Final Project Report: Dream's Shop - E-commerce Web Application

1. Project Overview

Dream's Sop is a Django-based e-commerce web application developed to provide a seamless online shopping experience for users, vendors, and administrators. The system is built using Django (Python) for the backend, HTML/CSS for the frontend, and SQLite/PostgreSQL as the database. The primary goal was to create a fully functional e-commerce solution that allows product listings, user registration, vendor management, and order tracking.

2. Project Objectives

- Develop a user-friendly and responsive e-commerce web application
- Implement separate roles: Admin, Vendor, and Customer (User)
- Enable vendors to register, manage products (CRUD)
- Allow users to register, browse products, add to cart, and place orders
- Allow admin to manage all users, vendors, and view orders

3. Technology Stack

• Backend: Django 5.x

• Frontend: HTML5, CSS3 (custom static files)

Database: PostgreSQL

Authentication: Django default auth with role-based access

• Version Control: Git, GitHub

4. Application Modules

- Users App:
 - Handles user registration and authentication

Includes user roles: is_admin, is_vendor, is_customer

Products App:

- Product listing, detail view, and CRUD for vendors
- Products linked to vendors (Foreign Key)

Store App:

- Cart, checkout, and order placement features
- Order model includes order date, user, and product details

Vendor Dashboard:

- Vendors can view and manage their own products
- Interface for adding/editing/removing products

5. Key Features Implemented

- Class-based views (CBVs) throughout
- Static folder setup with style.css
- Role-based template rendering (e.g. vendor dashboard, user cart)
- Separate HTML templates for login, registration, products, cart, checkout
- Admin can access Django admin panel

6. Deployment

- Local development using virtualenv
- Docker support for PostgreSQL setup (optional)
- Static files collected and served in production mode

7. Challenges Faced

- Managing role-based access without using signals
- Organizing apps for maintainability (users, products, store)

Ensuring user-friendly templates with basic CSS styling

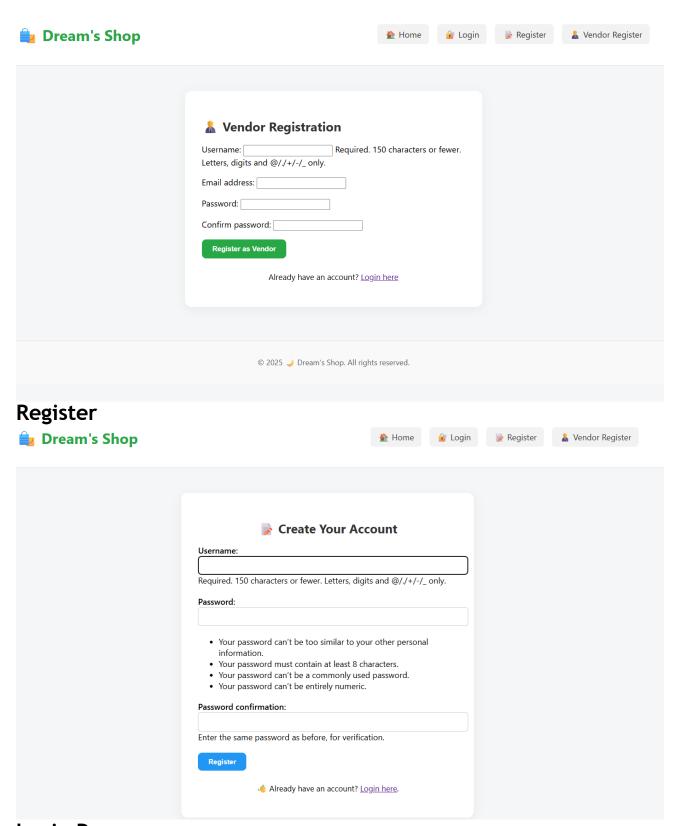
8. Future Improvements

- Add payment gateway integration (e.g. Razorpay, Stripe)
- Add product filtering, search, and reviews
- Implement AJAX for smoother cart updates
- Mobile responsive UI with Bootstrap or Tailwind
- REST API support using Django REST Framework

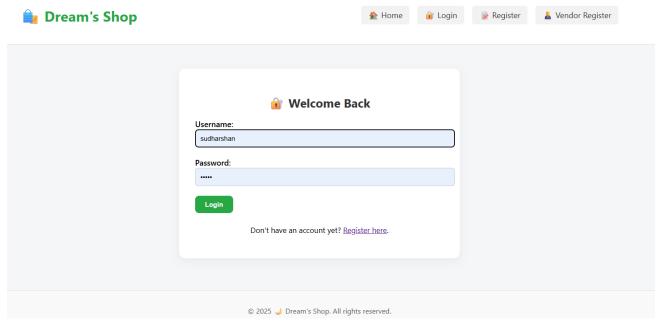
9. Conclusion

Dream's Shop successfully implements the core functionalities of an e-commerce application. It provides an easy-to-use interface for users, product control for vendors, and oversight capability for admins. The architecture is extendable for future features like payment integration or API support.

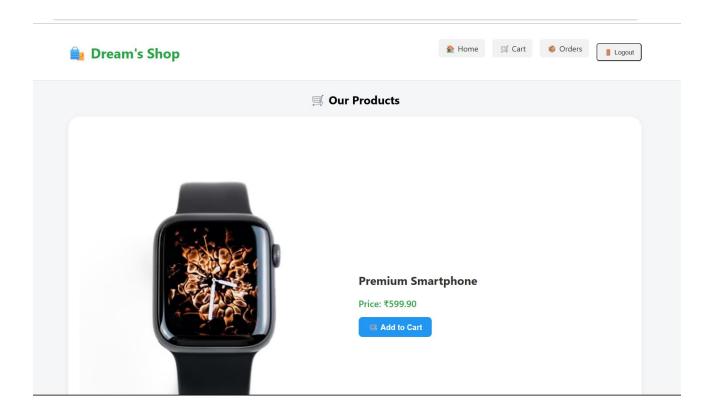
Vender Register



Login Page



Products





Profesional Camera

Price: ₹899.90

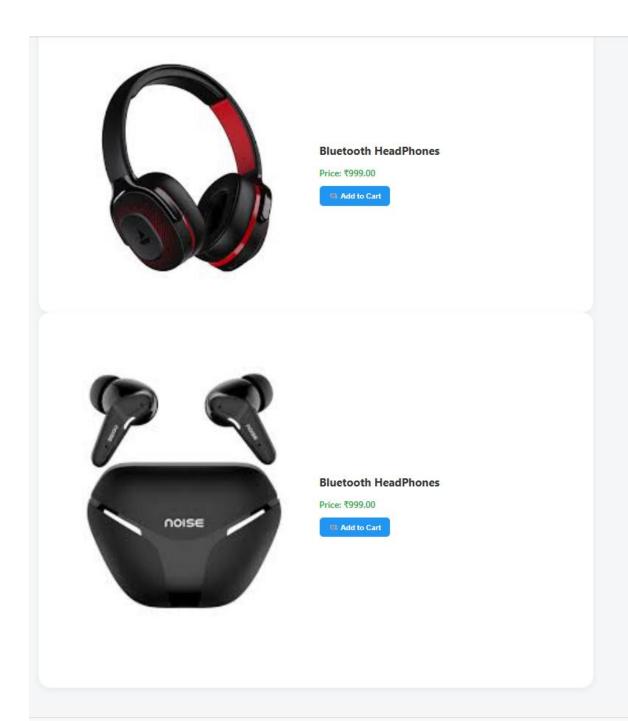
Made Add to Cart



Running Shoes

Price: ₹1299.00

Add to Cart



Cart Items

