**User Roles and Permissions**

Some of the users are;

1. Administrator.
2. Seller
3. Guest
4. Buyer
5. Delivery Personnel

**Roles and Permissions.**

(i) Administrator.

The administrator in an e-commerce system plays a pivotal role in managing and overseeing the overall operation of the platform.

Their responsibilities and permissions typically include:

1. User Management:

- Create, modify, or delete user accounts.

- Reset passwords and manage user authentication.

2. Product Management:

- Add, edit, or remove products from the platform.

- Set product categories, prices, and inventory levels.

3. Order Management:

- View and manage orders, including order processing and fulfillment.

- Handle order cancellations, returns, and refunds.

4. Content Management:

- Manage and update content on the platform, such as banners, promotions, and announcements.

- Ensure that product information is accurate and up to date.

5. Analytics and Reporting:

- Access analytics and reports on the performance of the e-commerce platform.

- Analyze user behavior, sales trends, and other key metrics to make informed decisions.

6. Security and Permissions:

- Set and manage user roles and permissions within the system.

- Implement and oversee security measures to protect against unauthorized access and potential threats.

7. System Configuration:

- Configure and customize the settings of the e-commerce platform.

- Manage payment gateway integrations, shipping options, and tax settings.

8. Technical Maintenance:

- Oversee technical aspects such as software updates, server maintenance, and database management.

- Ensure the smooth functioning of the platform and address any technical issues promptly.

9. Compliance and Policies:

- Enforce and update platform policies and guidelines.

- Ensure that the e-commerce system complies with relevant laws and regulations.

10. Communication and Support:

- Communicate with other team members, stakeholders, and external partners.

- Provide support and assistance to other users, such as customer support and sellers.

(ii) Vendors

1. Product Management:

- Add new products to the platform.

- Edit existing product listings, including updating product descriptions, prices, and images.

- Remove products from the platform.

2. Order Processing:

- Access and manage orders related to their products.

- Confirm and process orders, including updating order status.

- Handle order fulfillment, shipping, and tracking.

3. Inventory Management:

- Monitor and update inventory levels for their products.

- Receive notifications for low stock levels.

- Set up automated restocking if applicable.

4. Financial Transactions:

- View and manage financial transactions related to their sales.

- Access sales reports and analytics specific to their products.

5. Communication with Customers:

- Respond to customer inquiries and messages related to their products.

- Provide customer support for issues specific to their products.

6. Promotions and Discounts:

- Create and manage promotions or discounts for their products.

- Participate in platform-wide sales events or campaigns.

7. Storefront Customization:

- Customize their storefront within the platform's guidelines.

- Add branding elements, banners, and other visuals to enhance their store's appearance.

8. Analytics and Reporting:

- Access analytics and reports specific to their products and sales performance.

- Use data to make informed decisions about pricing, inventory, and product strategy.

9. Compliance:

- Adhere to platform policies and guidelines for product listings.

- Ensure that their products comply with legal and regulatory standards.

10. Technical Integration:

- Integrate their systems with the e-commerce platform for seamless order and inventory management.

- Utilize APIs and tools provided by the platform for efficient operations.

(iii) Guests.

Guests in an e-commerce system refer to users who visit the platform without creating an account or logging in. Their permissions are limited compared to registered users. Role of guests and their permissions in an e-commerce system include:

1. Browsing:

- Guests can browse products and services available on the platform.

- They can view product details, images, and prices.

2. Product Search:

- Guests can use the search functionality to find specific products.

3. Add to Cart:

- In many e-commerce systems, guests can add items to their shopping cart.

4. Checkout Process:

- Guests can initiate the checkout process to purchase products without creating an account.

- They typically need to provide necessary information for shipping and payment during the checkout process.

6. No Account Management:

- Guests cannot create accounts or manage account-related settings.

- They do not have the ability to save favorite products or create wish lists.

7. Communication:

- Guests may receive transactional emails related to their orders, such as order confirmation and shipping notifications.

8. Anonymous Browsing:

- Guests can browse the platform anonymously without the platform retaining their personal information after the session ends.

9. Limited Personalization:

- As guests do not have accounts, they may experience limited personalization in terms of product recommendations and tailored content.

(iv) Buyers

Buyers, or customers, are individuals who have registered accounts on an e-commerce platform and actively engage in purchasing products or services. Role of buyers and their permissions include:

1. Browsing and Product Search:

- Buyers can browse the entire product catalog on the platform.

- They can use search filters and sorting options to find specific products.

2. Add to Cart and Wish list:

- Buyers can add items to their shopping cart for future purchase.

- They can create wish lists and save favorite products for later.

3. Checkout and Payment:

- Buyers can initiate the checkout process to purchase products.

- They provide shipping information and choose payment methods for transactions.

4. Order History:

- Buyers have access to their order history, allowing them to track previous purchases.

- They can view order details, including itemized lists, prices, and shipping information.

5. Account Management:

- Buyers can manage their account settings, including personal information, shipping addresses, and payment methods.

- They can update passwords, email preferences, and communication settings.

6. Reviews and Ratings:

- Buyers can leave reviews and ratings for products they have purchased.

- Their feedback contributes to the overall product reputation on the platform.

7. Communication:

- Buyers may receive promotional emails, newsletters, and updates from the platform.

- They can opt in or out of certain communication preferences.

8. Returns and Refunds:

- Buyers can initiate returns and request refunds for products based on the platform's policies.

9. Personalization:

- Buyers may experience personalized recommendations based on their purchase history and browsing behavior.

- They may receive targeted promotions and discounts.

10. Saved Payment Information:

- Buyers can save and manage their preferred payment methods for faster checkout.

(v) Delivery Personnel.

The role of delivery personnel in an e-commerce system is crucial for ensuring that products are successfully transported from the seller to the buyer. Some of their roles and permissions include:

1. Order Fulfillment:

- Access information about orders assigned to them for delivery.

- Receive details about the products, quantities, and delivery addresses.

2. Route Planning:

- Plan and optimize delivery routes to ensure efficient and timely deliveries.

- Utilize navigation tools or apps to find the most optimal paths.

3. Package Verification:

- Verify that the packages they receive for delivery match the order details.

- Confirm the condition of the products and report any discrepancies.

4. Communication:

- Communicate with the e-commerce platform or sellers regarding any delivery-related issues, delays, or changes.

5. Proof of Delivery:

- Collect and provide proof of delivery, such as obtaining a signature or capturing a photo at the delivery location.

- Confirm that the products were successfully delivered to the correct recipient.

6. Real-time Tracking:

- Use tracking tools or apps to update the status of the delivery in real-time.

- Provide accurate and up-to-date information on the location of the delivery.

7. Customer Interaction:

- Interact with customers at the time of delivery, providing a professional and customer-friendly experience.

- Address basic customer inquiries related to the delivery process.

8. Security Measures:

- Adhere to security protocols to ensure the safety of the products during transit.

- Follow guidelines to prevent theft or damage to packages.

9. Schedule Management:

- Manage their delivery schedule and coordinate with the platform or sellers for any adjustments or changes.

10. Return Handling:

- Handle returns, if applicable, by collecting products from customers and returning them to the designated location.