**Online shopping cart**

**Name:**

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**1. Project Title**

Online Shopping Cart

**2. Problem Statement**

The problem addressed in this project is the need for a simple and efficient system to manage online shopping operations. In real-world scenarios, e-commerce platforms handle complex interactions such as inventory, cart management, and checkout. This console-based application simplifies the process by allowing users to browse products, add items to the cart, and checkout using fundamental C++ concepts.

**3. Objectives**

- To design and implement a basic online shopping cart system using C++.

- To apply object-oriented programming principles such as classes and objects.

- To demonstrate data handling using vectors.

- To implement interactive console-based input/output operations.

**4. Scope of the project**

This project is developed for educational purposes, emphasizing simplicity and functionality. It enables students to learn about:

- Managing product listings and inventory.

- Using vectors and classes to represent real-world entities.

- Handling user input and basic operations like adding to cart and checkout.

**5. Functionalities**

- View Available Products

- Add Product to Cart

- Display Cart Items

- Checkout

- Exit the Program

6. Uses of Function

- Use of While loop.

- Use of if-else statements.

- Use of Switch Statements.

- Use of classes, constructors, member functions, and vectors.

- Use of oop types Polymorphism, Encapsulation, Abstraction, Inheritance.

**7. Proposed tools and platforms**

- C++ is used as the primary programming language, applying object-oriented programming to structure andmanage the system.

- IDEs: Dev-C++, Code::Blocks

**8. Conclusion**

The Online Shopping Cart provides a simplified yet effective learning opportunity for understanding C++ programming. This project is ideal for beginners to practice class-based architecture, input/output handling, and dynamic memory management using vectors.