

# Technical Roadmap - Peerzada Store (Day 2)

## Introduction:

This document outlines the technical roadmap for the development and implementation of Peerzada Store, an E-commerce platform specialising in customised gifts. The roadmap ensures alignment with business goals, detailed technical planning, and efficient execution of workflows to deliver a high-quality, scalable, and user-friendly platform.

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## Project Milestones:

### Milestone 1: Set Up Sanity CMS Backend

- **Objective:** Establish a robust backend using Sanity CMS to manage product, order, and customer data.
- **Tasks:**
  1. Design and implement schemas for:
    - **Products:**
      - Fields: ProductID, Name, Category, Price, Stock, CustomisationOptions.
    - **Orders:**
      - Fields: OrderID, CustomerID, Products, TotalAmount, Status, Timestamp.
    - **Customers:**
      - Fields: CustomerID, Name, ContactInfo, City, OrderHistory.
    - **Packaging Options:**
      - Fields: PackageID, DesignName, Material, Price, Availability.
  2. Configure Sanity's Content Studio for ease of data entry and management.
  3. Set up roles and permissions for secure backend access.
- **Deliverables:**
  - Sanity CMS schemas for all entities.
  - Functional backend with a Content Studio interface.

### Milestone 2: Develop Frontend Pages (Next.js)

- **Objective:** Create a responsive and user-friendly interface for customers to browse, customise, and order products.
- **Tasks:**
  1. Design and implement the following pages:
    - **Home Page:**
      - Hero banner with CTAs (e.g., "Start Customising Now").
      - Category tiles for Wallets, Keychains, Pens, Frames, and Packaging.
      - Featured Products carousel.
    - **Product Listing Page:**
      - Display product categories with filtering and sorting options.
    - **Product Details Page:**
      - Customisation options with live preview.
      - Add-to-cart functionality.
    - **Cart Page:**

- List of added products with edit/remove options.
  - Display total amount and estimated delivery.
- **Checkout Page:**
  - Form for delivery details and payment options.
- **Order Confirmation Page:**
  - Display order summary and tracking details.
- 2. Ensure responsive design for seamless access on mobile and desktop devices.
- 3. Integrate frontend with Sanity CMS to dynamically fetch and display data.
- **Deliverables:**
  - Fully functional and responsive frontend pages.
  - Dynamic integration with Sanity CMS.

### Milestone 3: API Integration

- **Objective:** Enable core functionalities like payment processing and shipment tracking through API integration.
- **Tasks:**
  1. Integrate APIs for:
    - **Payment Gateway:**
      - Secure payment processing (e.g., Cash on Delivery, Cards, Bank Transfer).
    - **Shipment Tracking:**
      - Fetch real-time delivery updates via third-party APIs.
  2. Develop custom endpoints to:
    - Fetch products: `/products` (GET).
    - Create orders: `/orders` (POST).
    - Track shipments: `/shipment` (GET).
  3. Test all API interactions for reliability and security.
- **Deliverables:**
  - Integrated payment gateway.
  - Real-time shipment tracking system.

### Milestone 4: Test and Refine Workflows

- **Objective:** Validate the platform's functionality, usability, and performance.
- **Tasks:**
  1. Conduct end-to-end testing:
    - Product browsing, customisation, and ordering workflows.
    - Payment processing and shipment tracking.
  2. Perform usability testing to identify and fix UI/UX issues.
  3. Optimize loading times and responsiveness.
  4. Address any bugs or inconsistencies found during testing.
- **Deliverables:**
  - Comprehensive test report.
  - Optimised and bug-free platform.

### Milestone 5: Deployment

- **Objective:** Launch Peerzada Store on a secure and scalable hosting environment.
- **Tasks:**
  1. Set up a hosting environment (e.g., Vercel for frontend, Sanity's cloud infrastructure for backend).

2. Deploy the platform with SSL for secure connections.
  3. Configure DNS settings for a custom domain (e.g., `peerzadastore.com`).
  4. Monitor live performance and address post-launch issues.
- **Deliverables:**
    - Fully deployed E-commerce platform.
    - Monitoring setup for performance tracking.
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## Key Features to Implement:

- **Customisation Studio:**
    - Interactive tool for real-time customisation previews.
  - **Luxurious Gift Packaging:**
    - Dynamic packaging options with customisable tags and ribbons.
  - **Karachi Express Delivery:**
    - Same-day delivery option for Karachi customers.
  - **Subscription Plans:**
    - Monthly/quarterly curated gift boxes.
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## Technical Stack:

- **Frontend:** Next.js
  - **Backend:** Sanity CMS
  - **Payment Gateway:** Third-party API (e.g., Stripe, local banking solutions).
  - **Shipment Tracking:** Integration with local courier APIs.
  - **Hosting:** Vercel (frontend), Sanity Cloud (backend).
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## Timeline:

- **Week 1:** Set up Sanity CMS and develop schemas.
  - **Week 2:** Build and test frontend pages.
  - **Week 3:** Integrate APIs and validate workflows.
  - **Week 4:** Conduct end-to-end testing and deploy the platform.
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