Project Report: E-Commerce Cart System

1. Introduction

This report provides an analysis of the "E-Commerce Cart System" project, a Python-based console application designed to simulate a simple shopping cart experience.

2. Source Code Analysis

File: E-Cart-System.py
Description: A Python script implementing the E_cart_system class.

Key Features:
- User Initialization: Supports user login or guest access (__init__).
- Add Items: Allows users to add products with quantity and price (add_item).
- View Cart: Displays current items in the cart formatted in a table (view_cart).
- Total Calculation: Computes the total cost of items dynamically (total_price).
- Print Receipt: Exports the cart details to a timestamped text file (cart_print).
- Error Handling: Robust input handling for menu choices and numeric inputs.

Code Structure:
- Dependencies: termcolor for colored console output, datetime for timestamping.
- Class E_cart_system:
  - Stores items as a list of lists: [item_name, quantity, price].
- Main Execution Block:
  - Provides a menu-driven interface which includes adding items, viewing cart, printing details, and exiting.

3. Output Analysis

File: cart_details_20260102210929.txt
Description: A generated receipt file from the system operation.

Content Verification:
The output file follows the format defined in the cart_print method.

```
Date: 2026-01-02 21:09:29
User: Guest User
Items: apple (Qty: 2, Price: 600.0)
Grand Total: 1200.00 IN R
```

4. Conclusion

The E-Cart-System successfully implements the core functionality of a shopping cart. The code is structured with a class-based approach, and the output verifies that the receipt generation logic works correctly, producing a formatted text file with accurate calculations.