

Project Overview

Introduction

GameDrop is a comprehensive web-based e-commerce platform designed to facilitate the purchase and delivery of video games. The system provides a streamlined, user-friendly interface that enables customers to browse available games, add them to a shopping cart, complete the checkout process, and track their order history. For administrators, **GameDrop** offers robust inventory management capabilities, order processing tools, and user management features to ensure efficient operation and customer satisfaction.

This platform addresses the growing demand for specialized video game retail experiences by implementing a structured digital marketplace with clear product information, efficient ordering processes, and comprehensive inventory management. **GameDrop** transforms the video game shopping experience into an organized system with enhanced visibility, streamlined transactions, and excellent user experience.

Objectives

1. **Provide Seamless Shopping Experience:** Create an efficient system for browsing, selecting, and purchasing video games.
2. **Enhance Product Visibility:** Provide comprehensive information and search capabilities for all game products in the system.
3. **Streamline Transaction Processing:** Deliver an intuitive interface for cart management and checkout procedures.
4. **Establish Inventory Control:** Implement clear tracking mechanisms for product availability and stock levels.

5. **Facilitate Administration:** Provide administrators with tools to manage products, process orders, and oversee user accounts.
6. **Enable Customer Feedback:** Collect and display ratings and reviews to help inform purchase decisions.

Scope

The **GameDrop** platform will include:

- User registration and authentication system with role-based access control
- Comprehensive game catalog with detailed information and stock status
- Shopping cart functionality for selecting and purchasing games
- Order processing and tracking
- User profile management
- Product review and rating system
- Administrative dashboard for inventory and order management
- Search and filtering functionality for product discovery
- Responsive design for multi-device accessibility

Entities and Their Roles

Users

Customers (Members)

- Browse the game catalog and view product details
- Search and filter games by various criteria
- Add products to shopping cart
- Complete checkout process
- Track order history and status

- Submit reviews and ratings for purchased games
- Manage personal profile information

Administrators

- Manage the product inventory (add, update, remove)
- Process and update order statuses
- Monitor inventory levels and stock
- Manage user accounts and permissions
- View system statistics and reports

Product Items

- Represent the video games available for purchase
- Contain metadata (title, platform, genre, release date, ESRB rating, price)
- Include stock quantity and availability status
- Link to associated images and descriptions
- Store review and rating information

Orders

- Document the transaction between customers and the store
- Include items purchased, quantities, and total price
- Track order status (processing, shipped, delivered, cancelled)
- Store shipping information
- Provide transaction history for both customers and administrators

Shopping Cart

- Temporarily store selected items before purchase

- Track item quantities and calculate subtotals
- Associate with specific user sessions/accounts
- Convert to orders upon checkout completion

Categories/Collections

- Organize games by platform (PlayStation, Xbox, Nintendo, PC)
- Group games by genre (Action, RPG, Strategy, Sports, etc.)
- Enable efficient browsing and discovery