E-Commerce Website Project – SkyCart

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Project Title: SkyCart – E-Commerce Website using Django

Duration: January 2024 – March 2024

Role: Full Stack Developer

# Introduction to Web Development with Django

This presentation introduces the fundamentals of web development using Django, a high-level Python web framework that enables rapid development of secure and maintainable websites.

# Core Concepts

Explored Django’s core architecture including Model-View-Template (MVT) design pattern, URL routing, and built-in admin interface for building robust web applications.

# User Authentication and Management

Django provides a secure authentication system out of the box, including user registration, login, password handling, and session management. Implemented user profiles, order history, and account management features.

# Django Framework: Key Features for E-commerce

Django offers an ORM, authentication system, and admin interface that streamline development. Its modular design allows easy integration of payment gateways and shipping APIs.

# Product Catalog and Management

Designed product models with fields like name, description, price, images, categories, and variations. Used the Django admin interface for efficient product and inventory management.

# Shopping Cart Functionality

Implemented cart operations like item addition, removal, quantity updates, and session persistence. Ensured a seamless experience with real-time updates.

# Checkout and Order Processing

Designed a multi-step checkout flow including address selection, shipping method, order summary, and payment. Generated order IDs, updated inventory, and sent confirmation emails.

# Summary

Developed an e-commerce website named SkyCart using Django. The project involved building a secure, scalable, and user-friendly platform with features such as user authentication, product listings, shopping cart functionality, order management, and admin controls. Django's robust backend capabilities and built-in admin interface streamlined development and ensured rapid deployment.