□ □ □

SHOPPING CART APPLICATION

Product Class

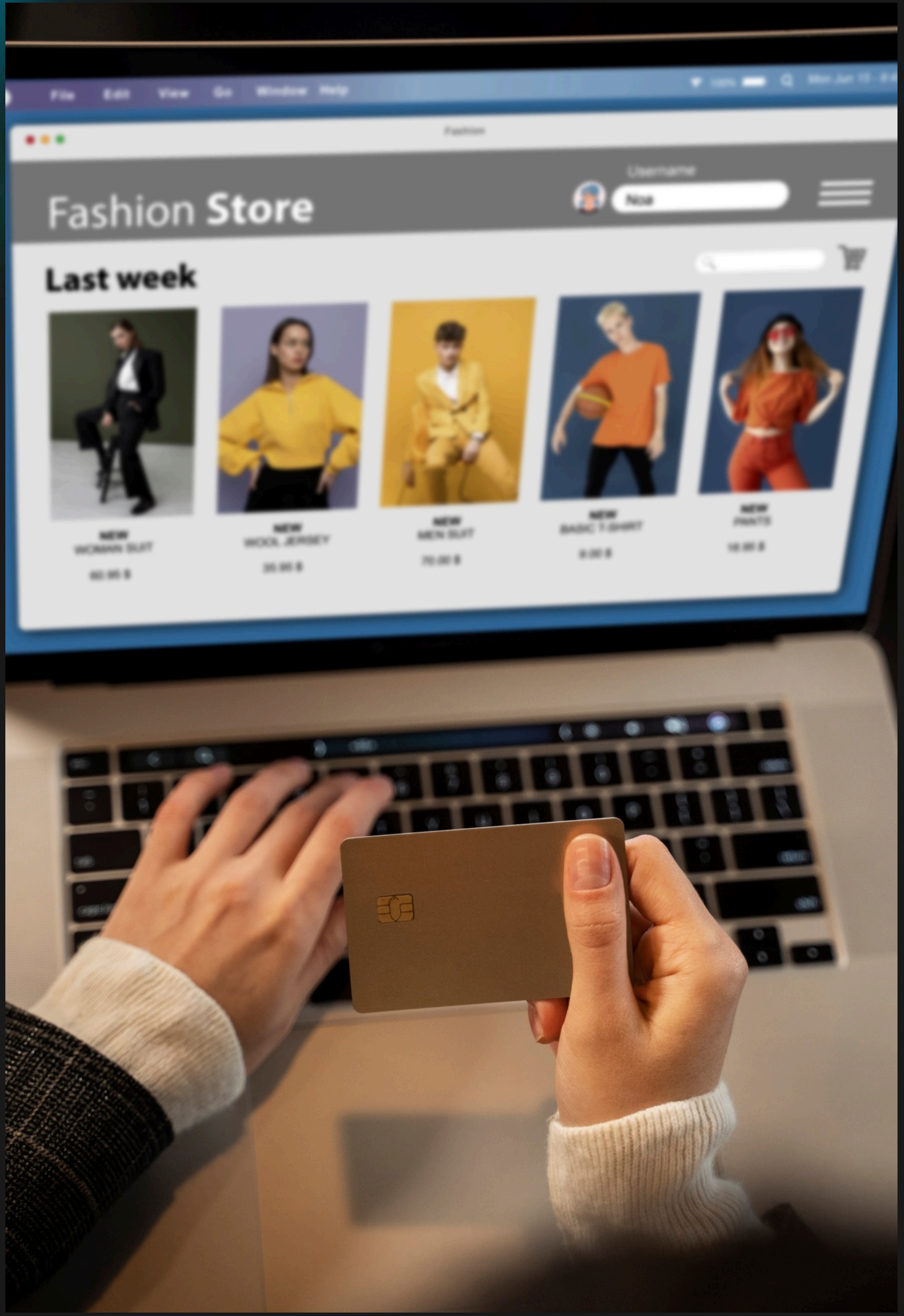
Purpose: Stores product details.

Key Properties

- **Name:** Product name.
- **Price:** Price per unit.
- **Quantity:** Quantity added to the cart.

Method:

- calculates total price per product by multiplying price and quantity.



Shopping Cart Class Overview

Purpose:

- Manages the cart, applying discounts, calculating tax, and processing checkout.

Fields:

- **cart**: Dictionary to store products by name.
- **SalesTax**: 8% tax applied to total.
- **discount:** Tracks any discounts applied

Cart Functionality

Add to Cart:

- Users select items, which are stored in the cart with updated inventory and price. A confirmation is shown, and the cart icon updates.

Remove from Cart:

- Users can remove items, adjusting the inventory and recalculating total price. A confirmation displays.

PRODUCT RECOMMENDATION

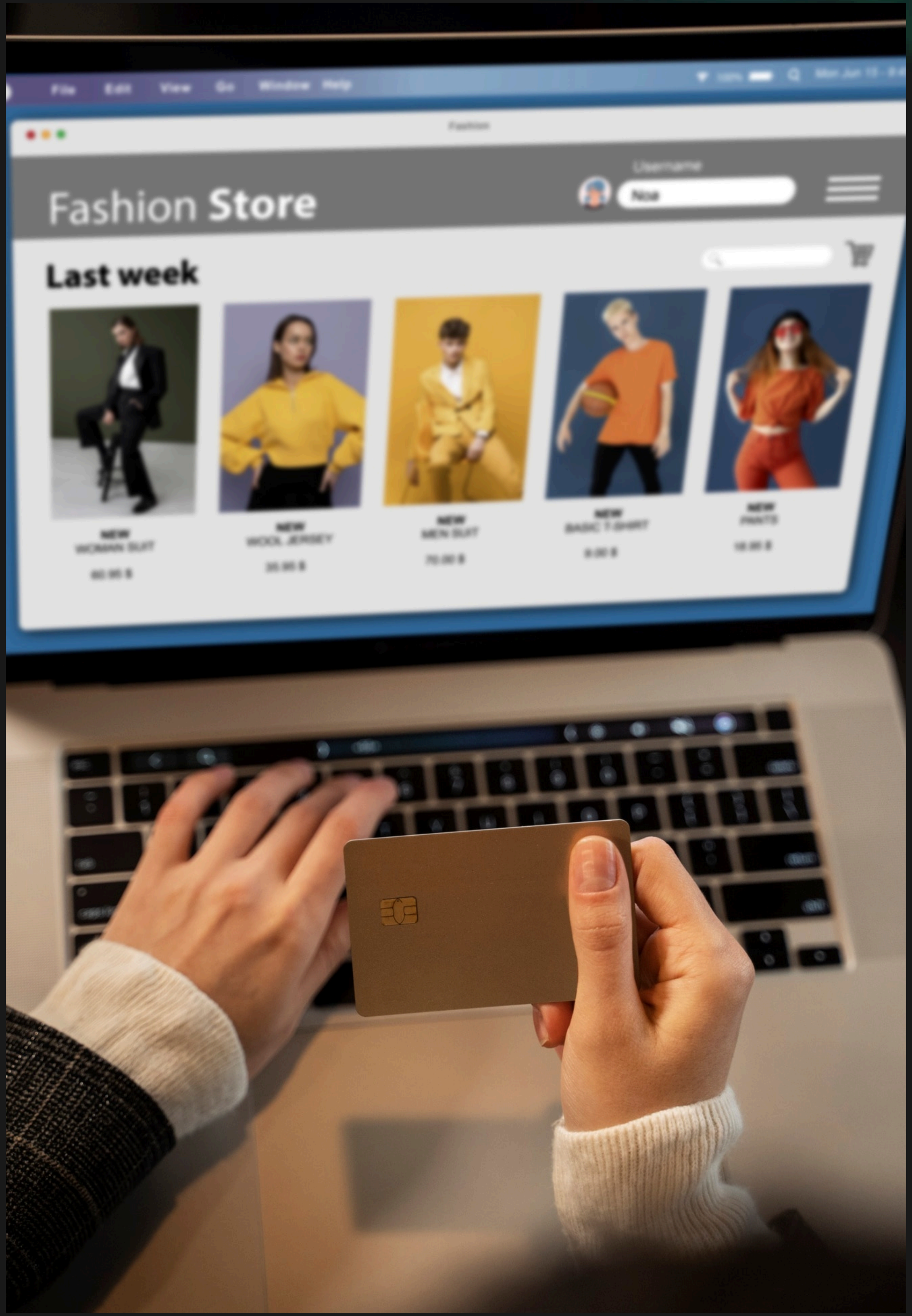
Purpose:

- Suggests relevant products based on items in the cart.

Mechanism:

- Tracks added products and applies discounts.
- Recommends additional products from the same category.

Key Method: RecommendProducts(string category) -



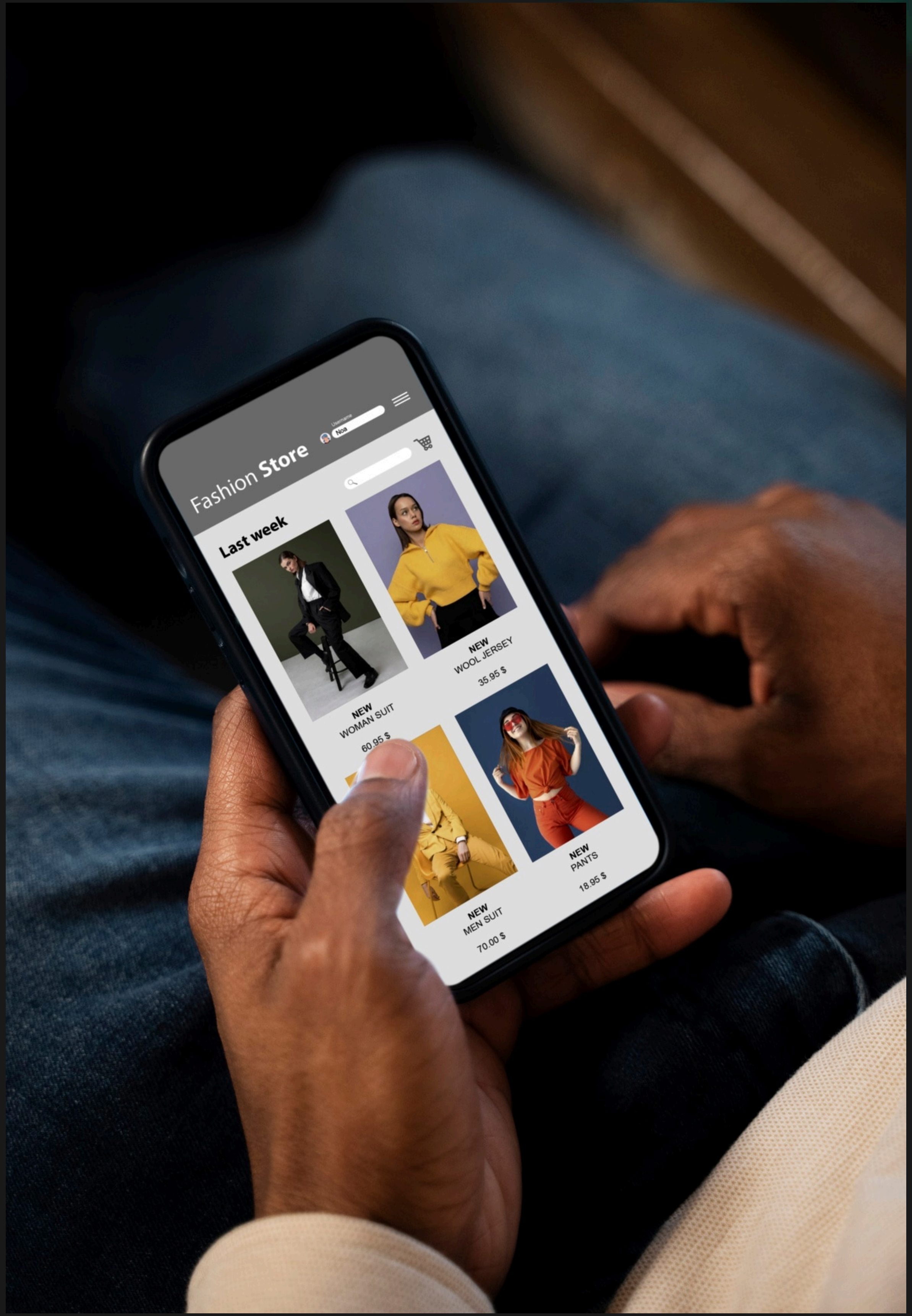
View Cart and Calculate Total Cost

ViewCart():

- Lists all items, quantities, and total price per item.
- Message if cart is empty.

GetTotalCost():

- Calculates total cost, deducts discount, adds sales tax.
- Returns final cost.



Apply Discount and Checkout

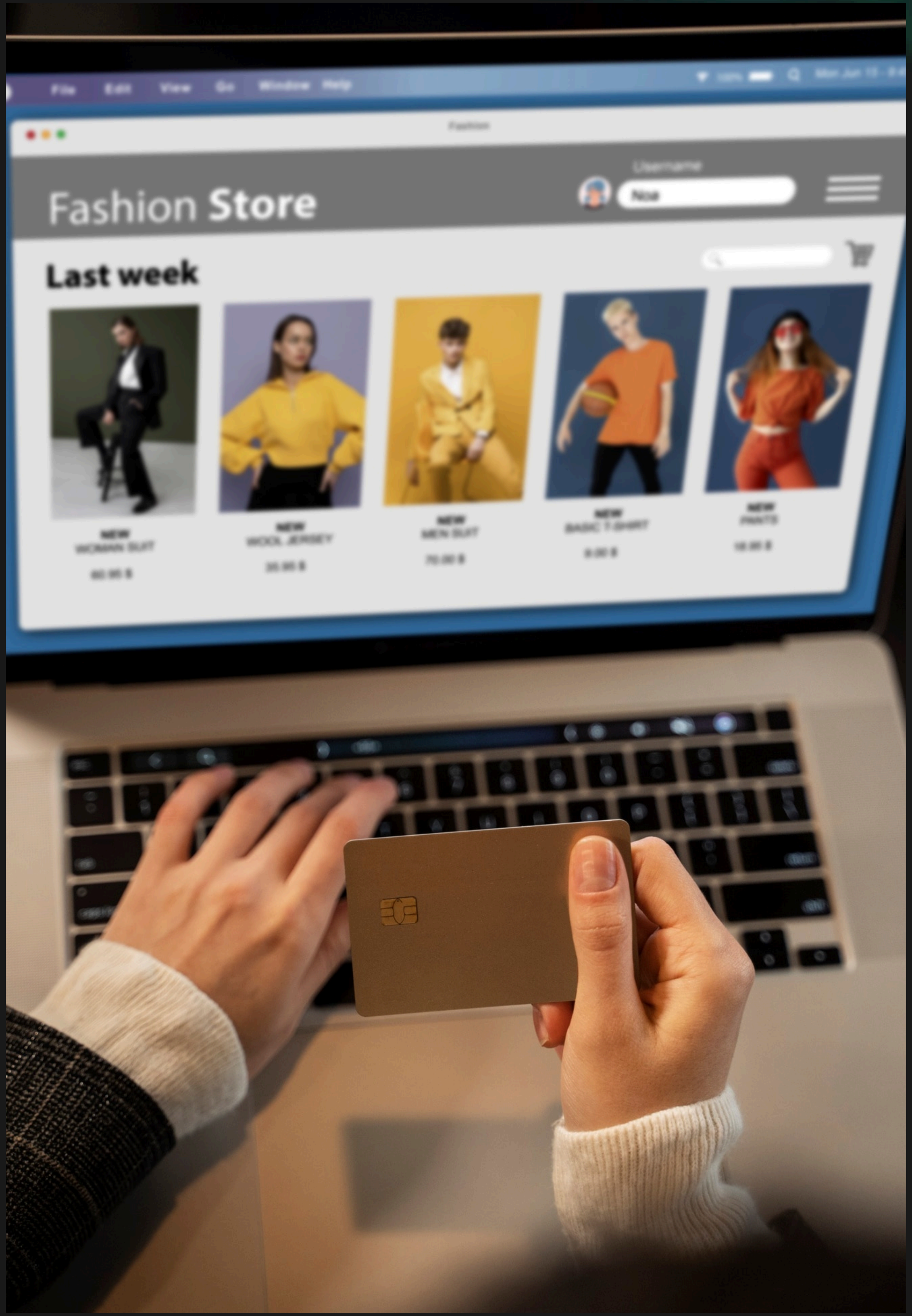
ApplyDiscount()

- :Sets discount amount and displays a message confirming the applied discount.

Checkout():

- Calculates total with tax and discount.
- Clears cart after purchase, shows final cost and a thank you message.

User Interaction



Item Selection:

- Users can explore products, filter by categories, and select items for the cart.

Add/Remove Items:

- Quick add-to-cart button for easy inclusion, with options to update or remove

Items Quantity Adjustments:

- Users can increase or decrease item quantities directly within the cart..

Trust and Security

Protect user data

- such as product selections and transaction details.

Payment Safety:

- (Future Scope) Implement secure payment gateways with encryption.

Validation:

- Input validation to prevent malicious entries and ensure data integrity.

User Assurance:

- Clear messaging during checkout, including total cost, tax, and discount confirmation to build trust.

THANKS!