ONLINE SHOPPING MANAGEMENT SYSTEM (e-Buy)

1. Use Case: Add Category and Product Details by Admin

- Actors: Admin

- Description: The admin wants to add new categories and product details to the online shopping management system.

- Precondition: The admin is logged into the online shopping management system and has the necessary privileges to add categories and products.

- Postcondition: The new category and product details are successfully added to the system.

Main Success Scenario:

1. The admin navigates to the "Manage Categories" or "Manage Products" section in the online shopping management system.

2. The system presents a form or interface allowing the admin to enter the details of the new category or product.

3. The admin fills in the required information, such as the category name, description, or product attributes, pricing, and availability.

4. The system validates the entered information to ensure it meets the required criteria.

5. If any validation errors occur, the system notifies the admin and prompts them to correct the errors.

6. Once the entered information is valid, the system adds the new category or product details to the database.

7. The system provides a confirmation message indicating that the category or product has been successfully added.

Alternate Flows:

1: Invalid Information

  - The system identifies that the entered information is incomplete, incorrect, or does not meet the required criteria.

  - The admin is prompted to correct the errors or provide the missing information.

2. Use Case: View Category and Product Details by Admin

- Actors: Admin

- Description: The admin wants to view the existing categories and product details in the online shopping management system.

- Precondition: The admin is logged into the online shopping management system.

- Postcondition: The admin can access and view the category and product details.

Main Success Scenario:

1. The admin navigates to the "Manage Categories" or "Manage Products" section in the online shopping management system.

2. The system retrieves the existing categories or products from the database.

3. The system displays a list of categories or products, including their names, descriptions, and other relevant details.

Alternate Flows:

1: No Categories or Products Found

  - The system detects that no categories or products exist in the database.

  - The admin is notified with a message indicating the absence of any categories or products to view.

3. Use Case: Update Category and Product Details by Admin

- Actors: Admin

- Description: The admin wants to update the details of categories and products in the online shopping management system.

- Precondition: The admin is logged into the online shopping management system and has the necessary privileges to update categories and products.

- Postcondition: The selected category and product details are successfully updated in the system.

Main Success Scenario:

1. The admin navigates to the "Manage Categories" or "Manage Products" section in the online shopping management system.

2. The system retrieves the existing categories or products from the database.

3. The system displays a list of categories or products, including their names, descriptions, and other relevant details.

4. The admin selects the category or product that they want to update.

5. The system presents a form or interface allowing the admin to modify the existing details of the selected category or product.

6. The admin makes the necessary changes to the category or product details, such as updating the name, description, attributes, pricing, or availability.

7. The system validates the entered information to ensure it meets the required criteria.

8. If any validation errors occur, the system notifies the admin and prompts them to correct the errors.

9. Once the entered information is valid, the system updates the category or product details in the database.

10. The system provides a confirmation message indicating that the category or product has been successfully updated.

Alternate Flows:

1: No Categories or Products Found

  - The system detects that no categories or products exist in the database.

  - The admin is notified with a message indicating the absence of any categories or products to update.

2: Unauthorized Access

  - The system identifies that the admin does not have the necessary privileges or permissions to update category or product details.

  - The admin receives an error message indicating the lack of authorization and is unable to proceed with the update.

3: Invalid Information

 - The system identifies that the entered information is incomplete, incorrect, or does not meet the required criteria.

 - The admin is prompted to correct the errors or provide the missing information.

4.Use Case: Delete Category and Product Details by Admin

- Actors: Admin

- Description: The admin wants to delete categories and product details from the online shopping management system.

- Precondition: The admin is logged into the online shopping management system and has the necessary privileges to delete categories and products.

- Postcondition: The selected category and product details are successfully deleted from the system.

Main Success Scenario:

1. The admin navigates to the "Manage Categories" or "Manage Products" section in the online shopping management system.

2. The system retrieves the existing categories or products from the database.

3. The system displays a list of categories or products, including their names, descriptions, and other relevant details.

4. The admin selects the category or product that they want to delete.

5. The system presents a confirmation prompt to ensure the admin's intention to delete the selected category or product.

6. The admin confirms the deletion by clicking on the "Delete" button or a similar action.

7. The system removes the selected category or product details from the database.

8. The system provides a confirmation message indicating that the category or product has been successfully deleted.

Alternate Flows:

1: No Categories or Products Found

  - The system detects that no categories or products exist in the database.

  - The admin is notified with a message indicating the absence of any categories or products to delete.

2: Unauthorized Access

  - The system identifies that the admin does not have the necessary privileges or permissions to delete categories or products.

  - The admin receives an error message indicating the lack of authorization and is unable to proceed with the deletion.

5. Use Case: View Category and Product Details by User

- Actors: User

- Description: The user wants to view the categories and product details in the online shopping management system.

- Precondition: The user is logged into the online shopping management system.

- Postcondition: The user can access and view the category and product details.

Main Success Scenario:

1. The user navigates to the "Categories" or "Products" section in the online shopping management system.

2. The system retrieves the existing categories or products from the database.

3. The system displays a list of categories or products, including their names, descriptions, and other relevant details.

4. The user can browse through the categories or products and view their respective details.

5. The system allows the user to click on a specific category or product to view more detailed information.

6. The system presents the detailed information, including attributes, pricing, availability, and any additional information associated with the category or product.

Alternate Flows:

1: No Categories or Products Found

  - The system detects that no categories or products exist in the database.

  - The user is notified with a message indicating the absence of any categories or products to view.

6. Use Case: Add Products to Cart by User

- Actors: User

- Description: The user wants to add products to their cart in the online shopping management system.

- Precondition: The user is logged into the online shopping management system.

- Postcondition: The selected products are added to the user's cart.

Main Success Scenario:

1. The user views the category and product details following the steps mentioned in "Use Case 1: View Category and Product Details by User."

2. The user selects a specific product they want to add to their cart.

3. The system provides an option to add the selected product to the cart.

4. The user clicks on the "Add to Cart" button.

5. The system adds the product to the user's cart and updates the cart's contents.

6. The system may display a confirmation message indicating that the product has been successfully added to the cart.

Alternate Flows:

1: Product Unavailability

  - The system identifies that the selected product is currently unavailable or out of stock.

- The user is notified with a message indicating the unavailability of the product.

7. Use Case: Make Orders by User

- Actors: User

- Description: The user wants to make an order for the products in their cart in the online shopping management system.

- Precondition: The user is logged into the online shopping management system and has products in their cart.

- Postcondition: The order is successfully placed, and relevant order details are recorded in the system.

Main Success Scenario:

1. The user navigates to their cart in the online shopping management system.

2. The system displays the products currently in the user's cart, along with their quantities and prices.

3. The user reviews the cart contents and verifies the selected products.

4. The user proceeds to the checkout process.

5. The system prompts the user to provide shipping and billing information, such as address and payment details.

6. The user enters the required information accurately.

7. The system validates the entered information to ensure its correctness and completeness.

8. If any validation errors occur, the system notifies the user and prompts them to correct the errors.

9. Once the entered information is valid, the system processes the order and generates an order confirmation.

10. The system deducts the purchased products from the inventory.

11. The user receives an order confirmation, including order details and any relevant instructions for further actions, such as payment instructions or shipment tracking.

Alternate Flows:

1: Empty Cart

- The system detects that the user's cart is empty.

  - The user is notified with a message indicating the need to add products to the cart before proceeding with the order.

8. Use Case: Remove Products from Cart by User

- Actors: User

- Description: The user wants to remove products from their cart in the online shopping management system.

- Precondition: The user is logged into the online shopping management system and has products in their cart.

- Postcondition: The selected products are successfully removed from the user's cart.

Main Success Scenario:

1. The user navigates to their cart in the online shopping management system.

2. The system displays the products currently in the user's cart, along with their quantities and prices.

3. The user reviews the cart contents and identifies the products they want to remove.

4. The user selects the specific products they want to remove from the cart.

5. The system provides an option to remove the selected products.

6. The user clicks on the "Remove" button or a similar action to delete the selected products from the cart.

7. The system updates the cart's contents by removing the selected products.

8. The system may display a confirmation message indicating that the products have been successfully removed from the cart.

Alternate Flows:

1: Empty Cart

  - The system detects that the user's cart is already empty.

- The user is notified with a message indicating the absence of any products to remove.

9. Use Case: Rate and Review Products by User

- Actors: User

- Description: The user wants to rate and review the purchased products in the online shopping management system.

- Precondition: The user is logged into the online shopping management system and has made a purchase.

- Postcondition: The user's rating and review are recorded and associated with the respective product.
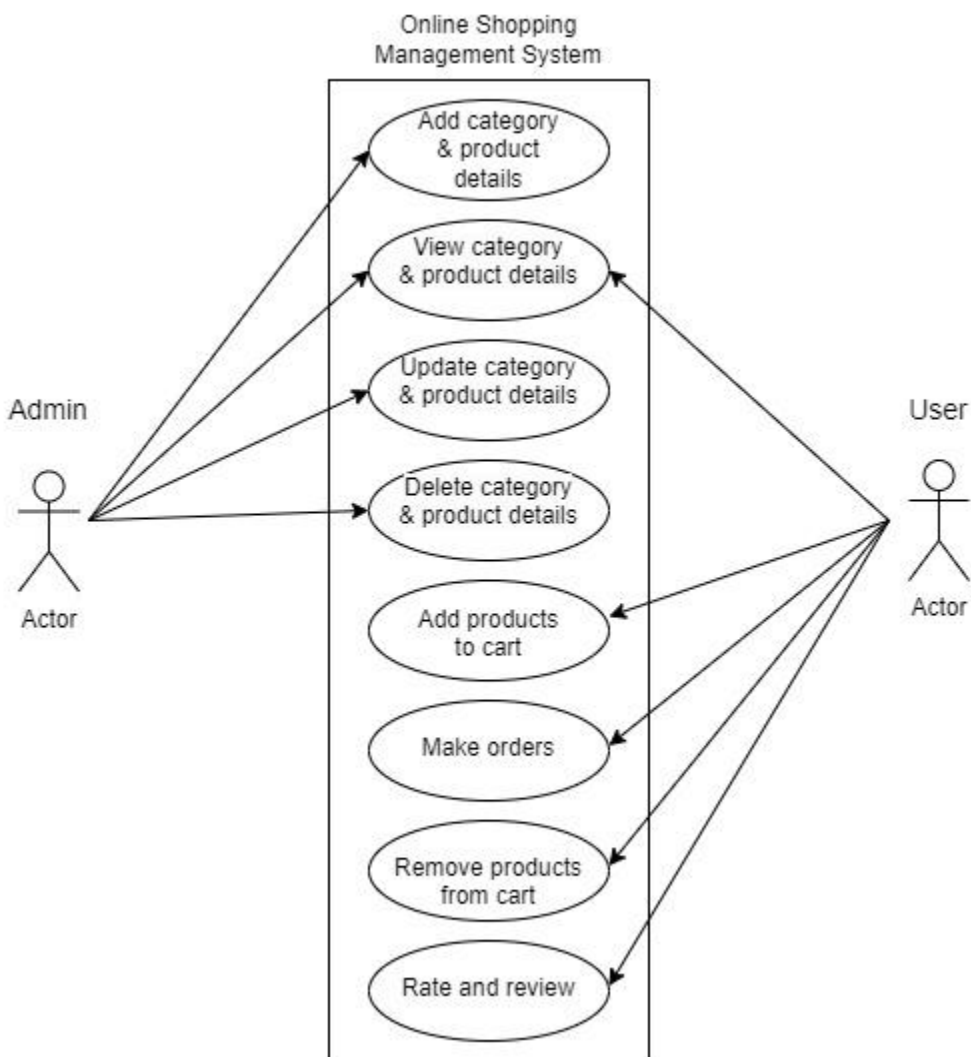
Main Success Scenario:

1. The user navigates to the "Order History" or "Purchased Products" section in the online shopping management system.

2. The system retrieves the user's order history or purchased products from the database.

3. The system displays a list of the user's previous orders or purchased products, along with relevant details.

4. The user selects the specific product they want to rate and review.

5. The system provides an option to rate and review the selected product.

6. The user provides a rating (e.g., star rating) for the product based on their satisfaction or experience.

7. The user enters a written review or feedback describing their thoughts, opinions, or recommendations about the product.

8. The user submits the rating and review to the system.

9. The system records the rating and review and associates them with the respective product in the database.

10. The system may display a confirmation message indicating that the rating and review have been successfully submitted.
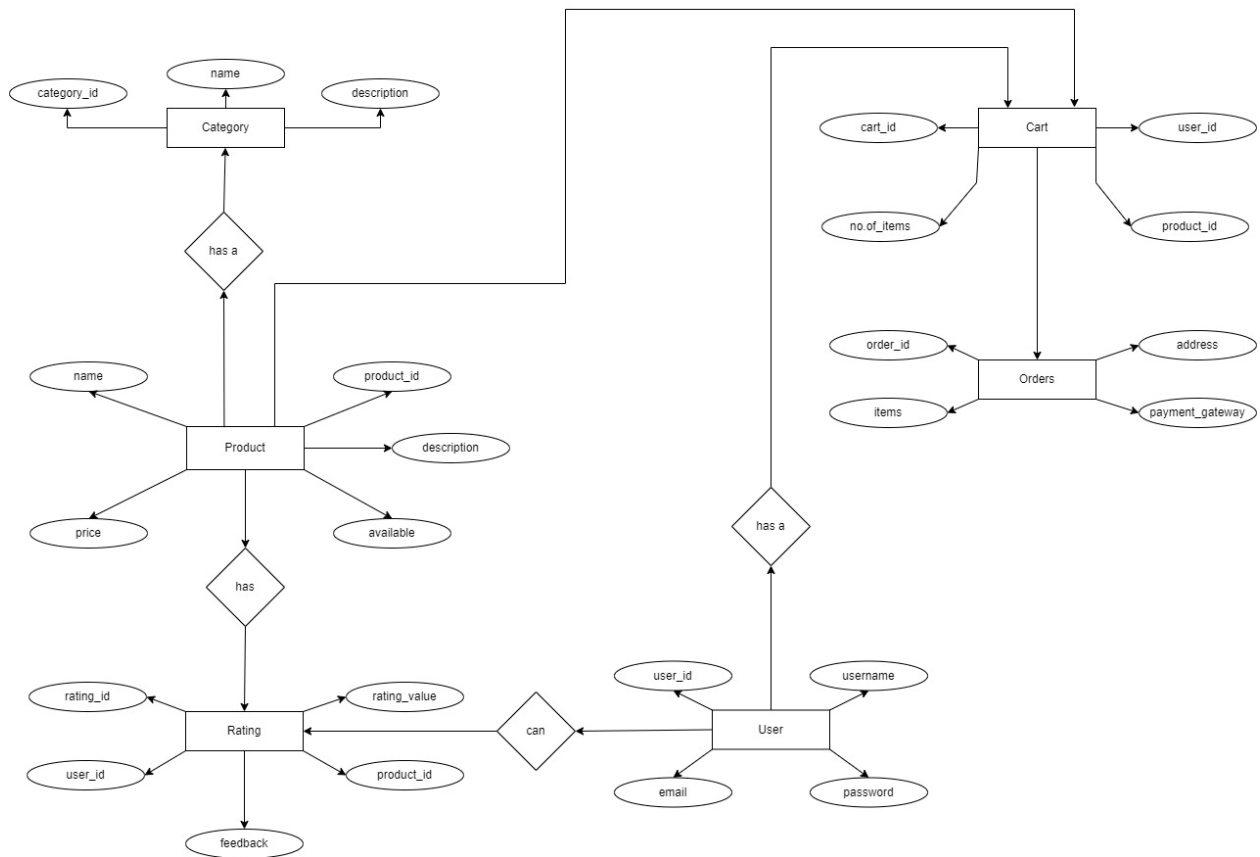
Alternate Flows:

1: No Previous Orders or Purchased Products

 - The system detects that the user has no previous orders or purchased products.

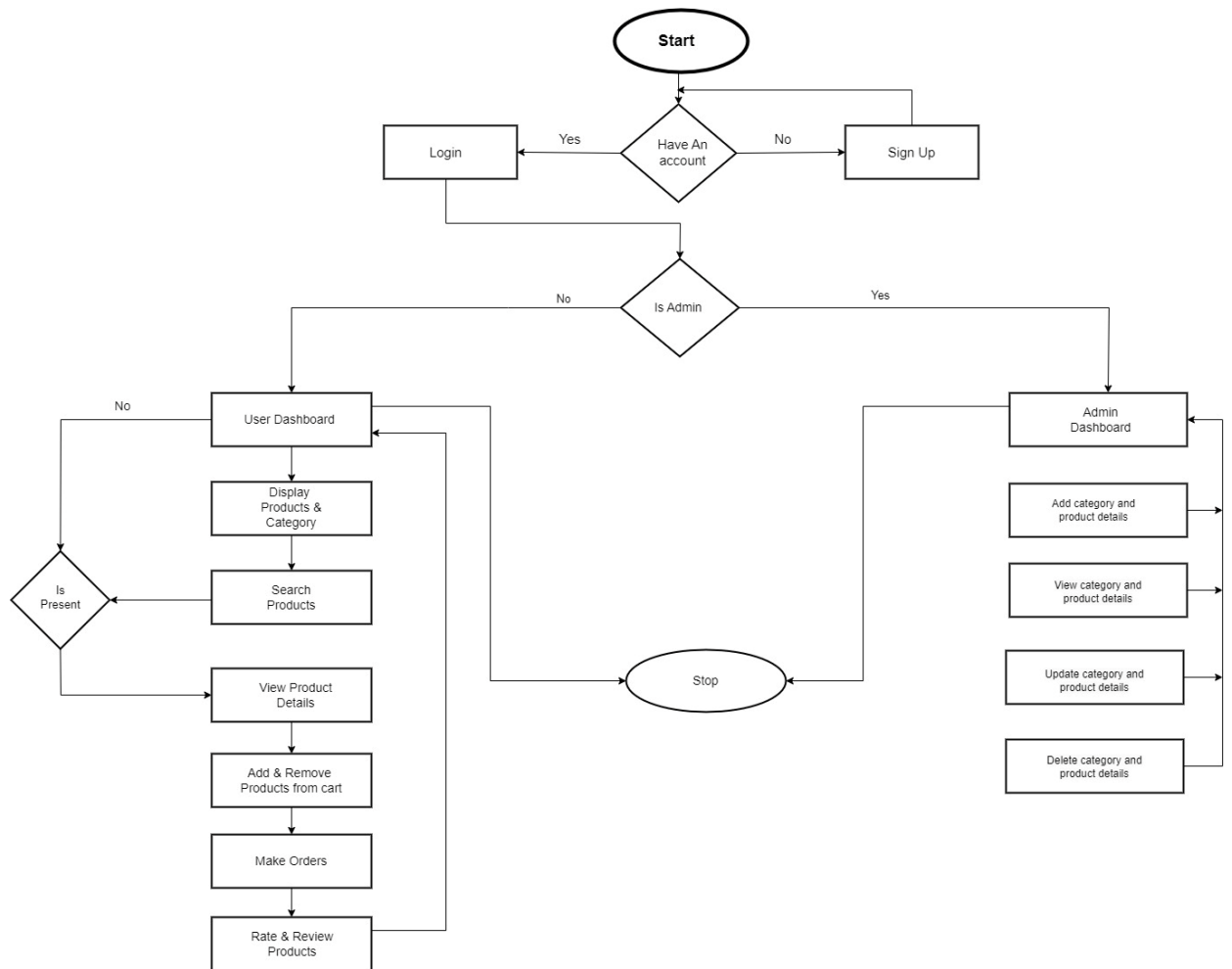 - The user is notified with a message indicating the absence of any products to rate and review.

Use case Diagram

Online Shopping
Management System

- Add category & product details
- View category & product details
- Update category & product details
- Delete category & product details
- Add products to cart
- Make orders
- Remove products from cart
- Rate and review

Admin
Actor

User
Actor

ER Diagram

Flow chart

Project Structure