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01/24/25

MythicPrints E-commerce Project

Notes/Ideas:

* Ability to put multiple posters in one cart
* One shipping fee, shipping 5 posters will be the same as shipping 1
* One size of poster, only poster paper no other options
* Each poster can have multiple tags to be searched through
* Tax table if time allows

Tech Stack:

* Frontend: HTML, CSS, JS
* Backend: Node.js with Express.js
* Database: MySQL
* Stripe for payment portal

ERD Tables:

A diagram of a computer

Description automatically generated

Business Rules:

**User Management**

1. Users must register with a **unique email** and a **secure password**.
2. Users can **reset passwords** via email verification.
3. Admins have **additional privileges** to manage products, orders, and users.

**Product Management**

1. Products must have a **unique name** and cannot be created without a price.
2. Admins can **add, edit, delete, and update** poster inventory.
3. If a product goes **out of stock**, it cannot be added to a cart.
4. Posters can be categorized into **different themes (anime, movies, custom, etc.)**.

**Order Management**

1. Customers can add **multiple posters** to their shopping cart before checkout.
2. An order can have multiple products, and each product in an order must have a **quantity greater than zero**.
3. Customers can only cancel orders that have not yet been shipped.
4. The system automatically updates **stock quantity** once an order is placed.
5. Admins can change the **order status** (e.g., "Processing", "Shipped", "Delivered").

**Payment Processing**

1. Customers must complete payment before an order is processed.
2. Payment methods include **credit/debit cards, PayPal, and digital wallets**.
3. If payment is **declined**, the order remains **unpaid** and is not processed.
4. Transactions must have a **unique transaction ID** for tracking.
5. Orders are **refundable only if returned within 30 days** (if applicable).

**Shipping and Delivery**

1. A unique **tracking number** is generated for every shipped order.
2. Customers must provide a valid **shipping address**.
3. Orders can be tracked in real-time via a **third-party shipping API**.
4. Customers receive notifications upon **shipment and delivery**.

**Reviews and Ratings**

1. Only users who have **purchased a product** can leave a review.
2. Reviews must include a **rating (1-5 stars)** and can include optional text feedback.
3. Admins can **remove inappropriate reviews**.
4. A user can **edit** their review within **48 hours** of submission.

**Security and Authentication**

1. User data (passwords, transactions) must be **encrypted** for security.
2. Admin functionalities must be **restricted to authorized users**.
3. Suspicious accounts can be **flagged and temporarily disabled**.
4. The system should **log failed login attempts** to prevent brute-force attacks.

Client Flow:

**1. User Registration & Authentication**

* New users **sign up** using their email, name, password, and contact details.
* Returning users **log in** using their credentials.
* Users can reset their password via email verification.

**2. Browsing & Searching Products**

* Users can view the **homepage** showcasing featured and trending posters.
* A **search bar and filters** allow users to browse by categories (anime, movies, gaming, etc.).
* Clicking a poster redirects to the **product details page**, displaying:
  + Poster image
  + Description
  + Price
  + Customer reviews and ratings

**3. Adding to Cart & Checkout**

* Users **add** desired posters to their shopping cart.
* The **cart page** displays selected posters, quantity, subtotal, and total price.
* Users can **update quantity** or **remove items** before proceeding.
* Clicking **Checkout** prompts users to:
  + Enter shipping details.
  + Select a payment method (Credit/Debit card, PayPal, etc.).
  + Confirm order details.

**4. Payment Processing**

* The system processes the payment securely.
* Upon successful payment:
  + The order is **confirmed**.
  + A confirmation email is sent to the user.

**5. Order Tracking & Shipment**

* Users can view their **Order History** in their account.
* Orders have a status: **Processing → Shipped → Out for Delivery → Delivered**.
* Users receive **email/SMS notifications** for shipping updates.
* A **tracking number** is provided for real-time tracking.

**6. Review & Feedback**

* After order delivery, users can **rate and review** the poster.
* Reviews are displayed on product pages to help other customers.
* Users can edit their review within **48 hours**.

**7. Customer Support & Returns**

* Users can request **refunds/returns** within a defined period.
* A **customer support portal** allows users to raise complaints or inquiries.
* Admins review refund requests and update the order status accordingly.