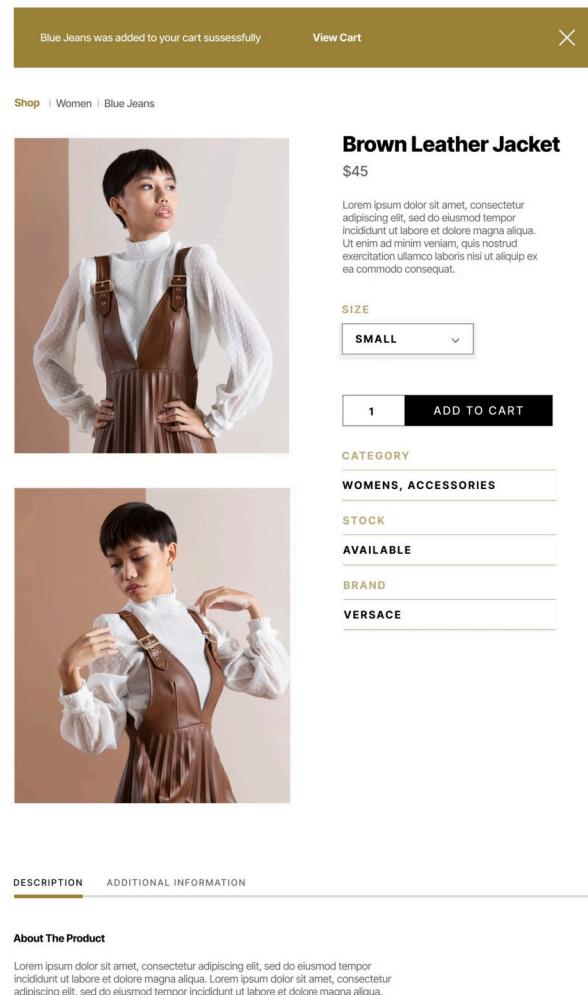
The shop page of couture closet will be used to showcase a listing of all available products for purchase. It will also include demographic, size and brand filters.



This mockup shows the shop page of the Couture Closet website. On the left, there are three vertical filter panels: 'Categories' (Mens 120, Women 145, Kids 12, Accessories 12, Bags 12), 'Size' (Small selected, Medium, Large, X-Large), and 'Brands' (Nike 5, Adidas 10, Gucci 31, Versace 2). The main area is titled 'Shop' and contains a product grid. Each item has a small image, the name, price (\$20), and a 'View Details' button. A 'Featured' badge is present on several items. An 'Add to Cart' button with a star rating is visible on one item. At the bottom, there are navigation arrows for pagination.

## Product Detail Page

The product page (detail view) will have the information of the item to be purchased, including quantity and size filters, and the category, brand, and availability of the item to be purchased. This page will also have buttons to add the item to the cart for subsequent checkout.



This mockup shows the product detail page for a 'Brown Leather Jacket'. At the top, a success message says 'Blue Jeans was added to your cart successfully' with a 'View Cart' button and a close icon. Below it, the breadcrumb navigation shows 'Shop | Women | Blue Jeans'. The main image features a woman wearing the jacket. To the right, there's a sidebar with dropdowns for 'SIZE' (set to 'SMALL'), 'QUANTITY' (set to '1'), and an 'ADD TO CART' button. Further down, there are sections for 'CATEGORY' (WOMENS, ACCESSORIES), 'STOCK', 'AVAILABLE', 'BRAND' (VERSACE), and 'DESCRIPTION' (with placeholder text about the product). At the bottom, there's an 'ADDITIONAL INFORMATION' section.

# User Personas

We have identified three primary user personas for Couture Closet:

## Guest User

This persona represents a user who browses the website without creating an account.

- **Actions:** Browse products, view product details, and register an account.
- **Use Case:**
  - a. Visits the homepage.
  - b. Browses through product categories.
  - c. Views product details.
  - d. Registers for an account.

## Authenticated User

This persona represents a registered user with a Couture Closet account.

- **Actions:** All guest actions plus add to cart, checkout, and view order history.
- **Use Case:**
  - a. Logs into the account.
  - b. Adds products to the cart.
  - c. Proceeds to checkout.
  - d. Completes the purchase.
  - e. Views order history.

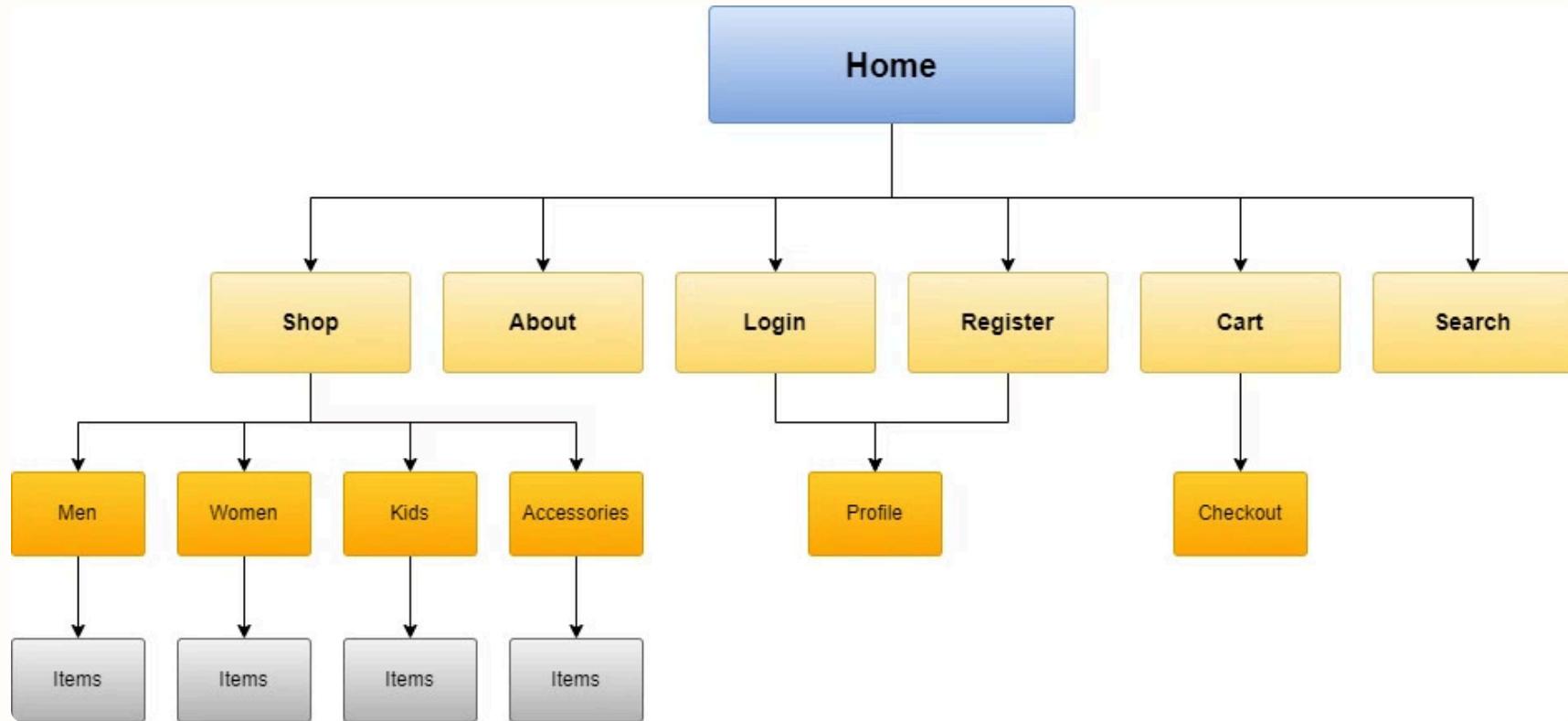
## Admin User

This persona represents an administrator with full access to the website's backend functionalities.

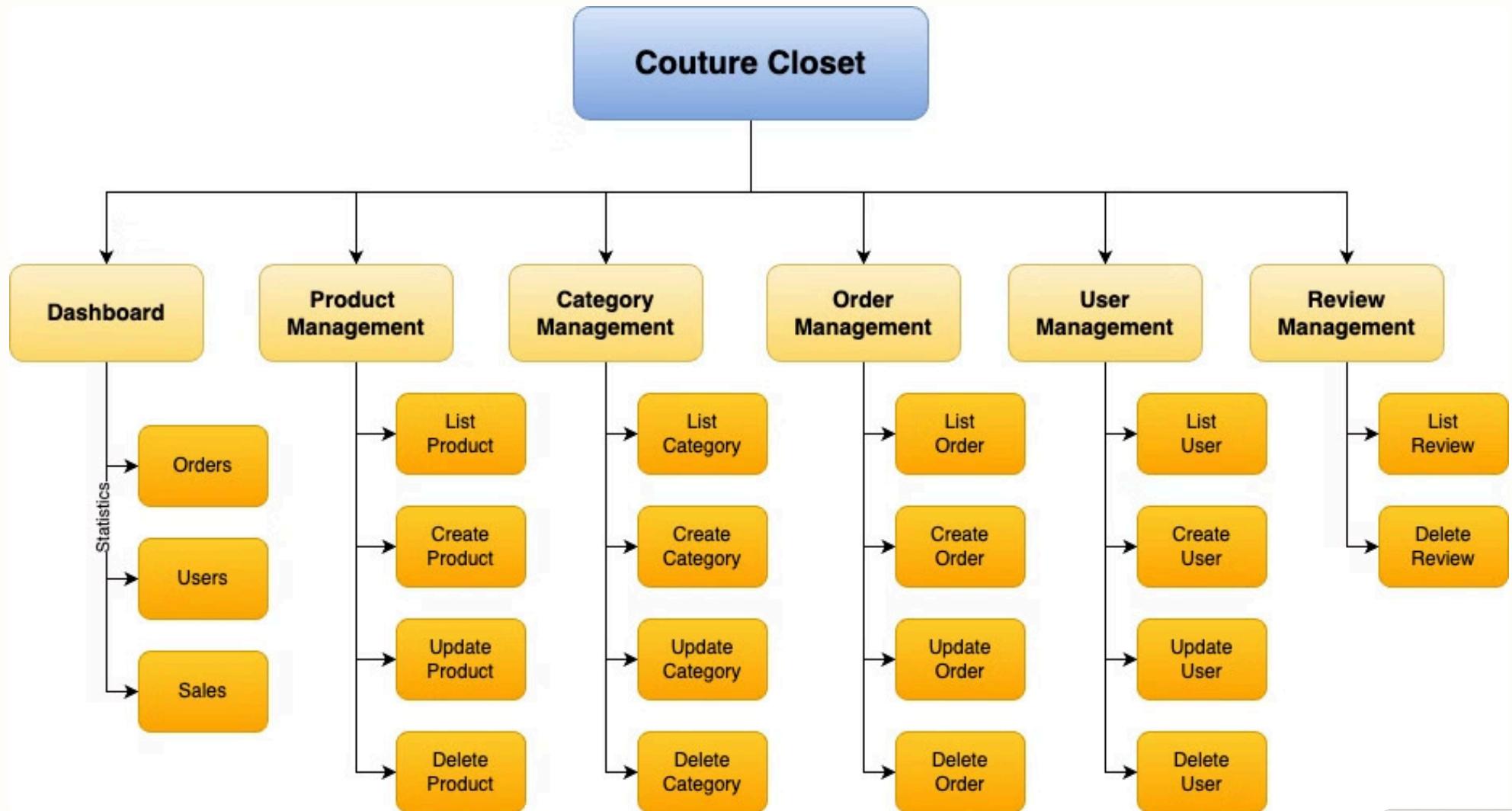
- **Actions:** Manage products, categories, users, and orders.
- **Use Case:**
  - a. Logs into the admin dashboard.
  - b. Adds new products and updates existing ones.
  - c. Manages user accounts and reviews orders.
  - d. Updates order statuses and handles customer inquiries.

# Sitemaps

Front End:



Back End:



# Server

The website is being developed on Ubuntu version 24.04 and hosted on <https://team1.uwpace.ca>, ensuring optimal performance and security.

Name	Version
Ubuntu	24.04
MySQL	8.0.37
Git	2.43.0
PHP	8.3.6
Apache	2.4.58
NPM	10.7.0
Node	v18.20.4
Composer	2.7.7
Laravel	11.9
Bootstrap	5.2.3
Zip	3.0



# Security

## Server-Level Security

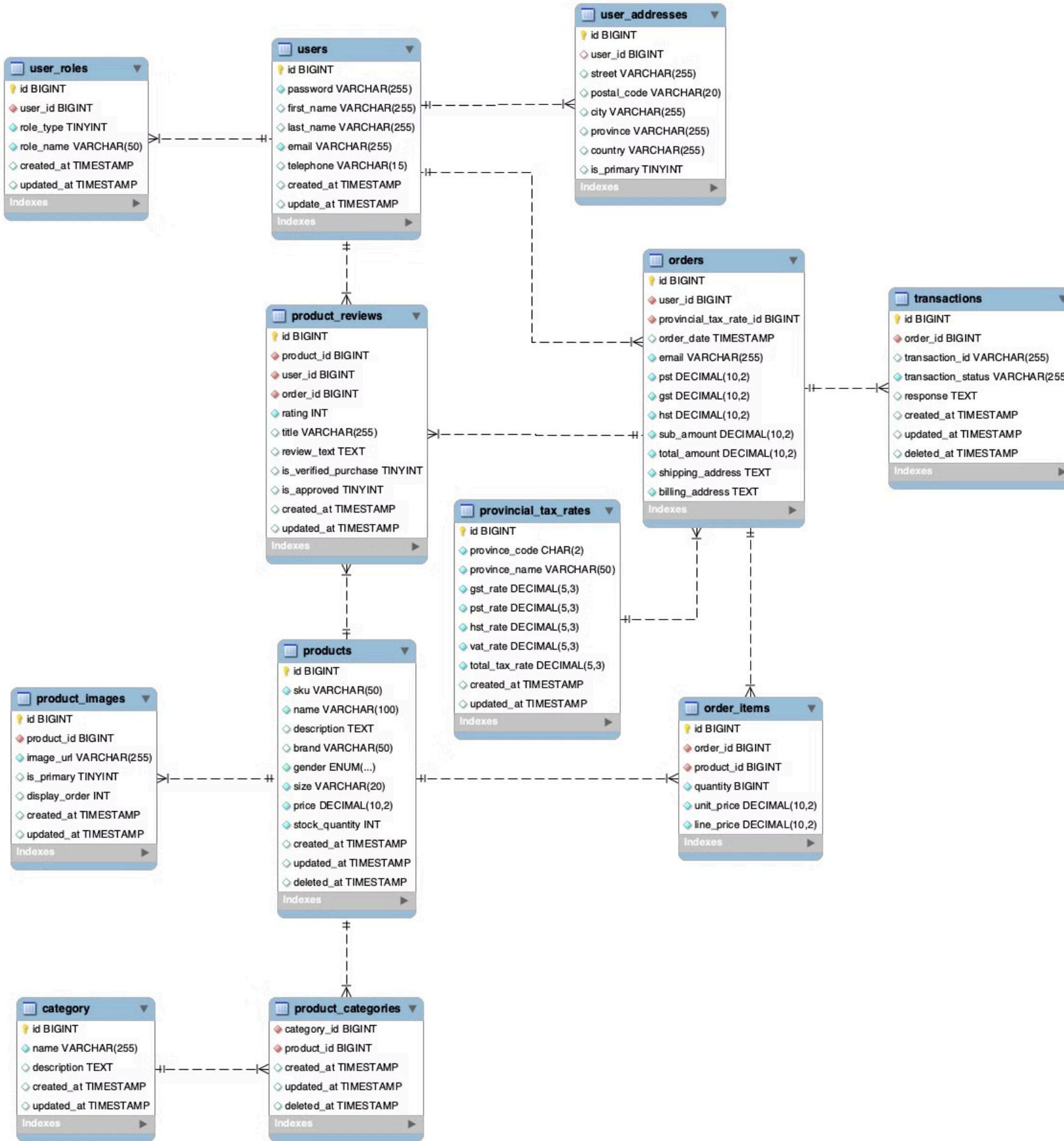
- Regular updates and patch management.
- Firewalls and access control lists (ACLs).
- Restricted permissions on root directory.
- SSH root access disabled.
- Firewall rules to close unnecessary ports.

## Application-Level Security

- **Password Encryption:** Using hashed passwords for secure storage.
- **XSS Protection:** Output sanitization and escaping to prevent cross-site scripting.
- **CSRF Protection:** Tokens and secure form submissions to prevent cross-site request forgery.
- **Authentication:** Different levels of authentication for admin, authenticated users, and unauthenticated users.
- **SQL Injection Prevention:** Prepared statements and parameterized queries to prevent SQL injection.

# Database

The database design for Couture Closet will be meticulously crafted to ensure data integrity, efficiency, and scalability. The Entity–Relationship Diagram (ERD) will define the relationships between different entities such as products, users, and orders. This ERD will visualize data flow, relationships, and constraints within the database, ensuring seamless operation and efficient information retrieval.



# Tables:

- **users**: Contains core information about registered users, including account credentials and personal details.
- **user\_addresses**: Stores multiple shipping and billing addresses associated with each user account.
- **user\_roles**: Defines different levels of access and permissions for users within the system.
- **products**: Stores detailed information about individual clothing items, including attributes and inventory status.
- **product\_images**: Stores image information for each product.
- **product\_reviews**: Allows users to leave reviews for products they've purchased.
- **product\_categories**: Organizes products into a hierarchical structure of categories and subcategories.
- **categories**: Stores all the categories.
- **provincial\_tax\_rates**: Stores tax rates for all Canadian provinces.
- **orders**: Stores overall order information.
- **order\_items**: Links orders to specific products and quantities.
- **transactions**: Tracks transactions associated with each order.

# Value Adds

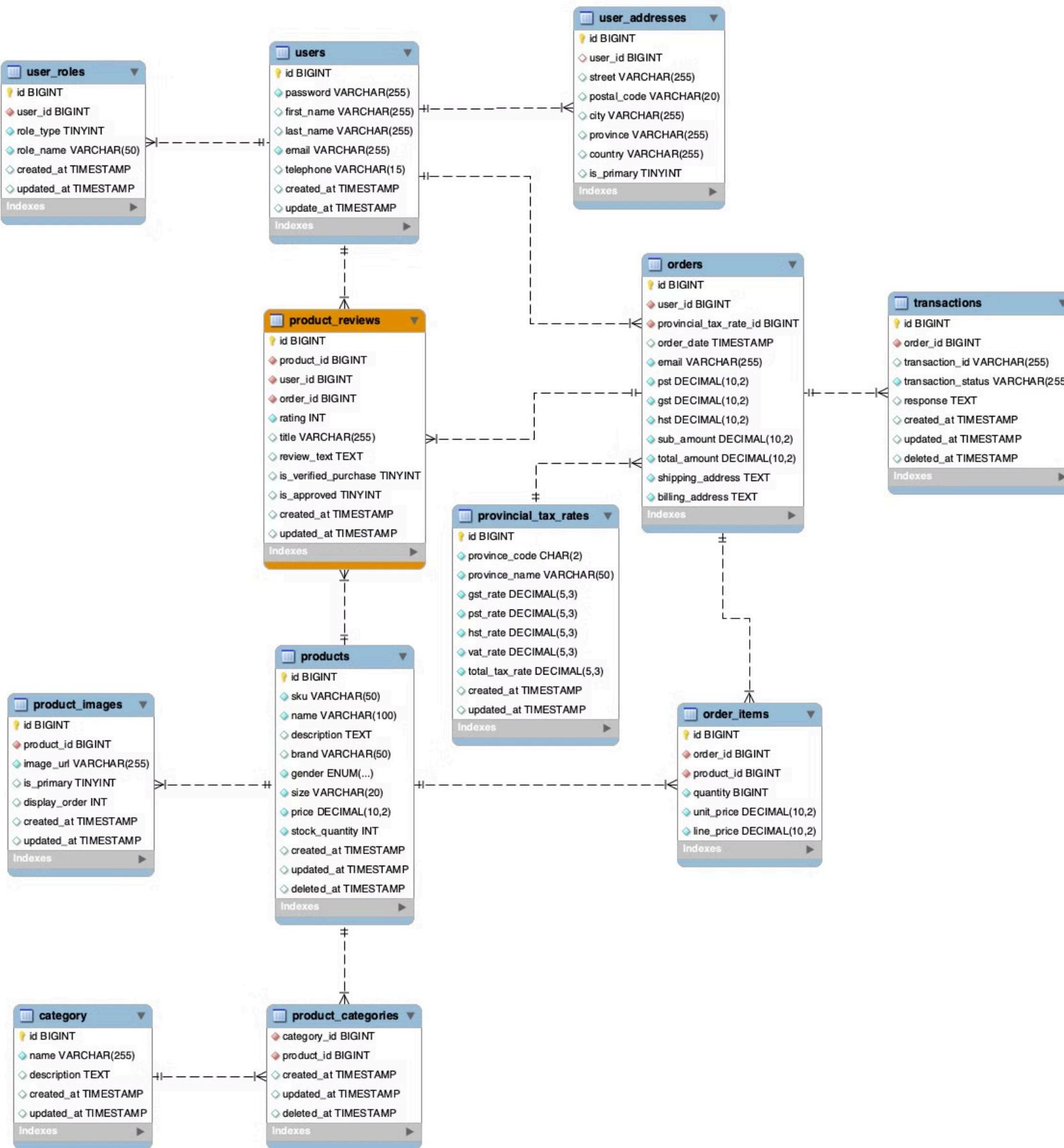
The "Reviews" feature enhances the functionality by enabling users to share their experiences and feedback about products. Reviews are linked to both users and products in the database, allowing for multiple reviews on a single product from different users. This helps other customers make informed purchasing decisions. Administrators can view all product reviews and take necessary actions.

- **Customer Reviews and Ratings:** Allowing users to leave feedback and rate products.

# Revised ERD for Value Adds

The "product\_reviews" table is a structured database table designed to capture and store customer feedback on products they have purchased. It serves as a crucial component of an e-commerce or retail system, allowing customers to share their experiences and opinions about products they've bought.

- **product\_reviews:** Allowing users to leave feedback and rate products.



# Team

## Team Name: Commerce Crew

The Couture Closet development team, known as Commerce Crew, consists of experienced and skilled professionals dedicated to delivering a high-quality and functional eCommerce solution. Each member has made equal contributions to programming, database design, and the overall look and feel of the website from a customer perspective. Below is a brief description of our team and the primary roles served by each member:

- **Imran:** Project Management, Git, JavaScript, Checkout, Cart. As the Project Manager, Imran oversees the project timeline, budget, and communication with the client.
- **Donald:** Design, HTML, CSS. As the User interface & User Experience (UI/UX) Designer, Donald is responsible for creating user-friendly and visually appealing website designs.
- **Snigdha:** HTML, CSS. As the Front-End Developer, Snigdha designs and develops the user interface and user experience.
- **Rui:** Server Setup, Database, MySQL, Login, Register, Admin Dashboard. As the Back-End Developer, Rui develops the server-side logic and integrates the database.
- **Parth:** QA, Testing, Bug Fixing. As the Quality Assurance (QA) Engineer, Parth tests the website for functionality, usability, and security.

Together, the Commerce Crew leverages their combined expertise to ensure the successful development and deployment of Couture Closet.