

CraftCircle – Requirements Document

1. Introduction and Rationale

CraftsCircle is an e-commerce platform for buying and selling handmade crafts. It supports two roles: **Admin** (who manages the listings) and **Buyer** (who browses, purchases, and manages items in a cart). The project highlights full-stack skills using **React (or HTML, CSS and JS)**, **Node.js/Express**, and **MongoDB**, with a clean and responsive design. The aim is to offer a marketplace that values creativity, simplicity, and usability.

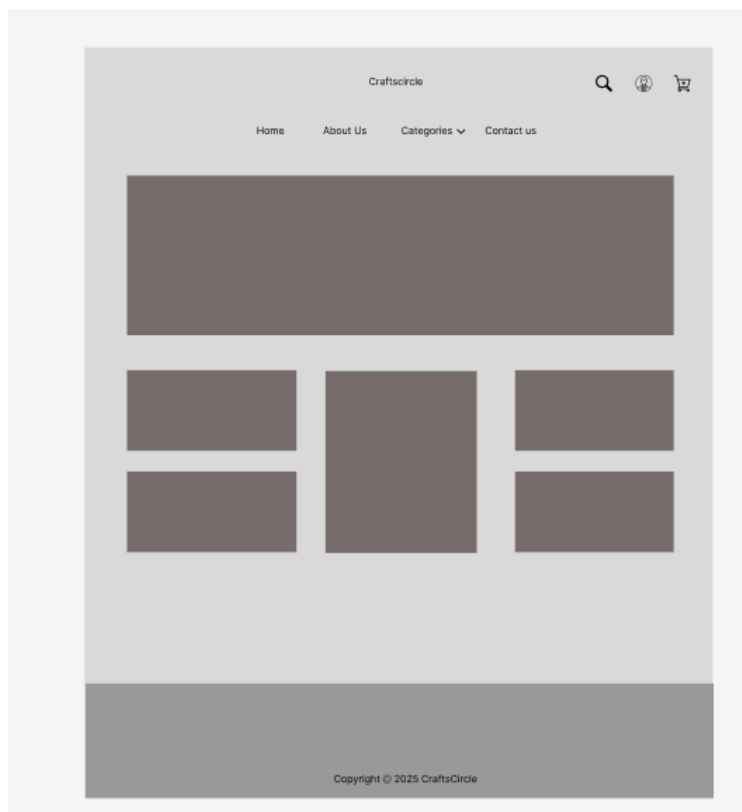
2. Content Evaluation

Navigation

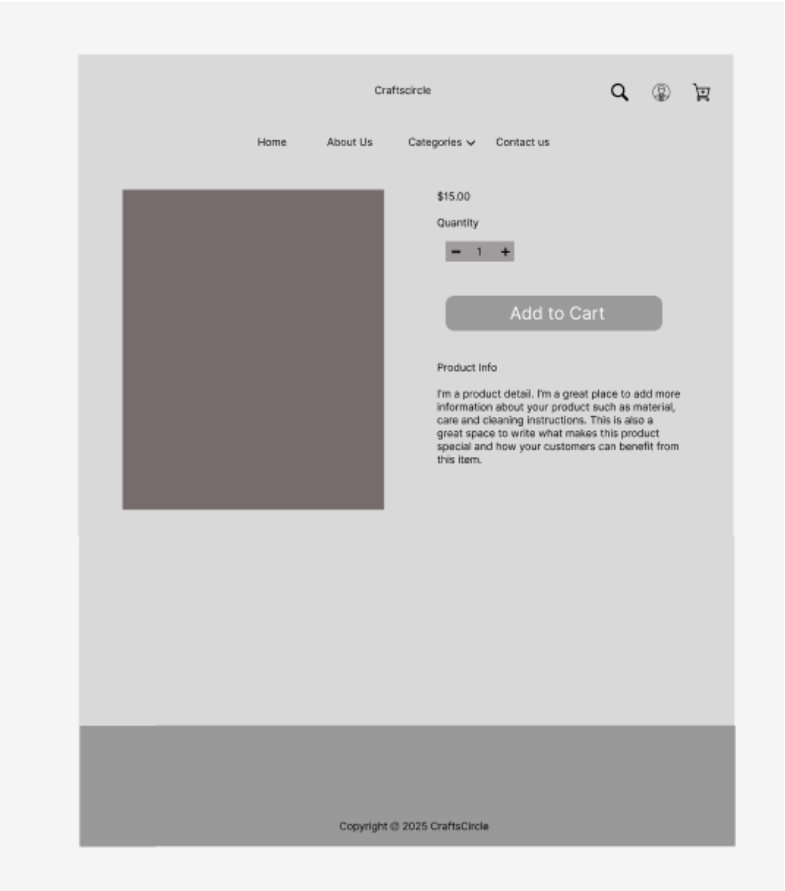
- Home
- Browse Crafts
- Cart
- Checkout
- Admin Dashboard
- Login / Logout

Wireframes

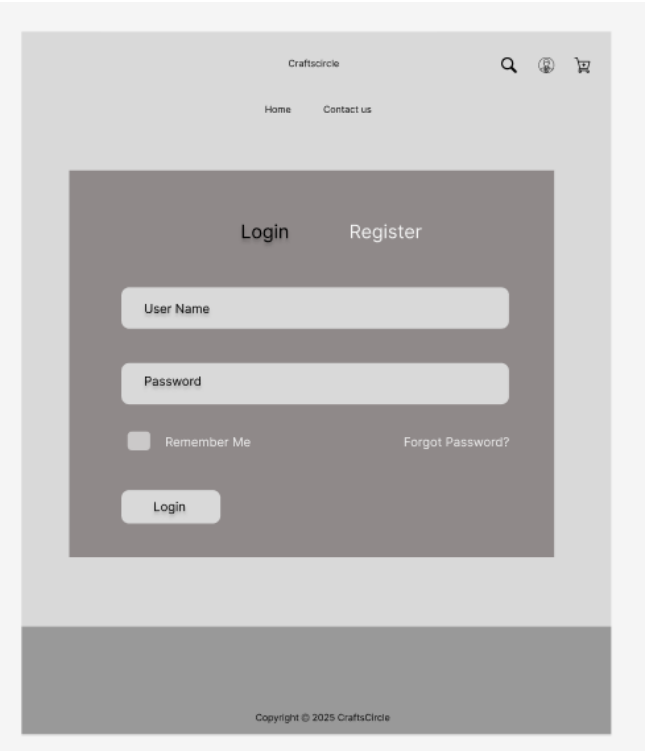
- Homepage



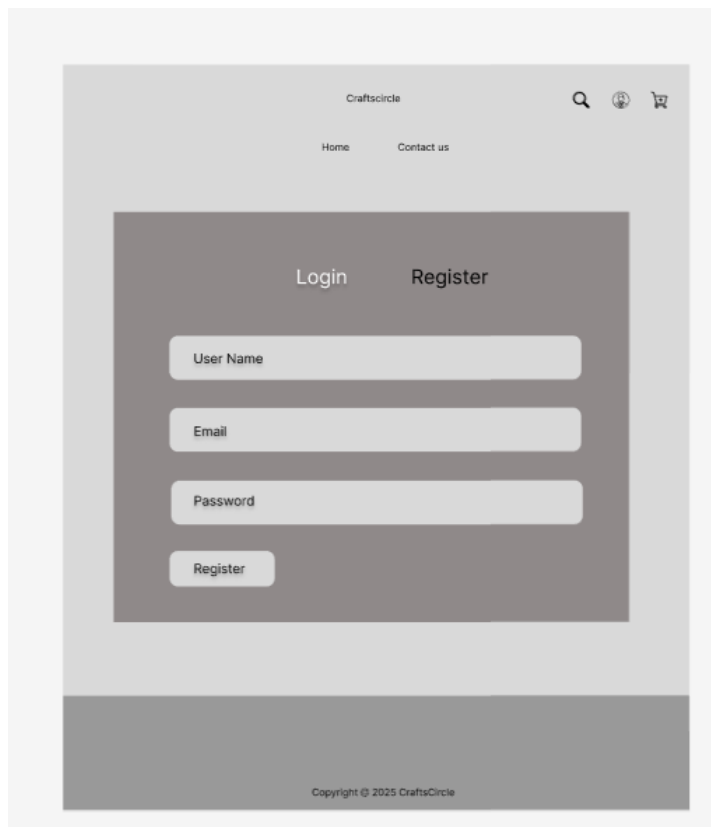
- Product detail page



- Login page



- Register Page



Content Descriptions and Sources

- Text: Authored manually (titles, descriptions, categories)
- Images: Sourced from royalty-free platforms (Unsplash, Pixels)
- Icons/UI: Font Awesome

3. Functionality (User Stories)

Must Have User Stories (25)

CRUD Operations (Admin)

Title: Admin - Create Craft Listing

User Story: As an Admin, I want to create a new handmade craft listing so that it appears in the shop.

Tasks:

- Build create form (title, description, price, image)
- Validate form inputs
- Send POST request to backend
- Store data in MongoDB

Time: 4.5 hrs

Title: Admin - View Craft Listings

User Story: As an Admin, I want to view all craft listings so I can manage them from a single place.

Tasks:

- Fetch listings from DB
- Display in admin table view
- Add edit/delete buttons

Time: 3.5 hrs

Title: Admin - Update Craft Listing

User Story: As an Admin, I want to update an existing listing to fix content.

Tasks:

- Load data into form
- Validate & update listing
- Show confirmation

Time: 4.5 hrs

Title: Admin - Delete Craft Listing

User Story: As an Admin, I want to delete a listing to remove it from the shop.

Tasks:

- Add delete button
- Confirm action
- Remove from DB and UI

Time: 3.5 hrs

User Authentication

Title: Admin Login/Logout

User Story: As an Admin, I want to log in and out securely.

Tasks:

- Build login form
- Connect to backend auth
- Handle token/session
- Add logout logic

Time: 5 hrs

Buyer Shopping Flow

Title: Browse Crafts

User Story: As a Buyer, I want to view available crafts.

Tasks:

- Fetch all listings
- Render in card layout
- Display image, price, title

Time: 4 hrs

Title: View Product Details

User Story: As a Buyer, I want to see details about each craft.

Tasks:

- Route to detail page
- Fetch and display info
- Add back button or breadcrumb

Time: 4 hrs

Title: Add to Cart

User Story: As a Buyer, I want to add a product to my cart.

Tasks:

- Add button on card/detail
- Save to localStorage/state
- Show cart count

Time: 4 hrs

Title: View Cart

User Story: As a Buyer, I want to view items in my cart.

Tasks:

- Show items (title, price, quantity)
- Update total dynamically

Time: 4 hrs

Title: Update Cart Item Quantity

User Story: As a Buyer, I want to change the quantity of items.

Tasks:

- Add +/- buttons or dropdown
- Update total price
- Save changes

Time: 4 hrs

Title: Remove Item from Cart

User Story: As a Buyer, I want to remove items I don't want.

Tasks:

- Add remove button
- Update UI and total
- Sync with backend/local Storage

Time: 3 hrs

Title: Checkout

User Story: As a Buyer, I want to checkout securely.

Tasks:

- Build form for name, email, address
- Validate form
- Store in DB or mock
- Show thank-you message

Time: 5 hrs

Should Have User Stories (5)

Title: Sort Listings

User Story: As a Buyer, I want to sort crafts by price or date.

Tasks:

- Add dropdown
- Implement sort logic
- Update product display

Time: 3.5 hrs

Title: Mobile Responsive Design

User Story: As a user, I want the site to work well on phones and tablets.

Tasks:

- Add media queries
- Test key pages on all devices

Time: 4 hrs

Title: 404 Error Page

User Story: As a user, I want a message when a page doesn't exist.

Tasks:

- Route undefined pages to 404
- Show message + return link

Time: 2 hrs

Title: Craft Categories

User Story: As a Buyer, I want to filter by category.

Tasks:

- Add dropdown or buttons
- Filter listing by category field

Time: 3 hrs

Title: Show Stock Status

User Story: As a Buyer, I want to know if an item is in stock.

Tasks:

- Add stock field in DB
- Display badge on card/detail

Time: 3 hrs

Nice to Have User Stories (3)

Title: Wishlist

User Story: As a Buyer, I want to save favourite crafts for later.

Tasks:

- Add "heart" icon
- Store in local Storage
- Create Wishlist page

Time: 4 hrs

Title: Search Bar

User Story: As a Buyer, I want to search by keywords.

Tasks:

- Add input field
- Filter data on change
- Handle empty results

Time: 4 hrs

Title: Filter by Category

User Story: As a Buyer, I want to filter listings quickly.

Tasks:

- Display category tags or checkboxes
- Combine filters if needed

Time: 3.5 hrs

4. Technical Specifications

- **Frontend:** React, HTML5, CSS3, JavaScript ES6
- **Backend:** Node.js with Express
- **Database:** MongoDB Atlas
- **Hosting:** Vercel (frontend), Render (backend)
- **Other Tools:** Cloudinary (images), GitHub, Font Awesome

5. Development Specifications

- **Folder Structure:**
 - Client (React frontend)
 - server (Node backend)
- **File Naming:** camelCase for JS, kebab-case for files
- **Accessibility:** Follows WCAG 2.1 AA (ARIA labels, keyboard nav)
- **Responsiveness:** Tested at 320px, 768px, 1024px breakpoints
- **GitHub:** <https://github.com/Isha003-hub/CraftsCircle>

6. Schedule

Week 1: Requirements & Wireframes

Week 2: Setup Project + Auth System

Week 3: Admin CRUD (Crafts)

Week 4: Buyer Cart + Checkout

Week 5: Sort, Search, Wishlist

Week 6: Testing + Accessibility Review

Week 7: Final Polish + Deployment

7. Conclusion

CraftsCircle is a focused and well-scoped e-commerce platform that showcases real-world development and UX practices. Through clearly defined roles and intuitive features, it delivers a smooth experience for both administrators and customers. The project aligns with HTTP5310 goals and highlights professional design, accessibility, and full-stack development.