

# Day 1 Submission:

## General E-Commerce

### Marketplace Business Goals – “مہک”

Our marketplace addresses these issues by offering a solution that simplifies the fragrance shopping experience, making it more inclusive, accessible, and user-friendly. Here's how we solve these problems:

#### 1. All Types of Essences and Perfumes at One Place:

We have created a platform that offers an extensive collection of perfumes and essences all in one place. Customers no longer need to browse multiple websites or physical stores to find the perfect fragrance. Whether you're searching for floral, woody, citrus, or oriental notes etc, Our marketplace has it all.

#### 2. A Fragrance for Every User: Our marketplace is designed to cater to everyone—men, women, and children. We understand that each demographic has different preferences and needs when it comes to scents. That's why we've separated categories and curated a selection of fragrances that provide something for everyone, whether you're looking for something sophisticated, refreshing, or playful.

#### 3. Classic and Simple Scents for Every Person: We believe in the power of simplicity and elegance. Our platform focuses on offering classic, timeless fragrances that are easy to wear and universally appealing. These are scents that can be enjoyed by anyone, regardless of their age or gender, making it easy for customers to find fragrances they'll love without feeling overwhelmed by too many complex options.

## Target Audience:

1. **Young Professionals:** Our marketplace specifically caters to young professionals who value quality, convenience, and personal expression. This group is often looking for versatile, high-end fragrances that complement their busy lifestyles. Whether they're shopping for themselves or looking for a scent that fits their professional image, our platform provides a broad selection of fragrances that meet their refined tastes.
2. **Gift Shoppers:** Perfumes are one of the most popular gift choices, and our marketplace is designed with gift shoppers in mind. Whether for birthdays, anniversaries, or special occasions, we offer a diverse range of scents that make for thoughtful and memorable gifts. Our platform makes it easy for shoppers to find the perfect fragrance for their loved ones, adding a personal touch to any celebration.
3. **Fragrance Enthusiasts:** Our marketplace also caters to fragrance enthusiasts—those who are passionate about exploring new scents, learning about different perfume notes, and curating their personal fragrance collections. For this audience, we offer an extensive selection of unique and high-quality perfumes, making it the go-to destination for those who seek to expand their olfactory horizons.

## Products and Services We Plan to Offer:

- **Perfumes and Fragrances:** We will offer a carefully curated collection of perfumes and fragrances from both well-known international brands and local favorites. Our selection will feature a variety of scents, from classic to contemporary, ensuring there's something for every taste and occasion.
- **Body Sprays:** In addition to perfumes, we will provide an assortment of body sprays, offering a lighter, more refreshing alternative to traditional perfumes. These body sprays will cater to those who prefer a subtle, everyday fragrance that's easy to apply and perfect for daily wear.
- **Attars:** We will also feature a selection of high-quality attars—traditional, alcohol-free natural oils that offer rich, long-lasting scents. Attars are popular for their unique appeal and are ideal for customers seeking a more natural, authentic fragrance experience.

## What set us apart?

- **Speed:** Delivery within 3 days quick and easy checkouts
- **Affordability:** Reasonable prices and exclusive offers and discounts and seasonal sales.
- **Customization:** Unique design bottles.

[Product]  
- ID  
- Name  
- Price  
- stock

[order] ←  
order ID  
Product ID  
Quantity  
Product type

[customer]  
- customer ID  
- customer Name  
- Email  
- Contact  
- Address  
- Payment type

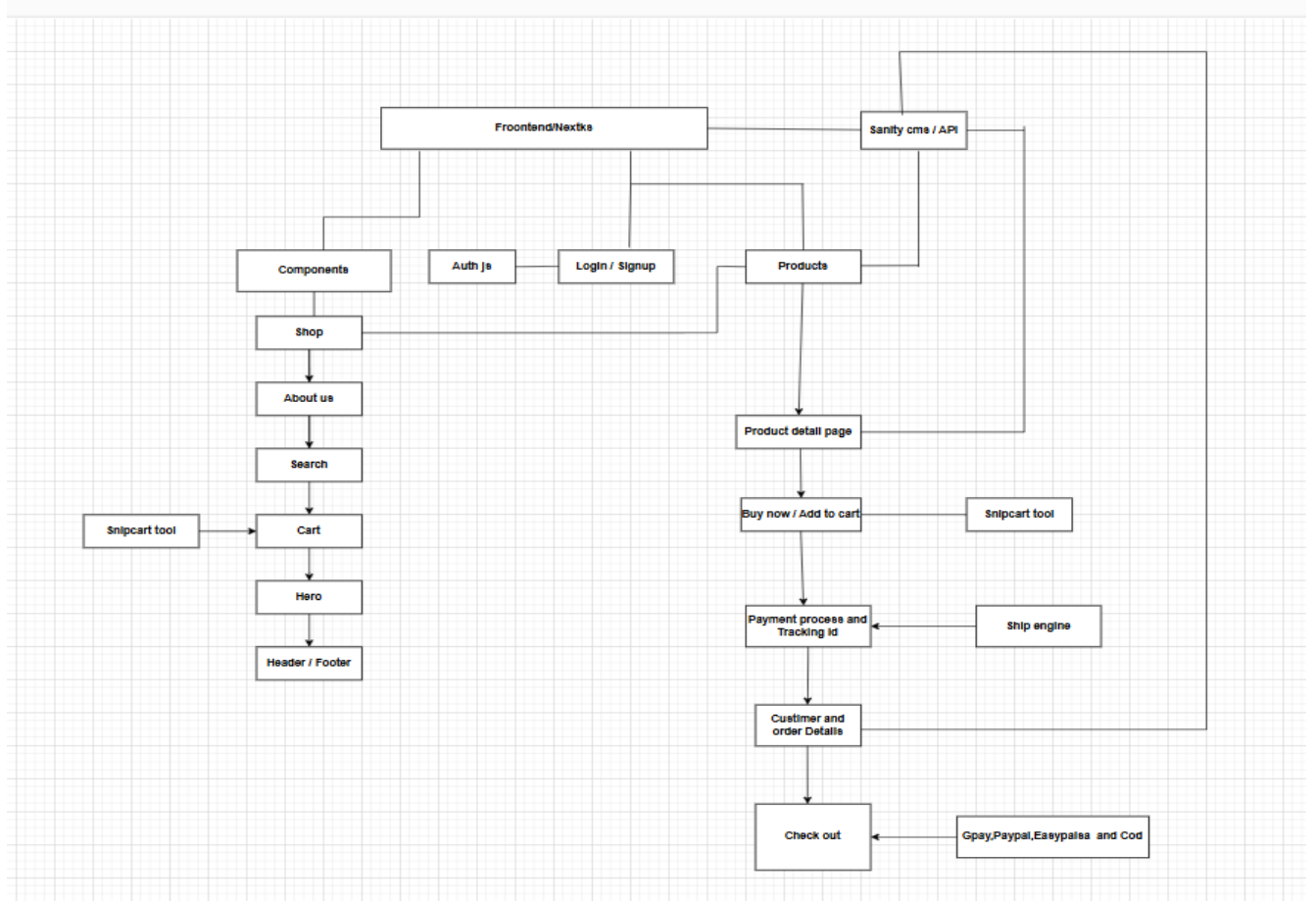
[shipment] → [delivery zone]

- Shipment ID  
- Customer Name  
- Order ID  
- delivery date  
- status

- Zone number  
- Customer Name  
- Order ID  
- Address  
- Assigned Rider  
- status

## Day 2 Submission:

### Marketplace Technical Foundation – “مہک”



# System Architecture Overview

## Marketplace Name: مہک

The marketplace architecture for "مہک" is designed to handle dynamic content management and efficient API interactions. The system comprises three primary components:

1. **Frontend (Next.js):** The user interface is built using Next.js, which fetches data from either the **Sanity CMS** or third-party APIs. The frontend handles all interactions between the user and the marketplace's content, ensuring smooth rendering of product data, user information, and transactions.
2. **Sanity CMS:** Sanity CMS serves as the primary content management system, where products, orders, and other dynamic data are stored. It acts as the backend for managing and organizing content in the marketplace.
3. **Snipcart and Shipengine:** It will be used for tracking id and payment processes

## Key Workflows

### 1. User Registration

Users can register or log in to the "مہک" marketplace using three main methods:

- **Google Login:** Users can authenticate using their Google account credentials, ensuring quick and secure access.
- **Facebook Login:** Similarly, users can use their Facebook credentials to log in.
- **Personal Account Creation:** Users who prefer a personalized interface can register with a traditional email and password combination. This option offers a separate, customized interface tailored to personal user needs.

### 2. Product Browsing

The marketplace allows users to easily search for products through the **search section**:

- **Tag-Based Search:** Users can search for products using specific tags or keywords. The system fetches relevant results from the Sanity CMS and displays them dynamically on the frontend.
- The search is intuitive and ensures users find the products they're looking for quickly.

### 3. Order Placement

Once a user has found their desired product, the ordering process is straightforward:

- **Product Detail Page:** After clicking on a product, users are redirected to a detailed product page, where they can view all relevant information, such as price, specifications, and availability.
- **Order Now:** Users can proceed by clicking the "Order Now" button, which triggers a form to collect essential details such as the user's name, address, and contact information.
- **Proceed to Payment:** After filling in their details, the user can proceed to the payment section.
  - Payment options include:
    - **Google Pay**
    - **PayPal**
    - **Easy paisa**
    - **Cash on Delivery** (for users who prefer offline payments).
- The order is processed, and the user receives a confirmation of their purchase.

## API Requirements

### 1. User Registration

- **Google Login** (/api/auth/google): This API endpoint allows users to log in or sign up using their Google account. It receives a Google OAuth token, processes it, and returns the user's ID and a session token for further authentication.
- **Facebook Login** (/api/auth/facebook): Similar to Google login, this endpoint allows users to authenticate via Facebook, returning the user ID and session token.

### 2. Product Search

- **Search Products** (/api/products/search): This GET endpoint allows users to search for products using search terms or tags. Based on the input, the system returns a list of relevant products.

### 3. Order Placement

- **Place Order** (/api/orders/place): When a user places an order, this POST endpoint handles the submission. It collects the product ID, user details, and payment method (Google Pay, PayPal, Easypaisa, or Cash on Delivery) and returns the order confirmation.

## Sanity Schema Design

The following schemas will be used to manage the data for products and orders in the "مہک" marketplace. These schemas ensure structured data management and integration with both the frontend and Snipcart for handling orders.

### 1. Product Schema (For Product Card & Detail Page)

```
export default {  
  
  name: 'product',  
  
  title: 'Product',  
  
  type: 'document',  
  
  fields: [  
  
    {  
  
      name: 'name',  
  
      title: 'Product Name',  
  
      type: 'string',  
  
      description: 'The name of the product',  
  
    },  
  
    {  
  
      name: 'image',  
  
      title: 'Product Image',  
  
      type: 'image',  
  
      options: {
```



```
    hotspot: true,  
  },  
  description: 'Image shown on product card and detail page',  
},  
{  
  name: 'price',  
  title: 'Price',  
  type: 'number',  
  description: 'The price of the product',  
},  
{  
  name: 'description',  
  title: 'Product Description',  
  type: 'text',  
  description: 'Detailed description of the product',  
},  
{  
  name: 'stock',  
  title: 'Stock Available',  
  type: 'number',  
  description: 'The quantity of the product available in stock',
```

```
    },  
    {  
      name: 'quantity',  
      title: 'Quantity',  
      type: 'number',  
      description: 'The quantity the user wants to purchase',  
    },  
    {  
      name: 'snipcartId',  
      title: 'Snipcart ID',  
      type: 'string',  
      description: 'ID for Snipcart integration (for handling Add to Cart & Buy Now  
buttons)',  
    },  
  ],  
};
```

## 2. Order Schema

```
export default {  
  name: 'order',  
  title: 'Order',  
  type: 'document',  
  fields: [  
    {  
      name: 'orderId',  
      title: 'Order ID',  
      type: 'string',  
      description: 'Unique ID for the order',  
    },  
    {  
      name: 'productId',  
      title: 'Product ID',  
      type: 'reference',  
      to: [{ type: 'product' }],  
      description: 'Reference to the ordered product',  
    },  
    {  
      name: 'quantity',
```

```
    title: 'Quantity Ordered',
    type: 'number',
    description: 'Number of products ordered',
  },
  {
    name: 'stock',
    title: 'Stock Remaining',
    type: 'number',
    description: 'Remaining stock after the order is placed',
  },
  {
    name: 'productType',
    title: 'Product Type',
    type: 'string',
    description: 'The type or category of the product',
  },
],
};
```

## Collaboration Notes

Throughout the development of the "مہک" marketplace, collaboration with peers played a key role in overcoming challenges and improving the system. Below are some highlights of the collaborative process:

- **Product Checkout and Payment Issues:** One of the significant challenges encountered was related to the checkout process, especially integrating various payment gateways like **Google Pay**, **PayPal**, **Easy-paisa**, and **Cash on Delivery**. Collaborating with peers helped resolve issues related to ensuring smooth payment processing through Snip cart tool, addressing potential payment failures, and improving the overall user experience during checkout.
- **Inventory Management:** Managing stock levels after each purchase was another area where feedback and collaboration were critical. Ensuring that stock quantities were updated accurately and preventing over-selling required the implementation of real-time stock management. Peers contributed valuable suggestions to enhance the reliability of this system.
- **Data Management of Users:** Handling user data, especially during registration and orders, required a secure and efficient system. Through collaborative discussions, the team worked together to implement secure user authentication via **Google** and **Facebook** and maintain proper data management practices for user orders and preferences.