# INSTITUTE FOR ADVANCE COMPUTING AND SOFTWARE DEVELOPMENT(IACSD), AKURDI, PUNE

Documentation On

## "ONLINE FURNITURE STORE"
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Submitted By:
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# ABSTRACT

The Online Furniture Store project aims to establish a comprehensive and user-friendly platform for the virtual retail of furniture, providing customers with a convenient and immersive experience in selecting and purchasing furniture items for their homes. The platform incorporates modern e-commerce functionalities, allowing users to browse a diverse catalog of furniture, view detailed product information, visualize items in virtual spaces, and securely complete transactions.

Extensive Product Catalog: The platform hosts a diverse range of furniture items, including sofas, chairs, tables, beds, and accessories, catering to various styles and preferences. Each product is accompanied by detailed descriptions, specifications, and high-quality images to assist customers in making informed decisions.

Immersive Visualization: Users can virtually visualize furniture items in their living spaces through augmented reality or interactive 3D models. This feature enhances the online shopping experience by helping customers assess how the chosen furniture will complement their existing decor.

The user interface is designed for ease of navigation, providing intuitive search and filtering options. Customers can easily explore different categories, styles, and brands, facilitating efficient product discovery.

The platform ensures secure and seamless transactions, incorporating robust payment gateways and encryption protocols to safeguard customer financial information. Multiple payment options are available to enhance user convenience.

Users can create accounts to save favorite items, track orders, and receive personalized recommendations based on their preferences and purchase history. This feature fosters a more personalized and engaging shopping experience.

The platform is optimized for various devices, including desktops, tablets, and smartphones, ensuring a consistent and responsive user experience across different screen sizes.

The online store provides accessible customer support channels, including live chat, email, and FAQs. Additionally, customers can provide feedback and reviews, contributing to a transparent and trustworthy online shopping community.

# **ACKNOWLEDGEMENT**

I take this occasion to thank God, almighty for blessing us with his grace and taking our endeavor to a successful culmination. I extend my sincere and heartfelt thanks to our esteemed guide, Mrs. Megha Mane for providing me with the right guidance and advice at the crucial juncture sand for showing me the right way. I extend my sincere thanks to our respected Centre Co-Ordinator Mr. Rohit Puranik, for allowing us to use the facilities available. I would like to thank the other faculty members also, at this occasion. Last but not the least, I would like to thank my friends and family for the support and encouragement they have given me during the course of our work.

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# 1. INTRODUCTION:

An online furniture store is a virtual marketplace where customers can purchase furniture from the comfort of their homes. Online furniture stores have become increasingly popular inrecent years as people have become more comfortable shopping online. This report will detail the various aspects of an online furniture store project, including its objectives, target audience, design, functionality, and marketing strategy.

## 1.1 Purpose:

This document communicates the business requirements and scope for developing an Online Furniture Store. The scope of this document is to define the functional and nonfunctional requirements, business rules and other constraints requirements.

## 1.2 Scope:

Online furniture stores can offer customers the convenience of shopping from their own homes, at any time of the day or night. Online furniture stores can expand their reach beyond their physical location and target customers across the state. Online furniture stores can offer customized furniture options, allowing customers to select the wood type of their furniture. Online furniture stores can leverage social media platforms to reach new customers and promote their products through targeted advertising and influencer partnerships.

## 1.3 Objectives Of Project :

The primary objective of an online furniture store project is to create a platform that offers customers a convenient and hassle-free way of purchasing furniture. The project aims to provide a wide range of furniture options for customers to choose from, while also ensuringthat the shopping experience is seamless and enjoyable. Additionally, the project aims to establish a strong online presence and build a loyal customer base.

## 1.4 Functionalities Provided By Online Furniture Store:

An online furniture store e-commerce website typically provides a range of functionalities to enhance the user experience and streamline the buying process. Here are common functionalities you might find on such a website:

1. **Product Catalog:**
   - A comprehensive catalog of furniture items, categorized by type (e.g., sofas, beds, tables), style, material, and brand.
   - High-quality images, detailed descriptions, and specifications for each product.
2. **Search and Filters:**

- Robust search functionality allowing users to quickly find specific items.
- Filters and sorting options based on price, popularity, style, and other relevant criteria.

3. **Product Pages:**
   - Individual product pages with in-depth information, customer reviews, and ratings.
   - Options for selecting variations (e.g., color, size) if applicable.

4. **Visualization Tools:**
   - Augmented reality or 3D visualization tools allowing users to see how furniture will look in their own spaces before purchasing.

5. **User Accounts:**
   - User account creation for personalized experiences.
   - Order history, saved items, and wishlist functionality.

6. **Shopping Cart:**
   - Shopping cart functionality to add, modify, and remove items before checkout.

7. **Secure Checkout:**
   - Secure and user-friendly checkout process with multiple payment options.
   - SSL encryption to ensure the security of user data during transactions.

8. **Payment Gateways:**
   - Integration with various payment gateways (e.g., credit cards, digital wallets) for convenient and secure payments.

9. **Shipping and Delivery:**
   - Options for users to choose shipping methods and track their orders.
   - Estimated delivery times and shipping costs.

10. **Return and Refund Policies:**
    - Clear and transparent return and refund policies.
    - Processes for initiating returns and tracking the status.

11. **Customer Support:**
    - Multiple customer support channels (live chat, email, phone).
    - Frequently Asked Questions (FAQs) section for common queries.

12. **Newsletter and Notifications:**
    - Option for users to subscribe to newsletters for updates and promotions.
    - Order confirmation and shipping notifications.

13. **Responsive Design:**
    - Responsive web design ensuring a consistent experience across various devices (desktop, tablet, mobile).

# 2. REQUIREMENT :

- An Online Furniture Store is a public web application.
- An Online Furniture Store will be open to global expansion, but in phase 1, the main targetis Maharashtra.
- There are mainly two types of users, one is the seller and other is the Customer.
- Sellers can submit their offerings to the website.
- An Online Furniture Store website provides the functions which connect the sellersand the customers efficiently and in a hassle-free way.
- The Online Furniture Store website could be maintained by the Administrator.

## 2.1 Functional Requirements Overview:

The Online Furniture System consists of three modules described below.

1. Seller Module
2. Customer Module
3. Admin Module

### 2.1.1 Seller Module.

- Sellers can register and create his own accounts.
- Sellers can login.
- Seller can upload product details and images of his inventory items.
- Sellers can view and confirm orders.
- Create and manage product listings.
- Communicate with customers regarding orders and product inquiries.

### 2.1.2  Customer Module

- Customers can register and create his own accounts.
- Customers can login.
- Online Furniture Store provides the function which allows customers to browsethrough a catalog of available products.
- Customers can place orders.

### 2.1.3  Admin Module

**1**.Online Furniture Store should provide all functions to admin how to handle theSystem.
   1.1 Approve Sellers and Customers.

**2**. Admins can generate transaction reports.

**3**. Manage site content and design.

## 2.2 Non-Functional Requirement:

- The website should use professional design, look and feel and color scheme.

- Users will have no limitations for accessing the application through theInternet. The portal being an internet application, it is difficult to specifyexact number of visitors or users. Hence, we will target the system to support a sufficiently large user base on launch of phase 1.

- Being a public website, the site must follow general usability guidelines for menus, navigation, colors, links and other actions provided on the screens.

- The system should be designed in such a manner that users will be ableto complete tasks in a minimum number of steps.

# 3 DATABASE DESIGN:

### 3.1 Seller

| Column Name | Field Type | Null | Key | Default | Description |
| --- | --- | --- | --- | --- | --- |
| sid | INT | NO | PK | NULL | Seller ID |
| store_name | VARCHAR(255) | NO | | NULL | Name of the seller's store |
| email_address | VARCHAR(255) | NO | | NULL | Seller's email address |
| password | VARCHAR(20) | NO | | NULL | Seller's password for logging in |
| contact_number | VARCHAR(255) | NO | | NULL | Seller's phone number or other contact information |
| area_id | TINYINT(1) | NO | | NULL | ID of the area where the seller is located |
| address | VARCHAR(255) | NO | | NULL | Seller's street address |
| status | VARCHAR(50) | NO | | NULL | Seller status (e.g. active, inactive, etc.) |
| gst_number | VARCHAR(255) | NO | | NULL | GST number associated with the seller |
| role | VARCHAR(50) | NO | | NULL | Role assigned to the seller |
| city_id | INT | NO | | NULL | ID of the city where the seller is located |

### 3.2 Customer Table

| Column Name | Field Type | Null | Key | Default | Description |
|---|---|---|---|---|---|
| cid | INT | NO | PK | NULL | Customer ID |
| address | VARCHAR(255) | NO | | NULL | Customer's street address |
| area_id | INT | NO | | NULL | ID of the area where the customer is located |
| contact | VARCHAR(255) | NO | | NULL | Customer's phone number or other contact information |
| email | VARCHAR(255) | NO | | NULL | Customer's email address |
| fname | VARCHAR(255) | NO | | NULL | Customer's first name |
| password | VARCHAR(255) | NO | | NULL | Customer's password for logging in |
| lname | VARCHAR(255) | NO | | NULL | Customer's last name |
| city_id | INT | NO | | NULL | ID of the city where the customer is located |

### 3.3 Login Table

| Column Name | Field Type | Null | Key | Default | Description |
|---|---|---|---|---|---|
| login_id | INT | NO | PK | NULL | Login ID |
| email | VARCHAR(45) | NO | | NULL | User's email address used for login |
| password | VARCHAR(45) | NO | | NULL | User's password used for login |
| question_id | TINYINT(1) | YES | | NULL | ID of the security question used for account recovery |
| role_id | TINYINT(1) | NO | | NULL | ID of the user's role |
| status | TINYINT(1) | NO | | NULL | Status of the user's account (e.g. active, inactive) |

### 3.4 Role Table

| Column Name | Field Type | Null | Key | Default | Description |
|---|---|---|---|---|---|
| role_id | INT | NO | PK | NULL | Role ID |
| role_name | VARCHAR(45) | NO | | NULL | Name of the role |

### 3.5 Products Table

| Column Name | Field Type | Null | Key | Default | Description |
|---|---|---|---|---|---|
| pid | INT | NO | PK | NULL | Product ID |
| description | VARCHAR(255) | YES | | NULL | Description of the product |
| pname | VARCHAR(255) | NO | | NULL | Product name |
| product_image | LONGBLOB | YES | | NULL | Image of the product |
| category_id | INT | YES | | NULL | ID of the product's category |
| sid | INT | YES | | NULL | ID of the seller of the product |
| price | BIGINT | YES | | NULL | Price of the product |
| rating | INT | YES | | NULL | Rating of the product |
| stock | INT | YES | | NULL | Stock availability of the product |

### 3.6 Category Table

| Column Name | Data Type | Null | Key | Default | Description |
|---|---|---|---|---|---|
| category_id | INT | NO | PK | NULL | Unique identifier for the category |
| category_name | VARCHAR(255) | NO | | NULL | Name of the category |

### 3.7 Order Table

| Column Name | Data Type | Null | Key | Default | Description |
|---|---|---|---|---|---|
| order_id | INT | NO | PK | NULL | Unique identifier for the order |
| customer_id | INT | NO | FK | NULL | The ID of the customer who placed the order |
| total_amount | DECIMAL(10,2) | NO | | NULL | Total amount of the order including taxes and shipping charges |
| discount_amount | DECIMAL(10,2) | YES | | NULL | Discount amount applied to the order |
| order_date | DATETIME | NO | | CURRENT_TIMESTAMP | Date and time when the order was placed |

### 3.8 Orderdetails Table

| Column Name | Data Type | Null | Key | Default | Description |
|---|---|---|---|---|---|
| orderdetailId | INT | NOT NULL | PRIMARY KEY | - | Unique identifier for each order detail |
| orderId | INT | NOT NULL | FOREIGN KEY | - | The unique identifier for the order that the detail belongs to |
| productid | INT | NOT NULL | FOREIGN KEY | - | The unique identifier for the product that was ordered |
| quantity | INT | NOT NULL | - | - | The quantity of the product that was ordered |
| productprice | DECIMAL(10,2) | NOT NULL | - | - | The price of the product at the time of the order |

### 3.9 City Table

| Column Name | Field Type | Null | Key | Default | Description |
|---|---|---|---|---|---|
| city_id | INTEGER | NO | PK | NULL | ID of the city |
| city_name | VARCHAR(45) | NO | | NULL | Name of the city |

### 3.10 Area Table

| Column Name | Field Type | Null | Key | Default | Description |
|---|---|---|---|---|---|
| aid | INTEGER | NO | PK | NULL | Area ID |
| pincode | VARCHAR(20) | NO | | NULL | Postal code |
| city_id | INTEGER(3) | NO | FK | NULL | ID of the city |

### 3.11 Cart Table

| Column Name | Field Type | Null | Key | Default | Description |
|---|---|---|---|---|---|
| quantity | INT | NO | | NULL | Quantity of the product |
| cid | INT | NO | PK | NULL | ID of the cart item |
| product_id | INT | NO | | NULL | ID of the product |

# 4. APPENDIX A:
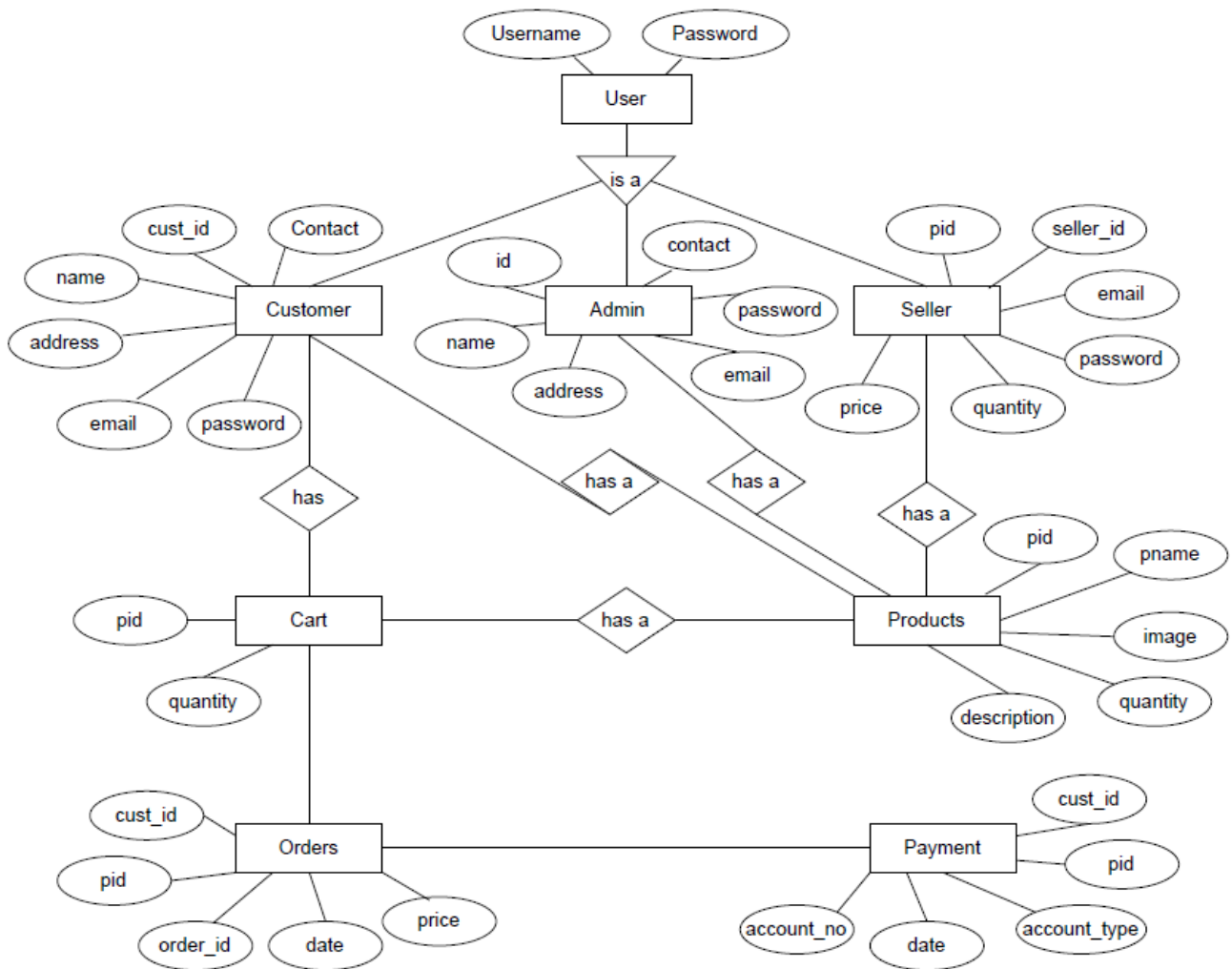


**E-R diagram shows database of Online Furniture Store**

**Fig. System Generated ER Diagram**

**Use-Case Diagram**

  **1.1 Admin:**
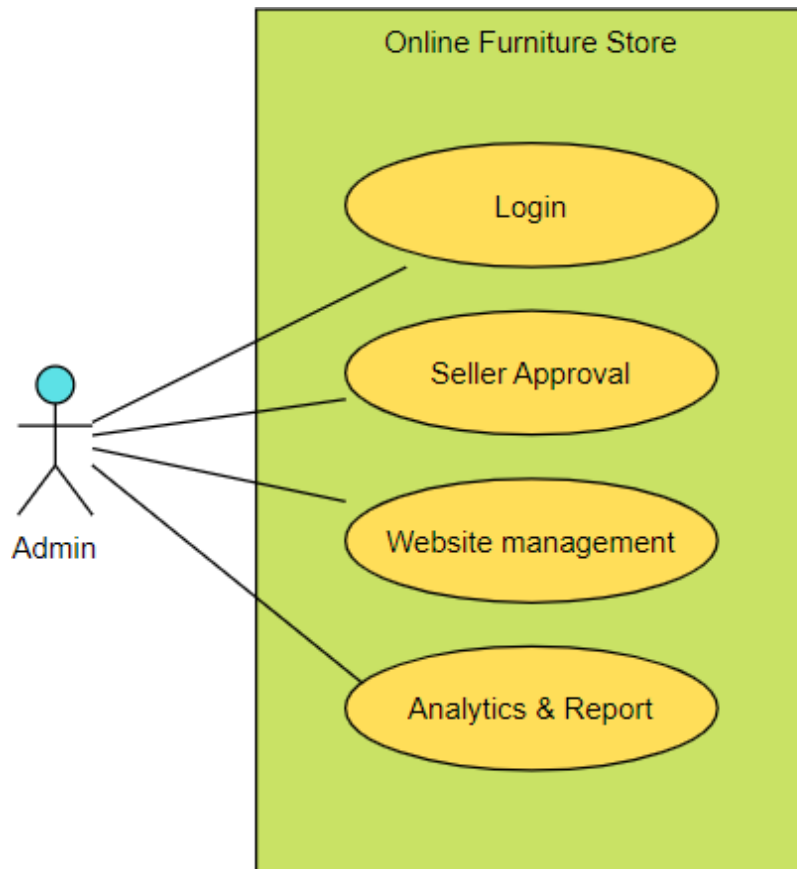


Fig. Use case diagram for Admin Model

**1.2 Seller:**
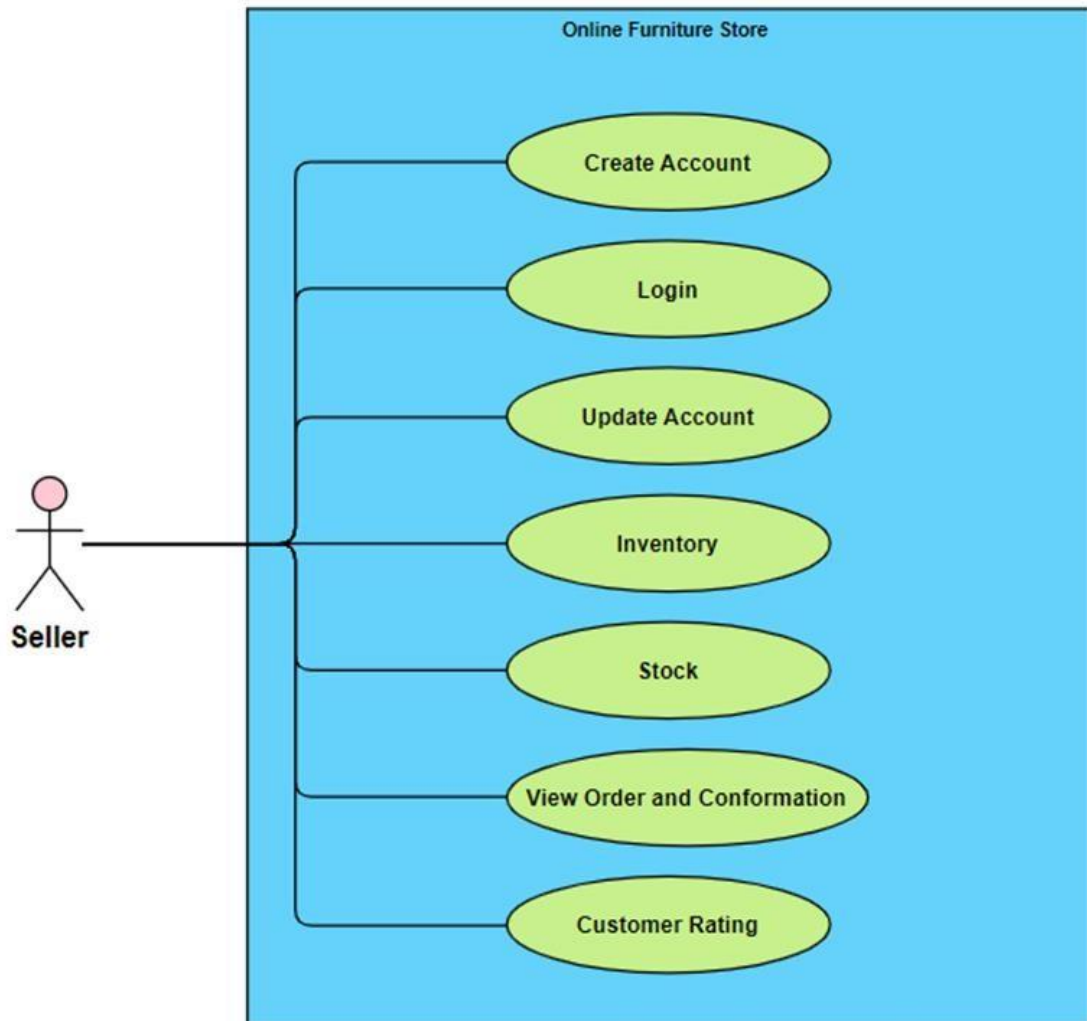


Fig. Use case diagram for Seller Model

## 1.3 Customer:
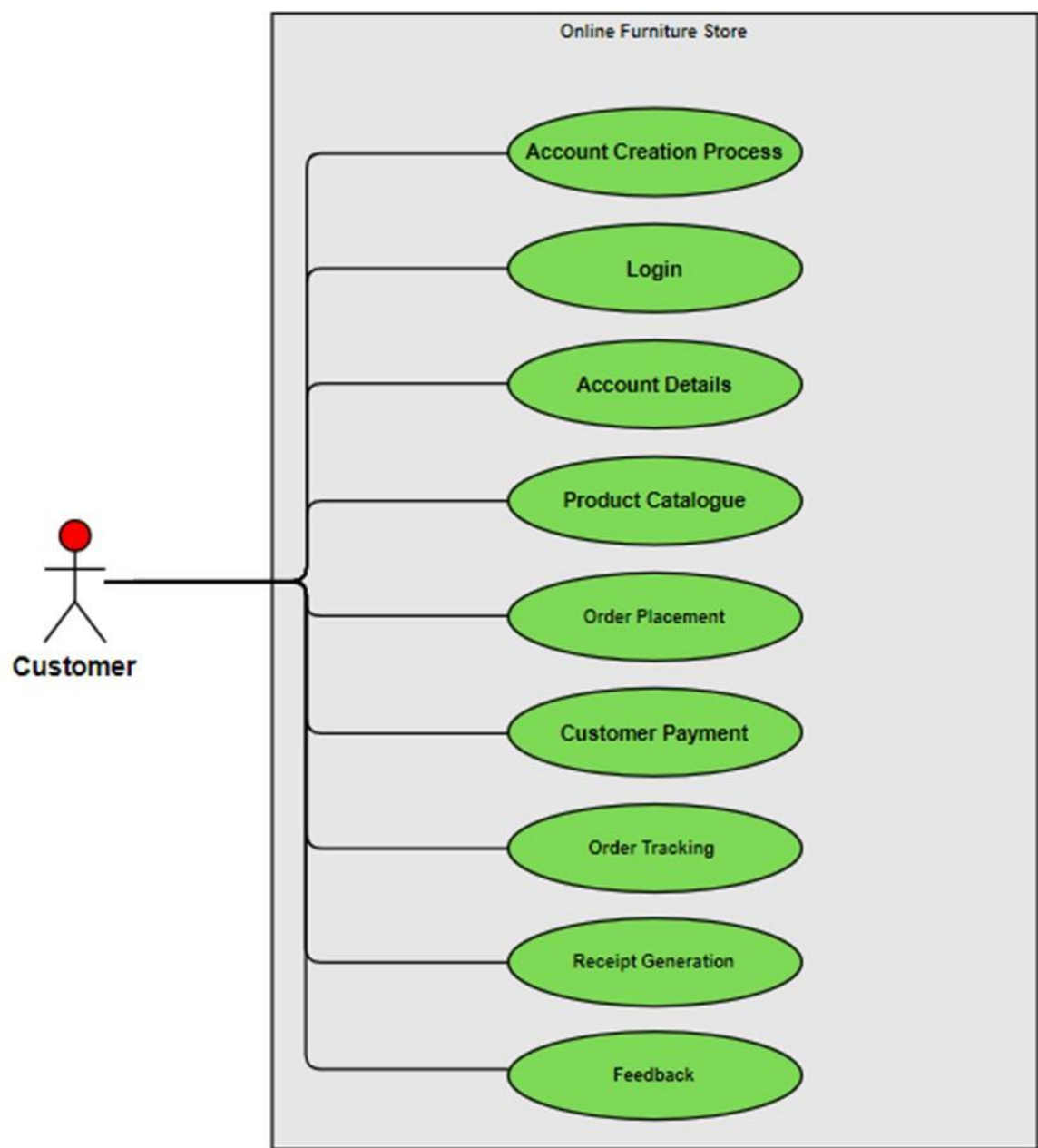


Fig. Use case diagram for Customer Model

**Data Flow Diagram :**
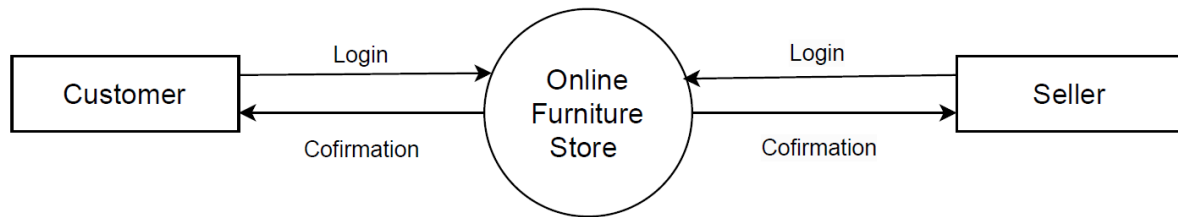


**Fig. Level 0 diagram**
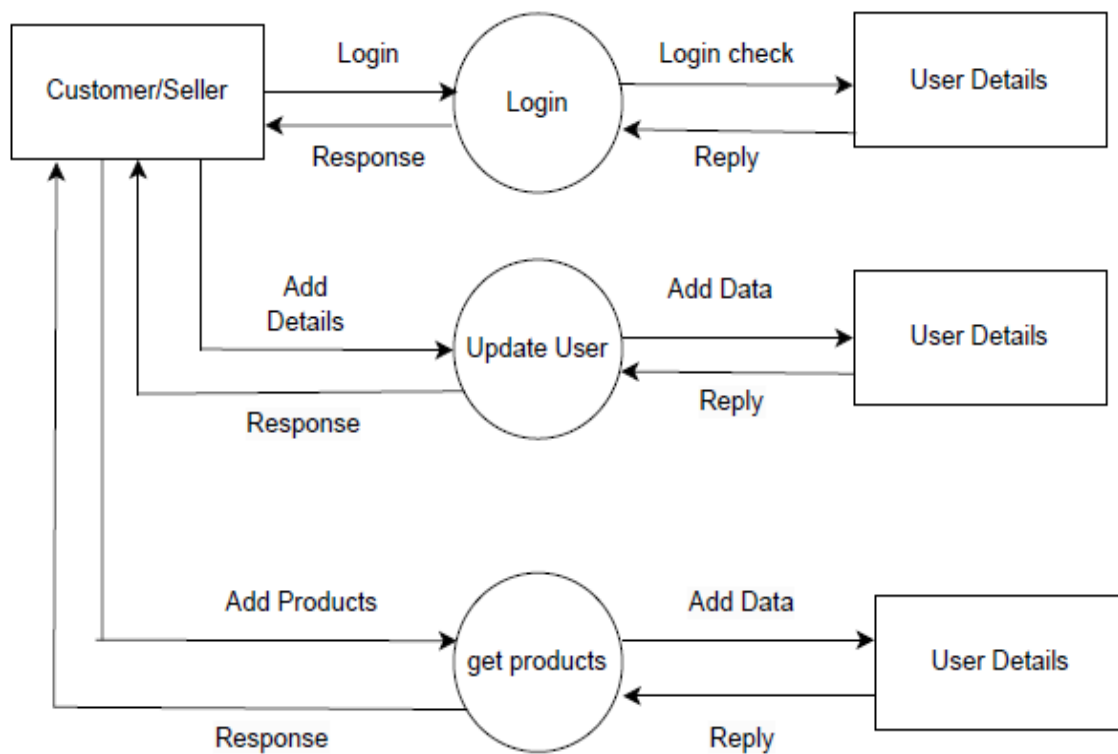


**Fig. Level 1 diagram**

# 5. APPENDIX B:

## 5.1 Home Page:

Following snapshot shows the Home page for Online Furniture Store.
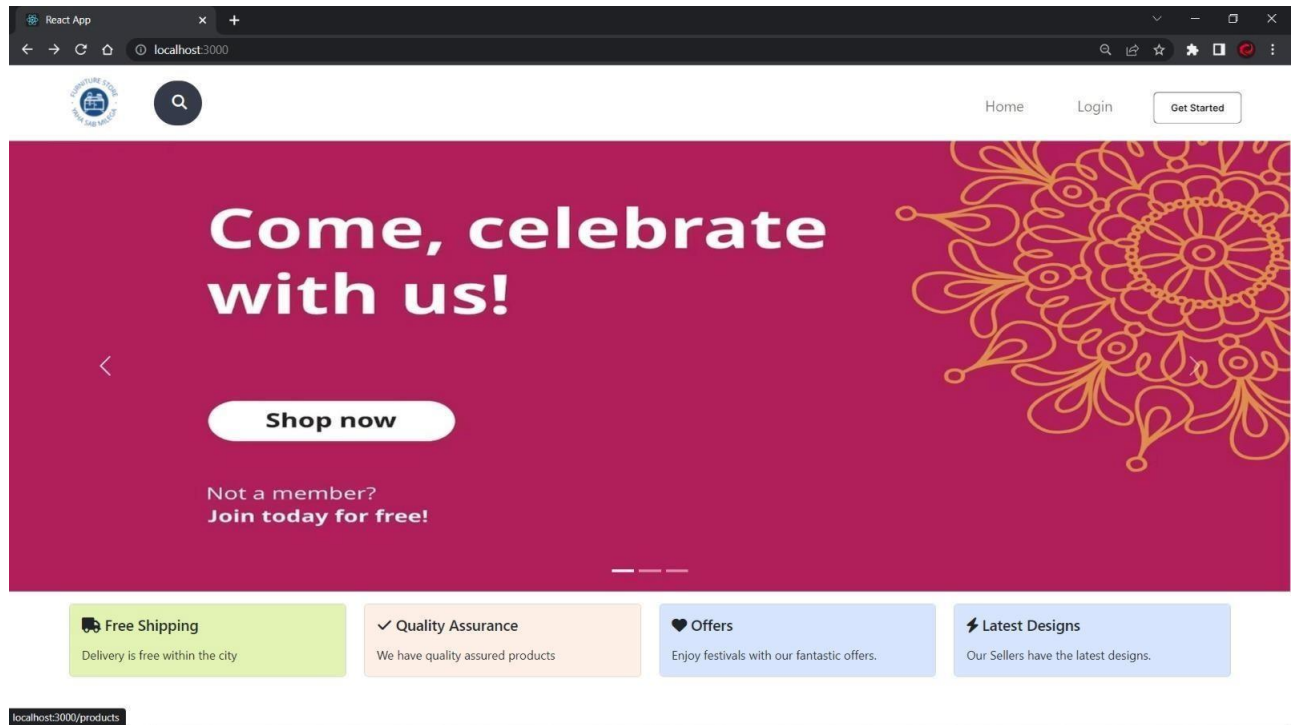


This page contains following controls

- Home
- Login
- Get Started

## 5.2 Login Page

Following snapshot shows the Login page for Online Furniture Store.
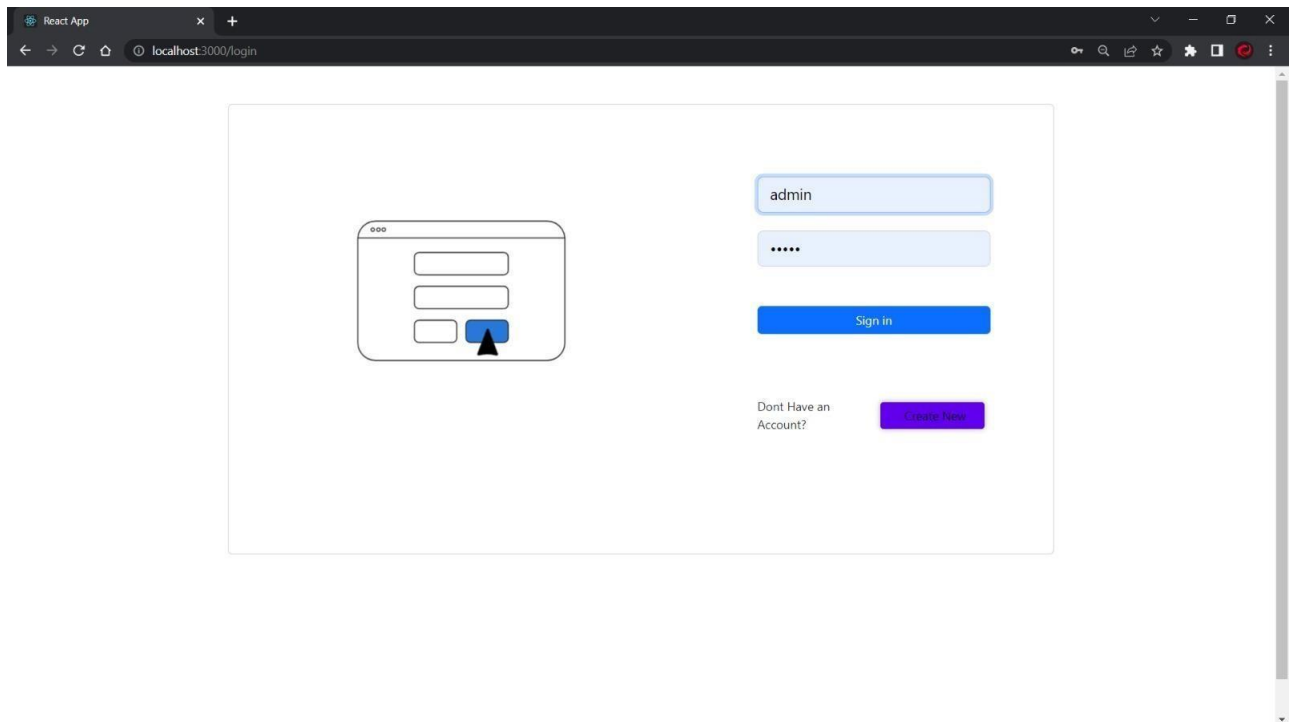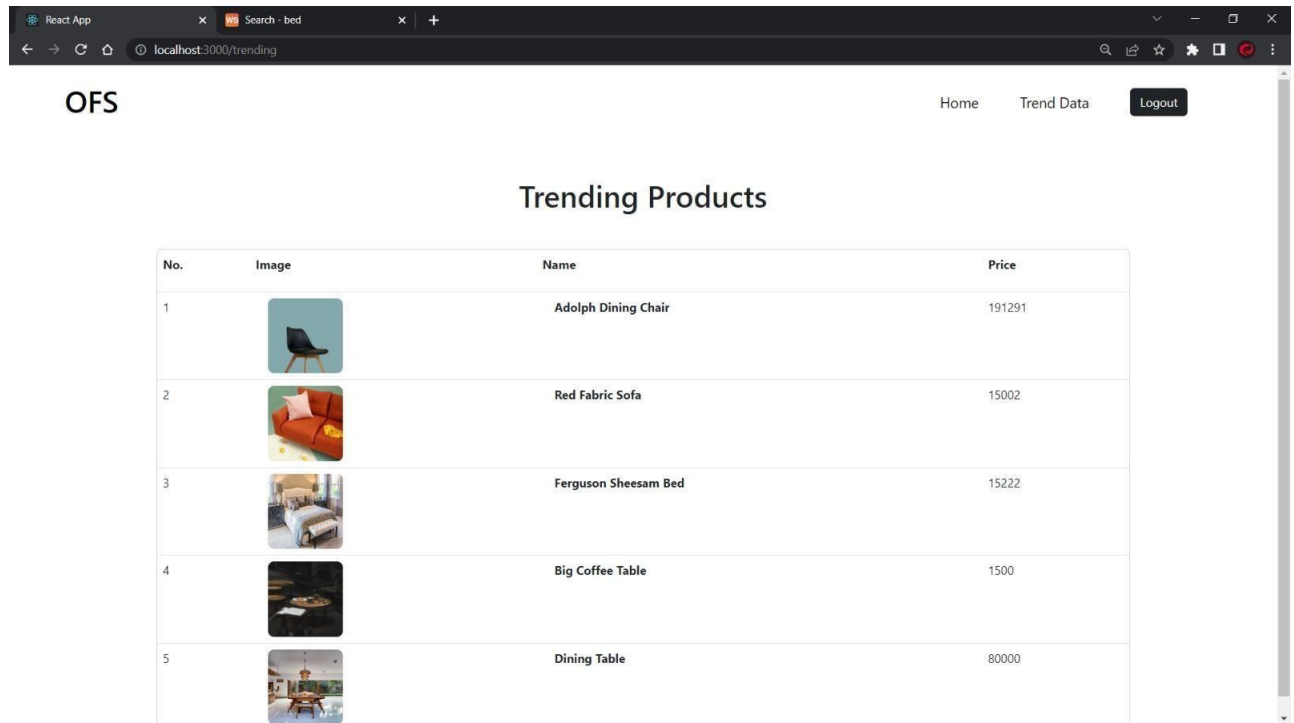


## 5.3 Admin Dashboard

Following snapshot shows the Admin Dashboard for Online Furniture Store.
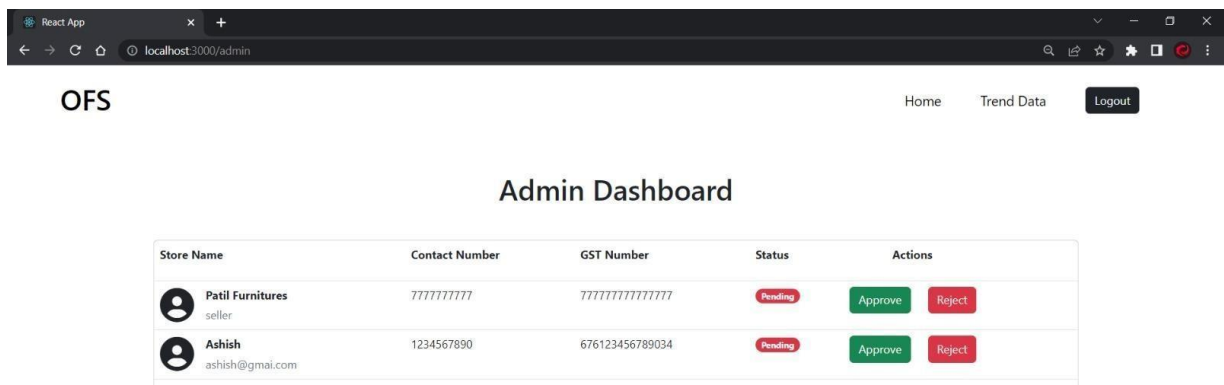
## 5.4 Trending Products
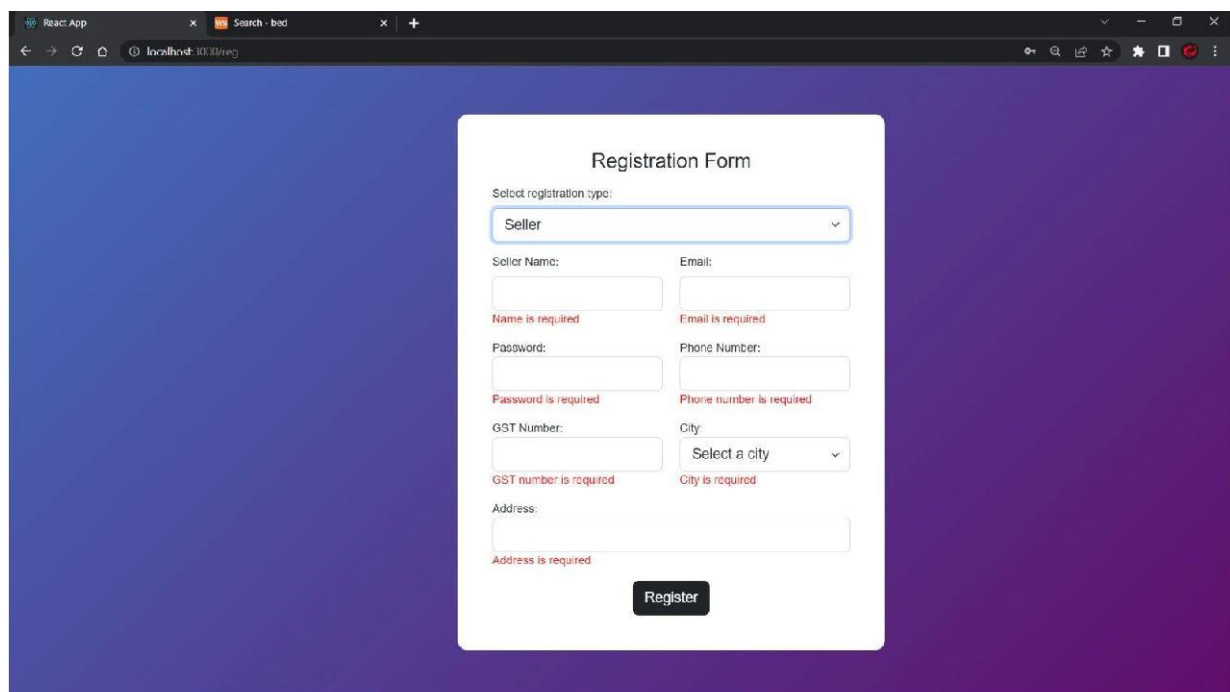
Following snapshot shows the Trending Products for Online Furniture Store.



## 5.5 Admin Home Page

- **Seller Registration Page**
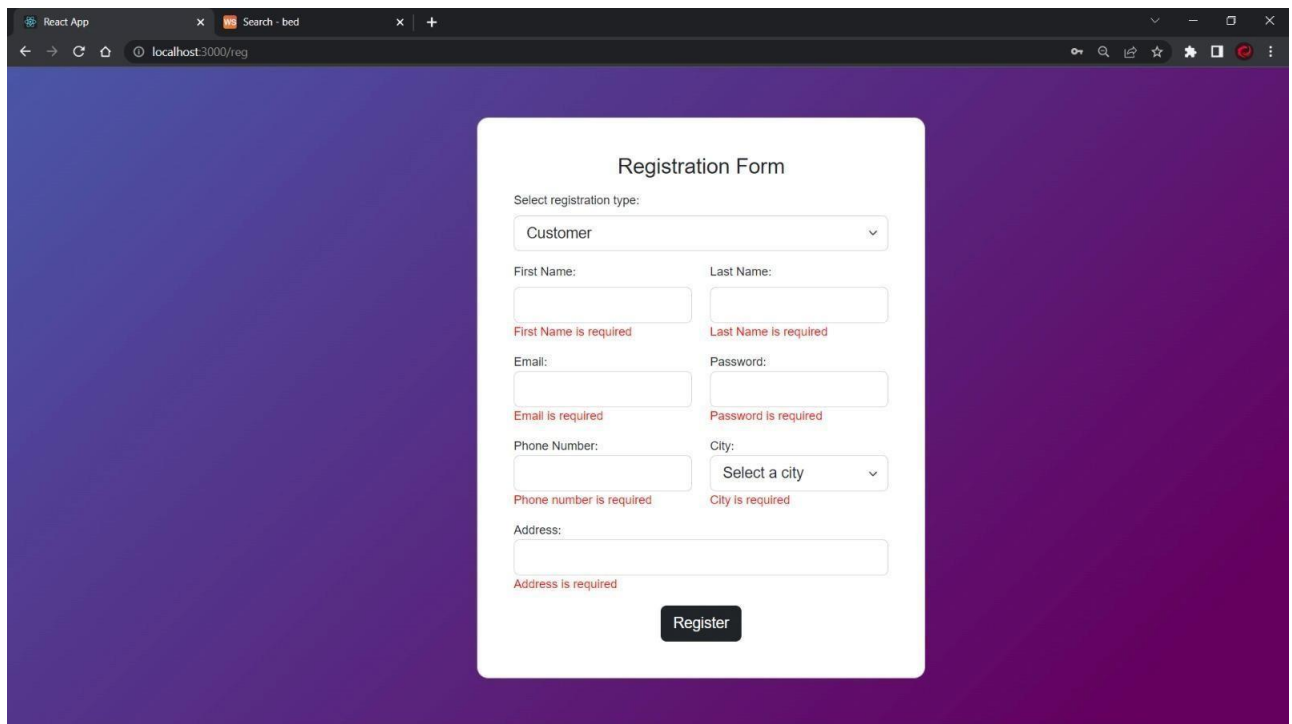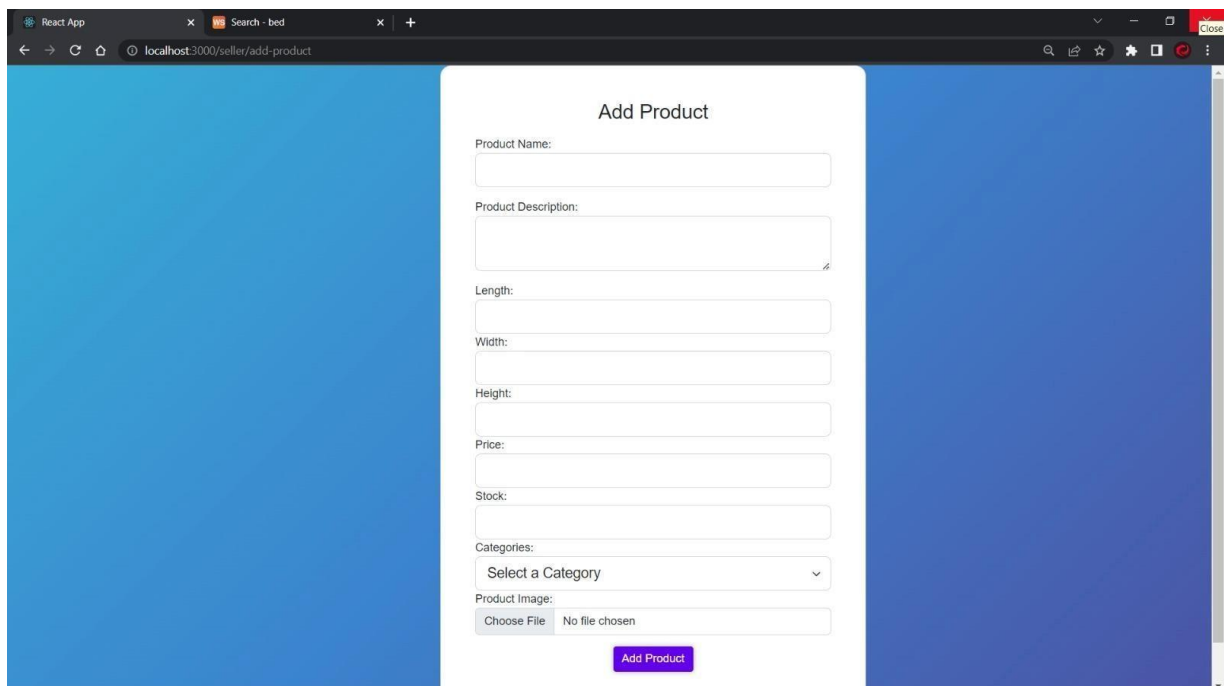
- **Customer Registration Page**



- **Seller Add-Product Page**

- **Catalog Page**



- **Product-Detail Page**
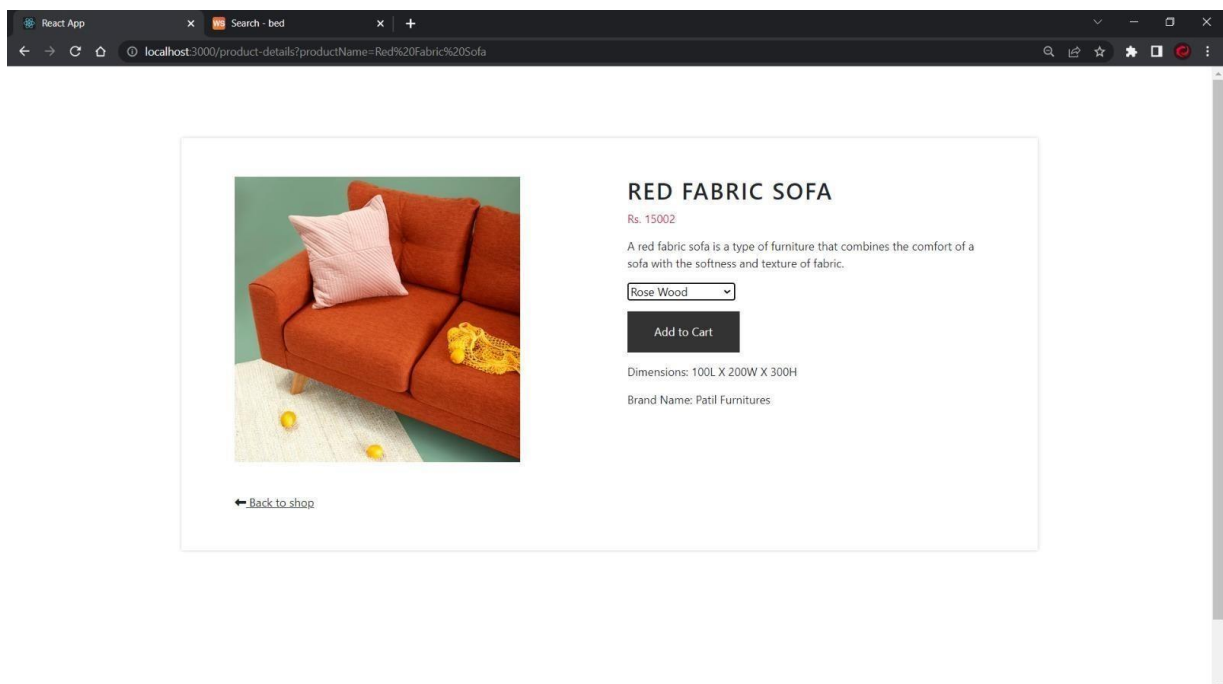
- **Shopping Cart Page**
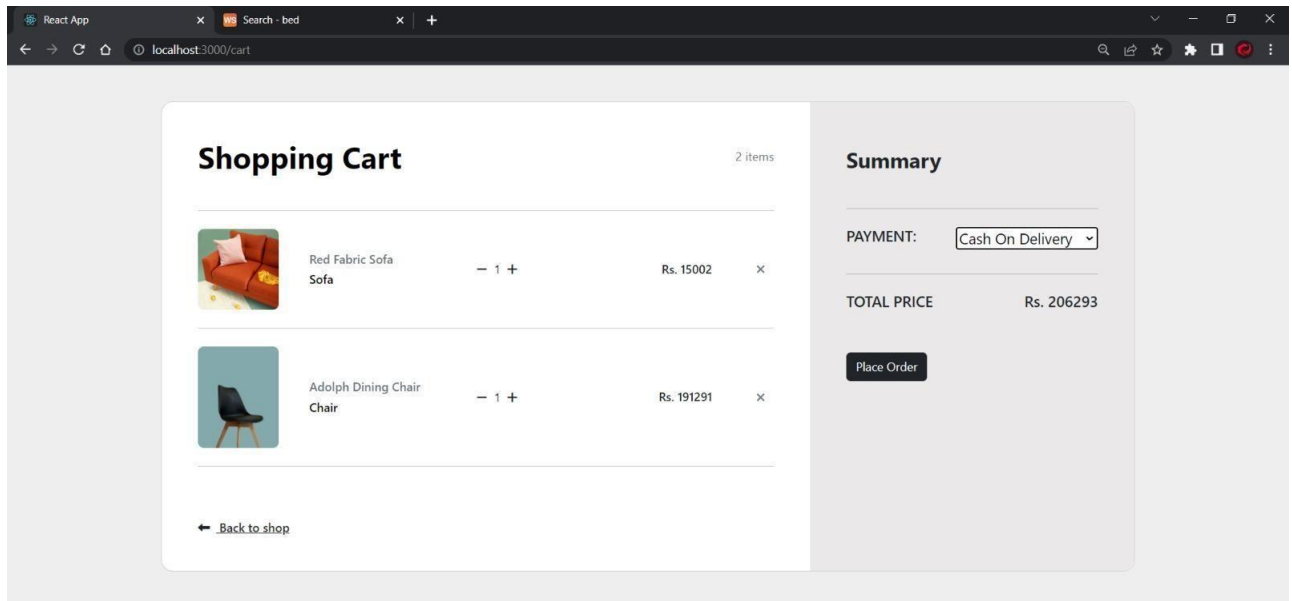


- **Order placed Page**

**Past Order placed Page**

## 6. REFERENCES :

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