

Software Requirements Specification (SRS)

1. Introduction

1.1 Purpose

The purpose of the Handicrafts Marketplace Web Application is to provide a digital platform that connects local artisans with customers who are interested in buying authentic handmade products. The platform allows artisans to showcase and sell their products online, while customers can browse, purchase, and support traditional handicrafts conveniently. This document specifies the requirements for the development and deployment of the system.

1.2 Document Conventions

- Abbreviations:
 - HMP: Handicrafts Marketplace Platform
 - UI: User Interface
 - DB: Database
- Standards:
 - Follows IEEE guidelines for SRS documentation.
 - Naming conventions use camelCase for code variables.

1.3 Intended Audience and Reading Suggestions

The intended audience includes:

- **Developers:** Should focus on Sections 2 and 3 for system design and functionality.
- **Testers:** Should review Section 3 for detailed functional requirements.

- **Project Managers/Faculty:** Should review Sections 1 and 2 for project overview, scope, and objectives.
- **End Users/Stakeholders:** Can review Sections 2.2 and 2.3 to understand features and roles.

1.4 Project Scope

The Handicrafts Marketplace is a web-based e-commerce system where artisans can register, upload product details, and manage sales, while customers can browse, search, add items to their cart, mark favorites, and make purchases securely. The platform aims to:

- Promote local artisans by providing them visibility.
- Enable customers to access authentic handicrafts online.
- Provide a secure, user-friendly e-commerce environment.

1.5 References

- PHP Documentation (<https://www.php.net/docs.php>)
- MySQL Documentation (<https://dev.mysql.com/doc/>)
- HTML & CSS Standards (W3C)

2. Overall Description

2.1 Product Perspective

The HMP is a standalone web application built using **HTML, CSS, PHP, and MySQL**. It provides artisan registration, customer login, product listings, and cart/checkout functionality.

2.2 Product Features

- **Homepage & Navigation:** Overview of artisans, categories, and featured products.
- **Product Listings:** Browse handicrafts by artisan, category, or search.
- **Artisan Profiles:** Showcase artisan details and their handicrafts.
- **Cart & Checkout:** Customers can add items to cart, view cart, and place orders.
- **Favorites:** Customers can save products for later.
- **Authentication:** User login/registration system.
- **Payment Integration:** Basic payment page for order completion.
- **Policies:** Privacy policy and terms of service pages.

2.3 User Classes and Characteristics

- **Customers (Buyers):** Browse products, add to cart, make purchases.
- **Artisans (Sellers):** Register, create profiles, upload/manage products.
- **Admins:** Oversee platform, verify artisans, manage product listings, and monitor transactions.

2.4 Operating Environment

- **Frontend:** HTML, CSS, JavaScript
- **Backend:** PHP
- **Database:** MySQL
- **Hosting:** Web server with PHP & MySQL support (e.g., XAMPP, Apache, or cloud hosting)
- **Devices:** Desktop, laptop, tablet, and mobile (responsive design).

2.5 Design and Implementation Constraints

- Must support responsive design for mobile and desktop.
- Database must ensure consistency and avoid duplicate entries.
- Limited to web environment (no mobile app version yet).

2.6 User Documentation

- Online help section with FAQs.
- Step-by-step guide for artisan registration.
- Checkout and payment instructions.

2.7 Assumptions and Dependencies

- Users have stable internet access.
- Artisans provide authentic handicrafts and accurate information.
- Payment system relies on third-party integration (can be extended later).

3. System Features

3.1 User Authentication

- **Description & Priority:** Essential for secure access. High priority.
- **Stimulus/Response:** Users register/login to access features.
- **Functional Requirements:**
 - Users can register with email, username, and password.
 - Session management using PHP sessions.
 - Password encryption for security.

3.2 Product Listing and Browsing

- **Description & Priority:** Core functionality for buyers. High priority.
- **Stimulus/Response:** Customers browse by artisan, category, or search.
- **Functional Requirements:**
 - Artisans can add/edit product details (name, image, description, price).
 - Customers can filter products by artisan or category.

3.3 Cart and Checkout

- **Description & Priority:** Facilitates purchase. High priority.
- **Stimulus/Response:** Customers add items to cart and proceed to checkout.
- **Functional Requirements:**

- Add, view, update, and remove cart items.
- Display total price dynamically.
- Order confirmation page after successful purchase.

3.4 Favorites

- **Description & Priority:** Allows saving products for later. Medium priority.
- **Stimulus/Response:** Customers mark items as favorites.
- **Functional Requirements:**
 - Save favorite items linked to customer profile.
 - Manage favorite list (add/remove).

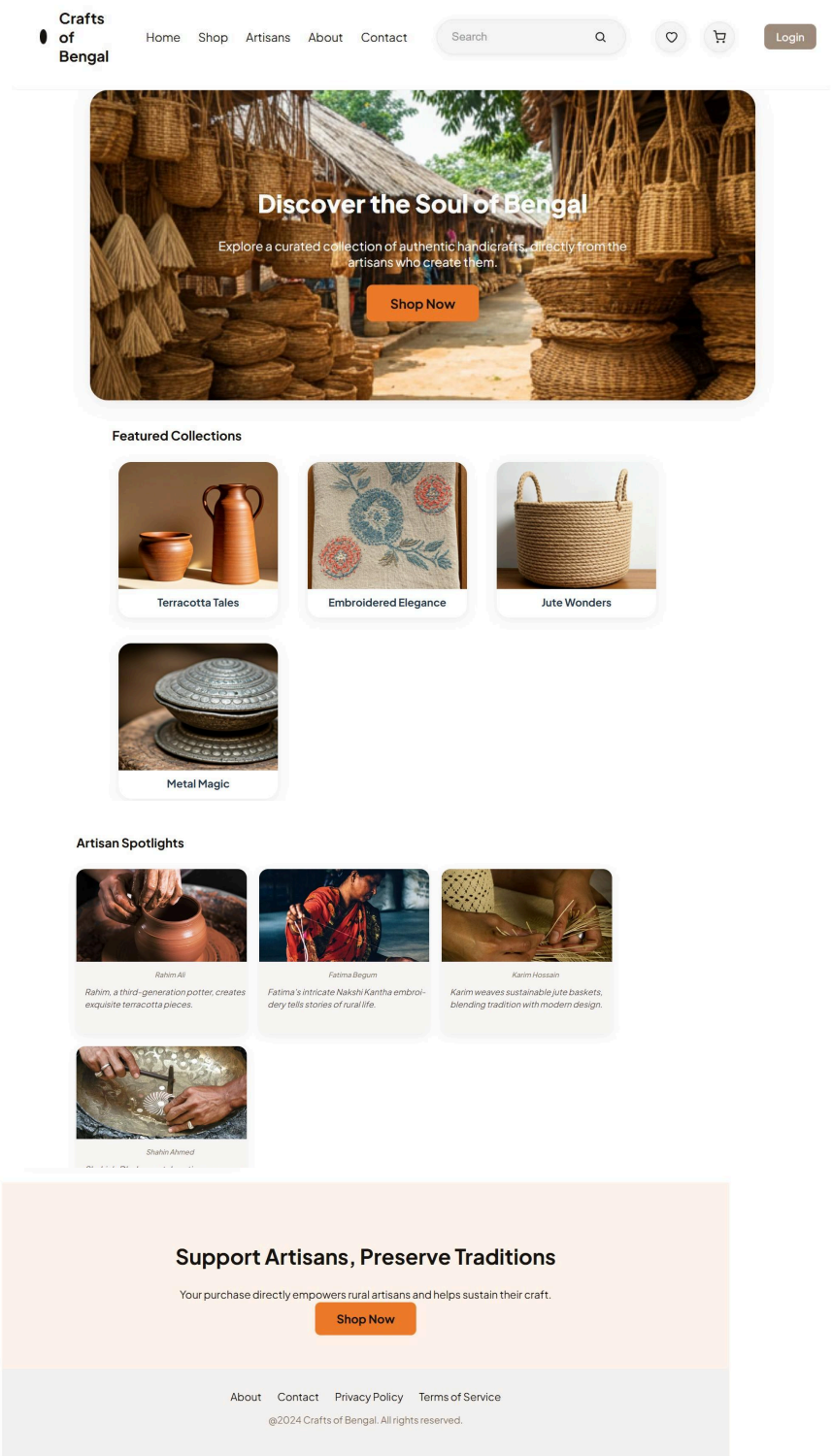
3.5 Artisan Profiles

- **Description & Priority:** Builds trust with customers. Medium priority.
- **Stimulus/Response:** Artisan details displayed along with products.
- **Functional Requirements:**
 - Artisans create/edit profiles.
 - Profiles display bio, location, and product catalog.

4. External Interface Requirements

4.1 User Interfaces

- Responsive HTML/CSS design.
- Navigation menu, product catalog, profile pages, cart, and checkout forms.



Handicrafts

Category

All Categories

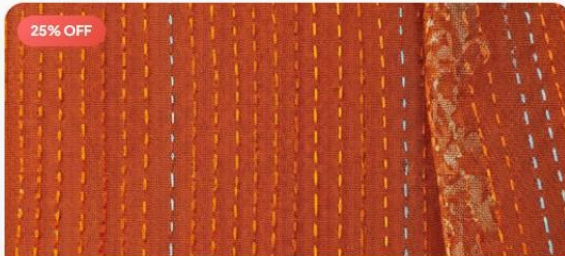
Artisan

All Artisans

Sort By

Featured

25% OFF



EMBROIDERY

★★★★☆ (39)

Nakshi Kantha Embroidered Quilt

Hand-embroidered quilt with traditional Bengali motifs

₹1,500 ~~₹2,000~~

Only 5 left!



POTTERY

★★★★☆ (28)

Traditional Terracotta Vase

Beautiful handcrafted terracotta vase for home decoration

₹3,500 ~~₹4,000~~

4.2 Hardware Interfaces

- Runs on standard desktop, laptop, and mobile devices with a browser.

4.3 Software Interfaces

- **Database:** MySQL (user accounts, products, orders).
- **Backend:** PHP APIs for handling authentication, products, cart, and orders.

4.4 Communications Interfaces

- Uses HTTPS for secure communication.
- Relies on internet connectivity for database queries and transactions.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

- Page load time < 3 seconds.
- Support up to 100 concurrent users.

5.2 Safety Requirements

- Backup of database to prevent data loss.
- Error handling for failed transactions.

5.3 Security Requirements

- Password encryption (e.g., hashing).
- Protection against SQL injection and XSS.
- Session timeouts for inactive users.

5.4 Software Quality Attributes

- **Usability:** Simple, intuitive navigation.
- **Maintainability:** Modular PHP scripts for APIs.
- **Scalability:** Can add more artisans, categories, and products.

6. Other Requirements

- Support for future integration with payment gateways.
- Option for analytics (admin dashboard) in future versions.

Appendices

A. Glossary

- **Artisan:** A registered seller who creates and sells handicrafts.
- **Cart:** A virtual shopping basket for selected items.
- **Responsive Design:** Adjusts layout across different devices.

B. Analysis Models

- **Use Case Diagram:** Customer (browse → add to cart → checkout).
- **Sequence Diagram:** Order flow (customer selects → system processes → confirmation).

● Crafts of Bengal

Home

Shop

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Welcome Back

Sign in to your account to continue shopping

Email Address

Enter your email

Password

Enter your password

☐ Remember me

[Forgot Password?](#)

Sign In

Don't have an account?

[Sign up here](#)

About

Contact

Privacy Policy

Terms of Service

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Handicrafts

Category

All Categories

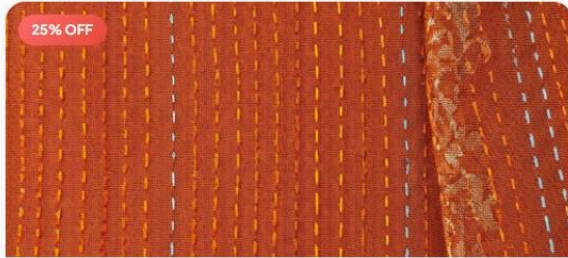
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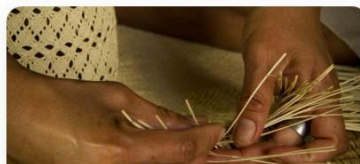
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Meet Our Artisans



Fatima Begum

Nakshi Kantha
Rajshahi, Bangladesh



Karim Hossain

Jute Weaving
Tangail, Bangladesh



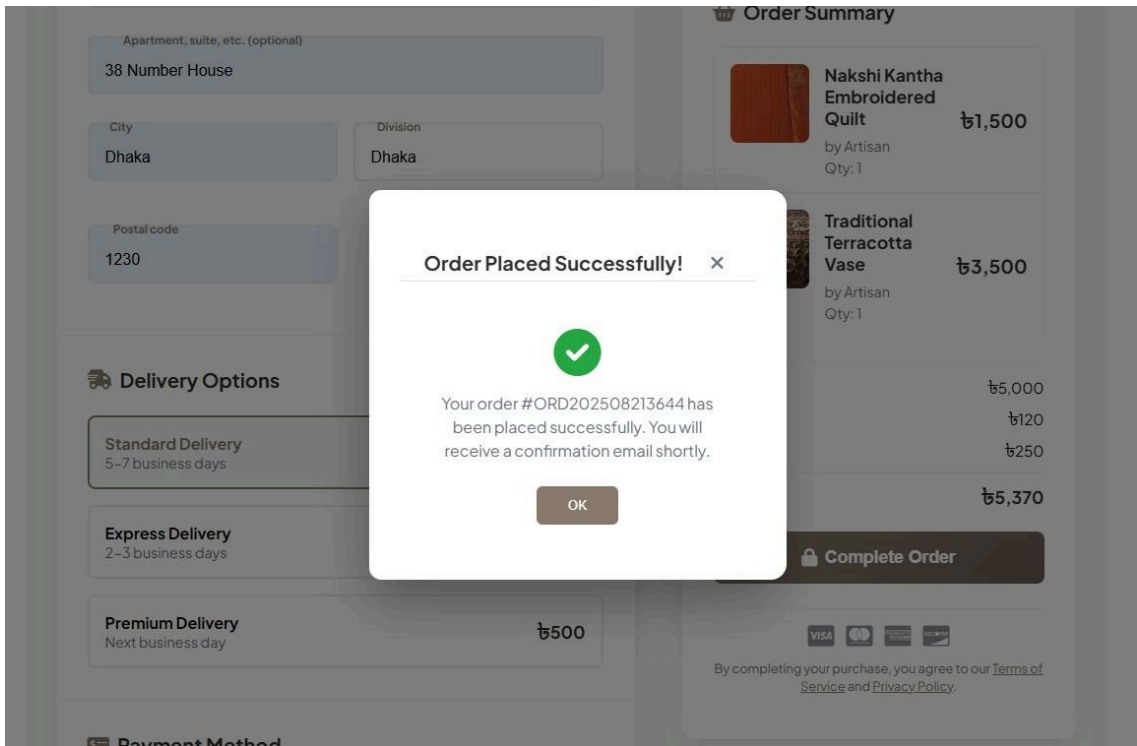
Rahim Ali

Terracotta Pottery
Bishnupur, West Bengal



Shahin Ahmed

Dhokra Metal Casting
Midnapore, West Bengal



Order Confirmed!

Thank you for your order. We'll send you a confirmation email shortly.

📋 Order Details

🕒 Processing

Order Number
ORD202508213644

Order Date
August 21, 2025


Payment Method

Estimated Delivery
August 28, 2025

Home / My Favorites

My Favorites

2 items




Traditional Terracotta Vase

Beautiful handcrafted terracotta vase for home decoration

by Rahim Ali

₹3,500

Add to Cart



Nakshi Kantha Embroidered Quilt

Hand-embroidered quilt with traditional Bengali motifs

by Fatima Begum

₹1,500

Add to Cart

Crafts of Bengal

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Q

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Login

Our Story

Connecting artisans with the world, one craft at a time

Our Mission

Our platform showcases the finest handcrafted products, from intricate Nakshi Kantha embroidery to beautiful terracotta pottery, each piece telling a story of tradition, skill, and cultural pride.

Crafts of Bengal is dedicated to preserving and promoting the rich cultural heritage of Bengal through its traditional handicrafts. We connect skilled artisans from rural communities with global customers, ensuring fair compensation and sustainable livelihoods.

C. Issues List

- Pending: Integration with real payment gateway.
- Resolved: Database schema for products and users finalized.