**National University of Computer and Emerging Sciences**

**Department of Computer Sciences**





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**f Computer & Emerging Sciences Faisalabad**

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**Chiniot Campus**

CS-4032

Web Programming Project

Course Instructor M. Hannan Farooq

Semester Spring 2025

1

# PROJECT PROPOSAL

## PROJECT RULES

1. Follow the guidelines and timelines.
2. 2 members are allowed in a group.
3. Plagiarized/copied submission would be marked 0.
4. Same project idea would not be accepted.

LEARNING OBJECTIVES

• Include the objectives of your project.

## TOOLS & EQUIPMENT

1. Visual Studio Code
2. HTML, CSS, JS, NodeJS
3. MySQL

## PROJECT IDEA

You need to add your project description here…

|  |  |  |
| --- | --- | --- |
|  | PROJECT NAME | |
| Sr. # | Roll Number | Name |
| 1 | 22F-3882 | M. Asheer Adnan |
| 2 | 20F-XXXX | XXXX |

|  |  |  |
| --- | --- | --- |
|  | FUNCTIONAL REQUIREMENTS | |
| Sr. # | Name | Description |
|  | MODULE 1 | |
| 1 | User Management: | * Users can register and log in using email or social media. * Users can manage their profiles, including preferences and order history. * Guest users can browse products but need an account for purchases. |
| 2 | AI-Based Perfume Recommendation System | * AI model interacts with users to understand their perfume preferences (e.g., floral, woody, citrus, oriental). * AI suggests the best-matching perfumes based on user inputs. * AI learns from user feedback to improve recommendations. * Users can filter AI recommendations based on price, brand, or occasion. |
| 3 | Product Catalog | * Display perfumes with images, descriptions, and prices. * Categorization of perfumes (Men, Women, Unisex, Luxury, Affordable, etc.). * Users can search for perfumes by name, brand, or fragrance type. |
| 4 | Shopping Cart & Checkout | * Users can add, remove, and update perfume quantities in the cart. * Secure checkout with multiple payment options (Credit Card, PayPal, etc.). * Order confirmation and invoice generation. |
| 5 | Order Management | * Users can track orders and view order history. * Admin panel to manage orders, process refunds, and update delivery statuses. |
| 6 | Reviews & Ratings | * Users can leave reviews and rate perfumes. * AI considers reviews to refine recommendations. |
| 7 | Promotions & Discounts | * Admin can create discount codes and special offers. * AI can suggest personalized discounts based on user behavior. |
|  | Module 2 | |
| 8 | AI Chatbot for Customer Support | * AI chatbot helps users with queries, order status, and recommendations. * Live chat support option for complex issues. |
| 9 | Security & Privacy | * Secure user authentication and encrypted transactions. * GDPR compliance for data privacy. |
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CONSTRAINS:

Such as User must have to login or signup for using this web site.

KEY FEATURES:

List the key features that the project will include. Provide a brief description of each feature and its purpose.

### **Key Features of AI-Powered Perfume E-Commerce Website**

**1. AI-Powered Perfume Recommendation System**

**Description:** Uses an AI model to interact with users and suggest perfumes based on their preferences.  
**Purpose:** Helps customers find the perfect perfume by analyzing their taste and past interactions.

**2. User Authentication & Profile Management**

**Description:** Users can sign up, log in, and manage their profiles, including saved preferences and order history.  
**Purpose:** Provides a personalized experience and allows users to track their activities.

**3. Advanced Search & Filtering**

**Description:** Users can search for perfumes by name, brand, fragrance type, price, or occasion.  
**Purpose:** Makes it easy for users to find the right product quickly.

**4. Product Catalog & Categories**

**Description:** Displays all available perfumes with high-quality images, descriptions, and prices, categorized for better navigation.  
**Purpose:** Enhances the shopping experience by organizing products efficiently.

**5. Shopping Cart & Secure Checkout**

**Description:** Users can add items to their cart, adjust quantities, apply discount codes, and complete payments securely.  
**Purpose:** Ensures a smooth and safe transaction process for buyers.

**6. Order Tracking & Management**

**Description:** Users can track their orders in real-time, view order history, and request returns/refunds.  
**Purpose:** Improves transparency and trust in the shopping process.

**7. Customer Reviews & Ratings**

**Description:** Users can leave reviews, rate perfumes, and read feedback from other customers.  
**Purpose:** Helps new buyers make informed decisions and improves AI recommendations.

**8. Personalized Discounts & Promotions**

**Description:** AI analyzes user behavior and provides tailored discounts or offers.  
**Purpose:** Increases customer engagement and boosts sales.

**9. Responsive & Mobile-Friendly Design**

**Description:** The website adapts seamlessly to mobile, tablet, and desktop screens.  
**Purpose:** Ensures a smooth experience across all devices.

**10. Social Media Integration**

**Description:** Users can share their favorite perfumes on social media and view Instagram feeds.  
**Purpose:** Enhances brand visibility and user engagement.

**11. AI Chatbot for Customer Support**

**Description:** A chatbot answers common queries, assists in recommendations, and provides order updates.  
**Purpose:** Enhances customer support and automates responses to save time.

**12. Security & Data Protection**

**Description:** Uses encryption and secure authentication methods to protect user data and transactions.  
**Purpose:** Ensures safe browsing and compliance with privacy regulations.

**GitHub link:  
https://github.com/asheeradnan/Web-Dev-Perfume-AI-Shop.git**