# Project Documentation

## Title : The Mandala Studio

### 1. Introduction

The Mandala Studio is an e-commerce web application designed to showcase and sell Mandala artwork. This platform provides a seamless and user-friendly experience for customers to browse, purchase, and request custom Mandala designs. The goal is to create a self-managed, commission-free online store.

### 2. Project Goals

• Provide an elegant and visually appealing art gallery to display Mandala artwork.
• Enable customers to browse, filter, and purchase Mandalas easily.
• Offer secure and seamless checkout for customers.
• Allow Admin to manage orders and track sales through an admin dashboard.
• Implement a custom order request feature where customers can place personalized Mandala art requests.
• Ensure the website is easy to maintain, scalable, and secure.

### 3. Features & Functionalities

### Customer Features

1. **Home Page** – Showcasing featured Mandala artworks.
2. **Art Gallery** – Displays all Mandala designs with categories (e.g., hand-drawn, digital, custom orders).
3. **Product Page** – Detailed view of each artwork with:
   • High-quality images
   • Description & pricing
   • Availability status
4. Cart System – Customers can add/remove Mandalas before purchasing.
5. Checkout System – Secure payment processing using Stripe/Razorpay.
6. Order History – Customers can view their past purchases.
7. Wishlist – Allows users to save their favorite Mandalas for future purchases.
8. Custom Orders – Customers can submit special requests for personalized Mandala art.

### Admin Features

1. Add/Edit/Delete Mandalas – Upload and manage artworks with images, descriptions, and pricing.
2. Order Management – Track and update order status (Pending, Shipped, Delivered).

3. Earnings Dashboard – View total sales and revenue generated.
4. Custom Order Requests Management – Accept or decline personalized Mandala design requests.

## 3. Technology Stack
Frontend  React.js (with Material-UI for styling)
Backend   Node.js with Express.js
Database  MongoDB (for storing orders, products, and user details)
Authentication Firebase Authentication (Google Login)
Payments Stripe or Razorpay (for secure transactions)
Hosting    Netlify (Frontend) & Render (Backend)

## 4. System Architecture

The following components define how The Mandala Studio operates:
1. Frontend (React.js)
   • Displays Mandala artworks in a well-structured UI.
   • Handles user authentication and checkout process.
   • Sends API requests to the backend for fetching artworks, orders, and payment processing.
2. Backend (Node.js & Express.js)
   • Manages user requests, order processing, and admin functionalities.
   • Connects to the MongoDB database for storing product and order details.
   • Interacts with Stripe/Razorpay for secure transactions.
3. Database (MongoDB)
   • Stores user details, Mandala products, and order information.
   • Maintains records of transactions.
4. Authentication (Firebase)
   • Enables secure Google Login for customers and admin access.
5. Hosting & Deployment
   • Frontend hosted on Netlify (provides a fast, globally distributed interface).
   • Backend hosted on Render (ensures stable server management).

## 5. User Flow & Navigation
**Customer Flow**
1. Visit Website → Browse Mandala artworks.
2. Click on Artwork → View details, add to cart.
3. Proceed to Checkout → Complete payment via Stripe/Razorpay.
4. Order Confirmation → Customer receives order details.
5. Track Order → View order history and status updates.

**Admin Flow**
1. Login via Admin Panel.
2. Upload & Manage Artworks.
3. Monitor Orders → Update order status (Processing, Shipped, Delivered).
4. View Sales Reports → Track total earnings and completed orders.
5. Manage Custom Orders → Accept or reject customer requests for personalized designs.


## 6 Future Enhancements

### Short-Term Enhancements
• Advanced Filtering Options (e.g., by color, theme, price range).
• Virtual Workshops accesible.
• Live Order Tracking (customers can track shipping status).
• Discount Coupons & Offers.

### Long-Term Enhancements
• Digital Mandala Downloads for instant purchases.
• Subscription-Based Art Content (e.g., tutorials, premium art collections).
• NFT Integration for selling exclusive digital Mandalas.
• Social Media Sharing Features (customers can share Mandalas on Instagram/Pinterest).

## 7. Summary
• The Mandala Studio is a self-managed personal e-commerce platform for selling the Mandala artwork.
• The platform includes a user-friendly interface, secure payments, and an order management system.
• Built using React.js, Node.js, MongoDB, and Stripe/Razorpay for smooth performance.
   • **Self-managed** platform with **full control** over pricing, orders, and interactions
• Offer **custom order requests** for personalized Mandala designs.
      • Ensure **seamless checkout, order tracking, and easy maintenance**.