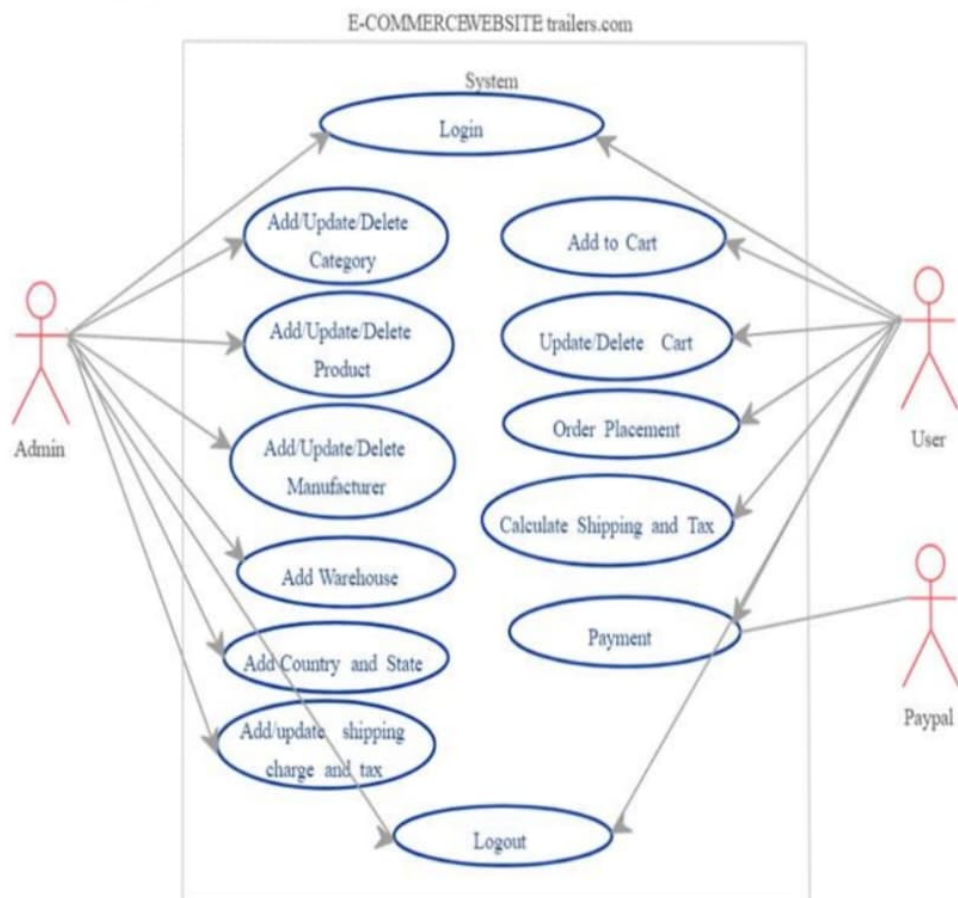


7. Draw a model for E-commerce sites in different views i.e Use case view, logical vie component view, Deployment view, Database design, forward and Reverse Engineering, and Generation of documentation of the project.

Use Case Diagram



A use case diagram for an e-commerce system illustrates the interactions and functionalities between different users (actors) and the system itself. Here's a description of the main components and interactions in a typical e-commerce use case diagram:

Actors:

- **Guest:**
- Represents a user who is not logged in but can browse products.

- **Registered User:**
- Represents a user who has created an account on the e-commerce platform.
- **Customer Support:**
- Represents customer support staff who can assist users with inquiries and issues.
- **Administrator:**
- Manages the overall functioning of the e-commerce system, including user accounts, product listings, and system configurations.

Use Cases:

Browse Products:

Actors - Guest, Registered User:

Users, whether guests or registered, can browse and search for products on the platform.

Register/Login:

Actors - Guest, Registered User:

Users can register for a new account or log in to an existing one to access personalized features, such as order history and preferences.

Add to Cart:

Actors - Registered User:

Registered users can add products to their shopping cart for future purchase.

Checkout:

Actors - Registered User:

Users can proceed to checkout, review their order, and provide shipping and payment information to complete the purchase.

View Order Status:

Actors: Registered User

Users can check the status of their orders, including processing, shipped, or delivered.

Manage Account:

Actors: Registered User

Users can update their account information, change passwords, or manage other account-related settings.

Provide Feedback/Rating:

Actors: Registered User

Users can leave feedback or ratings for products they have purchased.

Customer Support Interaction:

Actors: Registered User, Customer Support

Users can interact with customer support for inquiries, assistance, or issue resolution.

Administrator Functions:

Actors: Administrator

The administrator can manage user accounts, product listings, and system configurations.

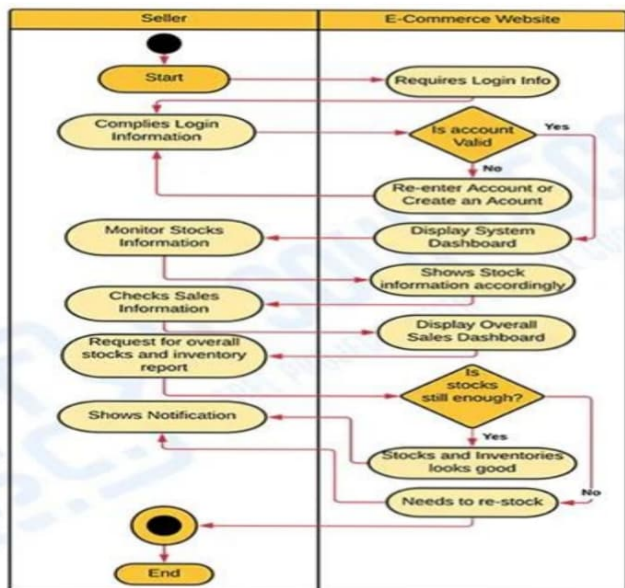
Associations:

- Relationships between actors and use cases are represented by lines connecting them.
- For example, there will be associations between the Guest actor and the Browse Products use case.

System Boundary:

- The boundary of the use case diagram represents the scope of the e-commerce system.
- This use case diagram provides a visual representation of the key functionalities and interactions within an e-commerce system, showing how different users interact with the system to perform specific tasks related to browsing, shopping, and managing their accounts.

Activity Diagram:



An activity diagram for an e-commerce system illustrates the workflow and activities involved in various processes, such as browsing products, placing orders, and managing accounts. Below is a description of the main components and activities in an activity diagram for an e-commerce system:

Browse and Search Products:

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Activities:

- Start browsing
- Search for products
- Display product details

Flow:

- Initiated when a user starts browsing or searching for products.
- Involves searching for products and displaying their details.
- Ends when the user decides to view product details or continues browsing.

User Registration and Login:

Activities:

- Register for an account
- Log in
- Authenticate user

Flow:

- Initiated when a user decides to register or log in.
- Involves entering account details, authentication, and account creation or login.
- Ends when the user successfully registers or logs in.

Add to Cart:

Activities:

- Add product to the shopping cart
- Update shopping cart
- View shopping cart

Flow:

- Triggered when a user adds a product to the shopping cart.
- Involves updating the cart and optionally viewing the contents.
- Ends when the user decides to proceed to checkout or continue shopping.

Checkout Process:

Activities:

- Proceed to checkout
- Provide shipping details
- Provide payment details

Confirm order:

Flow:

- Initiated when the user decides to proceed to checkout.
- Involves entering shipping and payment details and confirming the order.
- Ends when the order is successfully placed or canceled.

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Order Processing:

Activities:

- Process order
- Generate order confirmation
- Update inventory

Flow:

- Triggered when an order is confirmed.
- Involves processing the order, generating confirmation, and updating inventory.
- Ends when the order is processed.

Manage User Account:

Activities:

- View account details
- Update account information
- Change password

Flow:

- Initiated when a user decides to manage their account.
- Involves viewing and updating account information.
- Ends when the user completes account management tasks.

Customer Support Interaction:

Activities:

- Initiate support request
- Customer support responds
- Resolve issue

Flow:

- Represents the interaction between a user and customer support.
- Involves initiating a support request, customer support responding, and resolving the issue.
- Ends when the issue is resolved.

Administrator Functions:

Activities:

- Manage product listings
- Manage user accounts
- Monitor system performance

Flow:

- Represents activities performed by administrators.
- Involves managing product listings, user accounts, and monitoring system performance.
- These activity diagrams provide a visual representation of the sequential and parallel activities within an e-commerce system, illustrating how users interact with the system to perform various tasks related to shopping, account management, and support.