

A

Project Report On

(ONLINE FURNITURE ORDERING SYSTEM[GREEN FOREST])

As a partial fulfillment of B.C.A. Semester-V

Batch Year (2023-2027)

Under taken at

Narsinhbhaipatel college of computer studies &
Management,kadi-382715.

Submitted By:-

Prajapati Nipun S. [121]

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Internal Guide

(Mrs. Suchita Parikh)

Submitted to Narsinhbhai Patel College of Computer Studies &
Management, Kadi

KadiSarvaVishwavidyalaya-Gandhinagar.

Certificate

This to certify that

Prajapati Nipun Sureshbhai.

**Is a student of semester – V Bachelor of Computer Application
(B.C.A SEM-V) during academic year 2025-26 in N.P College of
Computer Studies And Management, Kadi**

He developed project on

ONLINE FURNITURE ORDERING SYSTEM

Using HTML,CSS,JS as Front End and PHP as Back End at

NPCCSM Kadi.

(BCA, BBA & PGDCA)

The duration of the project is 120 days.

**The system is verified by us and found suitable for implementation
at the Firm/Institute.**

During project work, He was sincere and regular.

Mrs. Suchita Parikh

Project Coordinator

Dr. Nirmesh B. Patel

Principal

Certificate

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**Is a student of semester – V Bachelor of Computer Application
(B.C.A SEM-V) during academic year 2025-26 in N.P College of
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Principal**

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Mrs. Suchita Parikh

Project Coordinator

Dr. Nirmesh B. Patel

Principal

Certificate

This to certify that

Prajapati Bhargav Bhavanbhai.

**Is a student of semester – V Bachelor of Computer Application
(B.C.A SEM-V) during academic year 2025-26 in N.P College of
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Mrs. Suchita Parikh

Project Coordinator

Dr. Nirmesh B. Patel

Head of Department

ACKNOWLEDGEMENT

It is always a pleasure to remain the fine people in KSV University for their sincere guidance I received so much help from so many people. In the present world of succeed. Project is like a bridge between theoretical and practical working. With this willing I joined this project.

First of all, I thanks to my parents for giving encouragement, enthusiasm and invaluable assistance to me. Without all this, I might not be able to complete this project. I am feeling oblige in talking the opportunity to sincerely thanks to my worthy teacher sir moreover. I am highly obliged in talking the opportunity to sincerely thanks to All the staff members of BCA department for their generous attitude and friendly behavior. At last but not the least I am thankful to all my teachers and friends who have been always helping and encouraging me though out the year. I have no valuable words to express my heart is still full of the favor received from every person.

PREFACE

Bachelor of computer application & information technology Integrated course offering unique chance to able to find way thought the intricacies and complexities of today information technology word. It covers a very wide spectrum of activities and throughout the course practical knowledge one cannot actually survive in today era of information technology.

I made a Project on **Online Furniture Ordering System.[GREEN FOREST]** The project training in 4th semester of the course aims at giving an exposure of real word to all student the course. The objective of project training at this level is to have a practical experience of the word by undertaking a live project. The project consists of develop projects for other institutes of organization.

i	ACKNOWLEDGEMENT	
ii	PREFACE	
<u>INDEX</u>		
No.	Content	Page No.
1	INTRODUCTION OF GROUP WITH PROJECT TITLE	9
2	PRELIMINARY INVESTIGATION	10
	2.1 NEED OF PROJECT	12
	2.2 PROJECT SCOPE & LIMITATION	13
	2.3 EXISTING SYSTEM	14
	2.4 ADVANTAGES & DISADVANTAGES OF EXISTING SYSTEM	15
	2.5 PROPOSED SYSTEM	16
	2.6 FEASIBILITY STUDY	17
3	SYSTEM REQUIREMENT SPECIFICATION	19
	3.1 HARDWARE & SOFTWARE SERVER SIDE	20
	3.2 HARDWARE & SOFTWARE CLIENT SIDE	21
	3.3 FRONTEND AND BACKTEND ITS NEED	22
4	SYSTEM ANALYSIS & DESIGN	
	4.1 HIERARCHICAL CHART	28
	4.2 DATA FLOW DIAGRAM	30
	4.3 E-R DIAGRAM	31
	4.4 DATA DICTIONARY	32

PROJECT PROFILE

Project title:-Online Furniture Ordering System
[Green Forest]

Project definition:-Online Furniture Ordering System as software that allows furniture businesses to accept and manage orders placed over the internet.

Internal guide:-Mrs. Suchita Parikh

Frontend:-HTML, CSS, JAVA SCRIPT

Backend:-PHP

Team members:-4

Group detail:-

N0	Name	Roll No.	Exam No.
1.	Prajapati Nipun S.	121	5121
2.	Prajapati Krishnal K.	120	5120
3.	Prajapati Bhargav B.	119	5119
4.	Patel Rudra P.	114	5114

(2) PRELIMINARY INVESTIGATION

(2.1) Need of Project:-

1. Expansion of Reach:

- A website offers businesses the opportunity to expand their customer base beyond geographic limitations, reaching potential buyers from anywhere in the world. By transitioning to an online platform, the business can tap into a global market.

2. Convenience for Customers:

- Consumers increasingly prefer shopping from the comfort of their own homes. An online furniture store allows customers to browse products, compare styles, and make purchases without having to visit a physical store. It also provides features like personalized recommendations, filtering by style or price, and the ability to check out in just a few clicks.

3. Competitive Advantage:

- In a competitive market, having an online presence is no longer optional. This website will position the business as modern, responsive, and capable of offering a user-friendly experience. A well-designed website with e-commerce functionality can differentiate the business from competitors.

4. Improved Customer Interaction:

- With integrated customer service tools like live chat, FAQs, and easy access to product information, customers

can get assistance anytime, improving their overall experience. Furthermore, customer reviews and ratings foster trust and transparency.

5. Increased Sales and Revenue:

- An e-commerce platform enables easy purchasing and payment processes, leading to an increase in sales. Through features like promotions, discounts, and targeted marketing campaigns, the website will drive conversions and improve the business's bottom line.

6. Detailed Product Information and Visualization:

- Customers can view detailed product descriptions, high-quality images, and 360-degree views, which would be difficult to replicate in a physical store. These features provide consumers with a clear understanding of the products and help them make informed purchasing decisions.

7. Real-Time Inventory Management:

- The website will allow for real-time updates on product availability, helping customers know instantly whether a product is in stock. This system will also help businesses manage their inventory efficiently.

8. Data Collection and Insights:

- By integrating analytics tools, the website will provide valuable insights into customer behavior, popular products, conversion rates, and sales performance. This data will enable the business to make data-driven decisions and optimize marketing efforts.

9. **Brand Visibility and Awareness:**

- An online presence is an essential tool for building brand awareness. A well-executed website with high-quality content and a strong visual identity will reinforce the brand's presence in the market.

10. **Future Growth and Scalability:**

- As the business grows, the website will be able to scale to accommodate new products, additional features, and an expanding customer base. E-commerce platforms allow for easy expansion, whether it's adding new payment options, expanding into international markets, or offering new product categories.

(2.2)PROJECT SCOPE & LIMITATION

PROJECT SCOPE :-

1. Project Overview:-

- **Purpose:** The website will serve as an online platform to showcase and sell furniture, offering an interactive shopping experience.
- **Target Audience:** Homeowners, interior designers, businesses, and anyone looking to purchase furniture online.

2 .Key Features:-

- **Product Listings:** A catalog of available furniture with categories (e.g., living room, bedroom, office).
- **Product Search & Filters:** Users can search by categories, styles, materials, or price ranges.
- **Product Pages:** Detailed pages for each item, with descriptions, prices, and high-quality images.

- **Shopping Cart:** Users can add products to their shopping cart and view items before checkout.
- **Checkout & Payment Gateway:** A secure checkout process with integration to payment gateways.
- **User Accounts:** Users can create accounts to track orders and save preferences.
- **Responsive Design:** The website will be responsive, optimized for desktops, tablets, and smartphones.

PROJECT LIMITATION:-

•**No Mobile App:** The project is limited to a website; a mobile application is not included.

•**Limited Customization:** Some specific customization options for furniture (e.g., custom sizes or colors) may not be available at launch.

•**Payment Integration:** Initially, the website will only support one or two payment gateways (e.g., PayPal and Stripe). Additional gateways may be added in the future.

•**Shipping Integration:** Real-time shipping rates might not be included initially. Shipping options could be limited to predefined rates.

•**Language Support:** Initially, the website will support only one language (e.g., English). Multi-language support may be added later.

(2.3) Existing system :-

- **Product Display:**

The current website will display a comprehensive list of furniture items, including sofas, double beds, single beds, dining tables, and office furniture such as desks.

- **Search and Filtering:**

We provide a two main filters which is Categories of furniture and brands of furniture . In categories of furniture there are five types of furnitures which is Bedroom furnitures , Kitchen furnitures , Office furnitures , Outdoor furnitures, Living room furnitures.

- **Shopping Cart & Checkout:**

We have created a order section that will show you the list of orders That you have placed.

- **Mobile Responsiveness:**The existing system I not optimized for mobile devices. We only created a browser application .This application run on any browser and any devices.

- **User Accounts & Registration:**You can buy a furniture when you created a account on our website.

- **Product Information:**

We give a full information of existing product like height ,weight ,colour , material used in furniture etc,

.

(2.4) ADVANTAGE AND DISADVANTAGE OF EXISTING SYSTEM

Advantage:-

1. Comprehensive Product Display:The website showcases a wide range of furniture items, making it easy for customers to explore various options.

2.Search and Filtering:

Users can quickly find their desired furniture by filtering through categories and brands.

3.Order Tracking:

The shopping cart and order section allow users to track their purchases efficiently.

4.Cross-Device Compatibility:

The website runs smoothly on different browsers and devices.

5.Detailed Product Information:

Customers can view essential details like dimensions, color, and material before making a purchase.

Disadvantage:-

1. Lack of Mobile Optimization:

The system is not fully responsive for mobile users, which may affect user experience on smaller screens.

2.Account Requirement for Purchase:

Users must create an account before buying furniture, which may discourage some customers.

3. Limited Checkout Features:

The current system lacks advanced payment options, discounts, and shipping estimations.

4. No Wishlist Feature:

Users cannot save their favorite products for future purchases.

(2.5) Proposed System:-

1. Mobile Optimization

The new system will be fully responsive, ensuring a seamless experience on mobile devices, tablets, and desktops.

2. Advanced Search and Filtering

We will enhance the filtering system by adding more options such as price range, material type, color, and customer ratings.

3. Improved Shopping Cart & Checkout

The checkout process will be streamlined with multiple payment options, order tracking, shipping cost estimation, and discount coupons.

4. Guest Checkout Option

Users will have the ability to purchase products without creating an account, making the buying process faster and more convenient.

5. Wishlist Feature

Customers can save their favorite products to a wishlist for future purchases.

6. Enhanced Product Information

Each product page will include more details such as assembly instructions, warranty details, and customer reviews.

7. User-Friendly Interface

A modern, intuitive, and visually appealing interface will be designed for better navigation and accessibility.

8. Personalized Recommendations

AI-powered recommendations based on user preferences and browsing history will help customers discover relevant products.

(2.6) FEASIBILITY STUDY:-

.1 .Technical Feasibility

- The website can be developed using technologies like **HTML, CSS, JavaScript, React, and a backend with Node.js/PHP/Python.**
- A **database (MySQL, MongoDB, or Firebase)** will be used to store product details, user information, and orders.
- Hosting on **cloud platforms (AWS, Google Cloud, or shared hosting like Hostinger)** is feasible.

- Integration of **payment gateways (PayPal, Stripe, Razorpay, etc.)** is possible.

2. Economic Feasibility

- **Development Costs:** Website development costs will include domain purchase, hosting fees, developer salaries (if hiring), and third-party integrations.
- **Revenue Model:** The website can generate revenue through **direct sales, advertisements, and premium listings.**
- **Return on Investment (ROI):** A well-optimized e-commerce furniture website has the potential to generate significant revenue over time.

3. Operational Feasibility

- The website will provide an easy-to-use interface for customers to browse and purchase furniture.
- A **backend admin panel** will allow the business to manage orders, inventory, and customer queries.
- Logistics and **delivery integration** with shipping companies will be necessary.
- Customer support via **chatbots, email, or phone support** can enhance user satisfaction.

4. Legal Feasibility

- Compliance with **e-commerce laws, consumer protection policies, and data protection regulations (like GDPR, CCPA, etc.)** will be ensured.
- Terms and conditions, return policies, and privacy policies must be included on the website.
- Secure transactions with **SSL certificates and secure payment gateways** will be implemented.

5. Schedule Feasibility

- Estimated timeline:
 - **Website design & development:** 2-3 months
 - **Testing & security implementation:** 1 month
 - **Deployment & marketing:** 1-2 months
- The project is achievable within **4-6 months** based on the available resources and workforce.

(3) SYSTEM REQUIREMENT SPECIFICATION

(3.1) HARDWARE & SOFTWARE AT SERVER SIDE:-

- Hardware specification:-
 - **Processor (CPU):**
 - Minimum: **Intel Xeon E3 / AMD Ryzen 5**
 - Recommended: **Intel Xeon Silver / AMD EPYC** (for handling high traffic)
 - **RAM:**
 - Minimum: **8GB DDR4**
 - Recommended: **16GB DDR4 or higher** (for better performance under heavy loads)

•**Storage:**

- Minimum: **256GB SSD (Solid State Drive)**
- Recommended: **1TB SSD NVMe** (for faster data processing)
- Additional **HDD for backups**

•**Bandwidth& Network:**

- High-speed **Internet connection (1 Gbps or higher)**
- Load balancing for handling traffic spikes

•**Power Backup:**

- UPS or cloud-based redundancy to ensure 24/7 uptime

• **Software specification:-**

•**Operating System (OS):**

- Ubuntu Server 22.04 LTS / CentOS / Windows Server

•**Web Server:**

- Apache or Nginx (for handling HTTP requests)

•**Database Management System (DBMS):**

- MySQL / PostgreSQL / MongoDB (for storing product, user, and order data)

•**Backend Development:**

- Node.js (Express.js) / Python (Django or Flask) / PHP (Laravel)

•**Frontend Development (for rendering server-side pages, if needed):**

- React.js / Next.js / Angular

•**Security Measures:**

- SSL Certificate (HTTPS) for encryption
- Firewall & DDoS protection
- Regular security patches & updates

• **Cloud Hosting (Optional):**

- AWS (EC2, RDS, S3), Google Cloud, or DigitalOcean for scalability and redundancy

• **Payment Gateway Integration:**

- PayPal, Stripe, Razorpay, or similar secure payment APIs

(3.2) HARDWARE & SOFTWARE AT CLIENT SIDE :-

• **Hardware specification :-**

• **Processor (CPU):**

- Minimum: **Intel Core i3 / AMD Ryzen 3**
- Recommended: **Intel Core i5 or higher / AMD Ryzen 5 or higher** (for better performance)

• **RAM:**

- Minimum: **4GB RAM**
- Recommended: **8GB RAM or higher**

• **Storage:**

- Minimum: **10GB free space** for caching and temporary files
- SSD recommended for faster performance

• **Display & Resolution:**

- Minimum: **1280x720 (HD resolution)**
- Recommended: **1920x1080 (Full HD) or higher**

• **Internet Connection:**

- **Minimum: 4 Mbps** (for basic browsing)
- **Recommended: 10 Mbps or higher** (for fast page loading and multimedia content)

• **Input Devices:**

- **Keyboard & Mouse** (for desktops/laptops)
- **Touchscreen support** (for mobile devices and tablets)

❖ **Software specification:-**

• **Operating System (OS):**

- Windows 10 / Windows 11
- macOS (latest versions)
- Linux (Ubuntu, Fedora, etc.)
- Android (for mobile users)
- iOS (for iPhones and iPads)

• **Web Browser (Latest Version Recommended):**

- **Google Chrome** (Recommended)
- Mozilla Firefox
- Microsoft Edge
- Safari (for macOS& iOS users)

• **Frontend Technologies Used (By Website Developers, Affects Client Experience):**

- HTML5, CSS3 (for design & layout)
- JavaScript, React.js, Vue.js, or Angular (for dynamic UI)
- Bootstrap or Tailwind CSS (for responsive design)

• **Additional Software & Plugins (If Needed):**

- **Adobe Acrobat Reader** (for viewing invoices in PDF format)
- **JavaScript enabled in browsers** (to support website features)

• **Non-Functional Requirements:-**

1. Performance Requirements

The website should load within **3 seconds** on high-speed internet. The system should handle **at least 500 concurrent users** without performance degradation.

The server should respond to API requests within **200ms** under normal load.

2. Security Requirements

The system must use **SSL encryption (HTTPS)** to protect user data. User passwords must be **hashed and stored securely** (e.g., using bcrypt).

Implement **role-based access control (RBAC)** for admin and customer privileges.

Protection against **SQL injection, XSS (Cross-Site Scripting), and CSRF (Cross-Site Request Forgery) attacks**.

3. Usability Requirements

The website should have a **user-friendly and intuitive interface**. Mobile responsiveness is required, ensuring smooth browsing on **smartphones, tablets, and desktops**.

Users should be able to complete a purchase within **5 steps or fewer**.

4. Scalability Requirements

The system should be designed to **scale horizontally**, allowing more servers to be added as traffic increases.

The database should be **optimized to handle millions of records** without affecting speed.

Use **cloud hosting (AWS, Google Cloud, or Azure)** for auto-scaling and load balancing.

5. Reliability & Availability Requirements

The system should have **99.9% uptime**, ensuring minimal downtime. Automatic backups should be performed **daily** to prevent data loss.

The system should recover from failures **within 5 minutes** using backup servers.

6. Maintainability & Support Requirements

The system should be **modular**, allowing for easy updates and maintenance.

Developers should be able to deploy **bug fixes and updates without downtime**.

Logs and error reports should be generated for troubleshooting issues.

7. Compliance Requirements

The system should comply with **GDPR (General Data Protection Regulation)** for data privacy.

Follow **PCI DSS (Payment Card Industry Data Security Standard)** for secure payment processing.

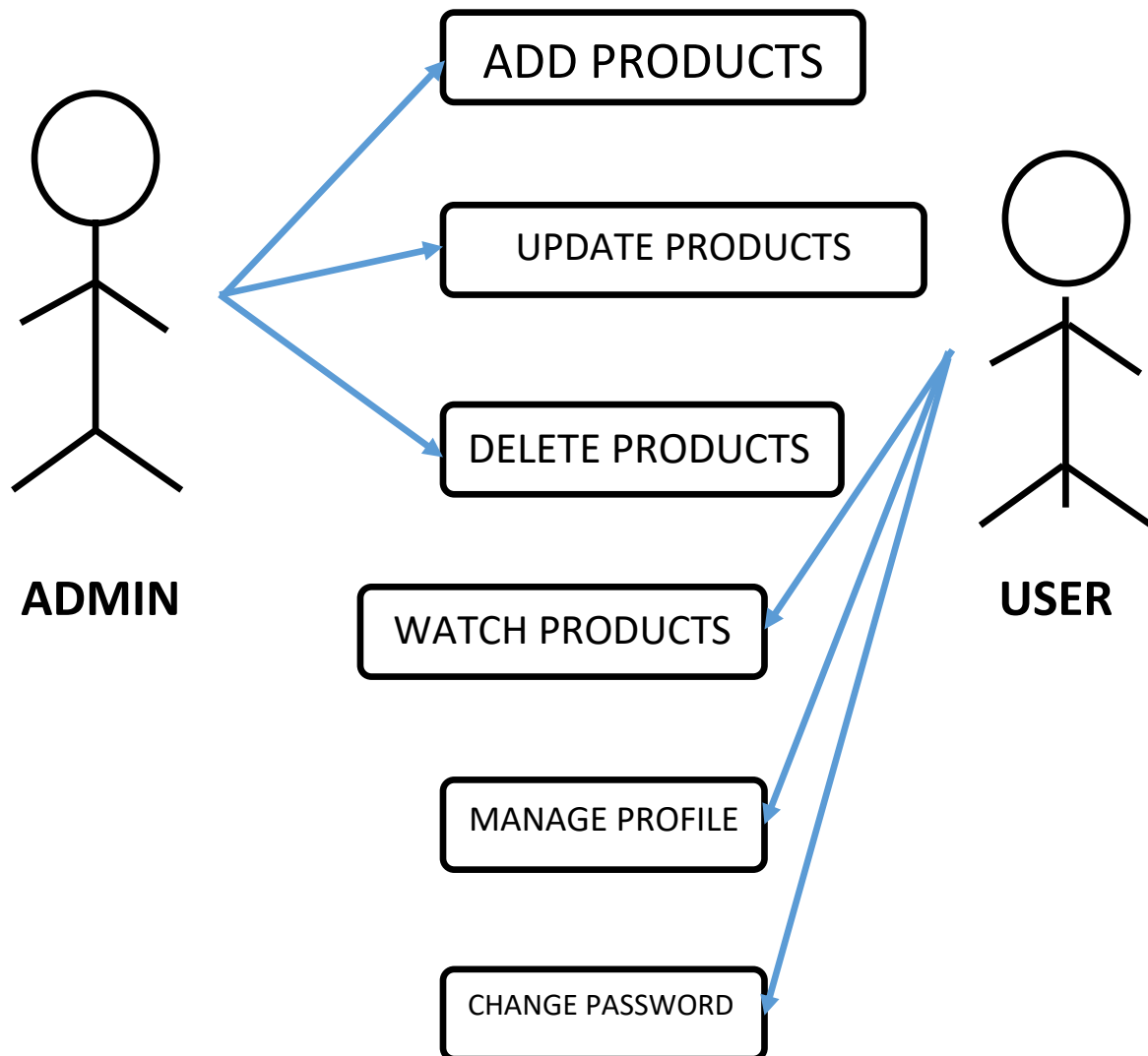
Ensure accessibility compliance (WCAG 2.1) to support users with disabilities.

(3.3) FRONTED AND BACKEND ITS NEED:-

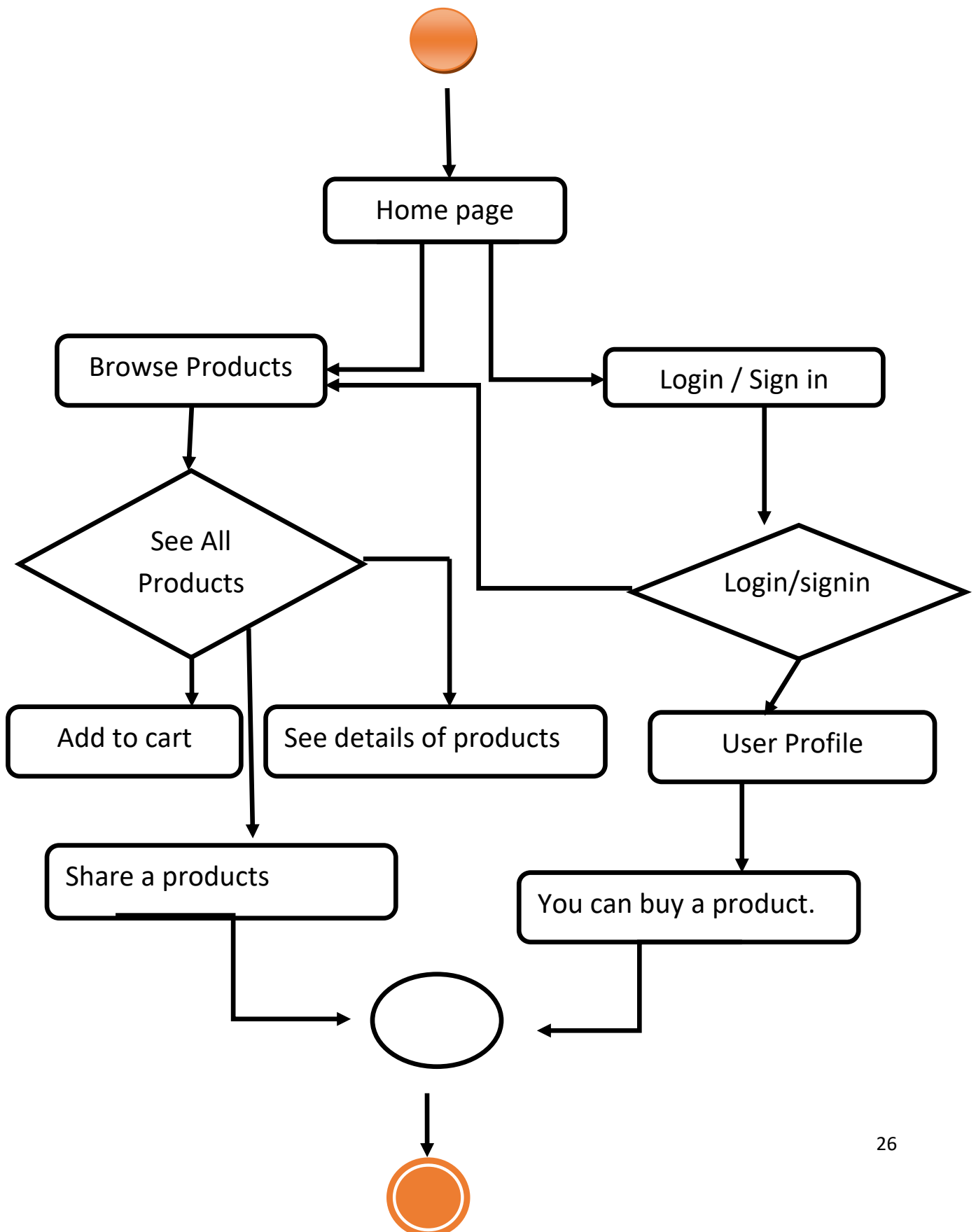
FRONTED	BACKEND
HTML5	PHP
CSS3	Mysql
JAVASCRIPT	

(4) SYSTEM ANALYSIS & DESIGN

(4.1) Use Case Diagram:-



➤ (4.6)ACTIVITY DIAGRAM FOR USER SIDE

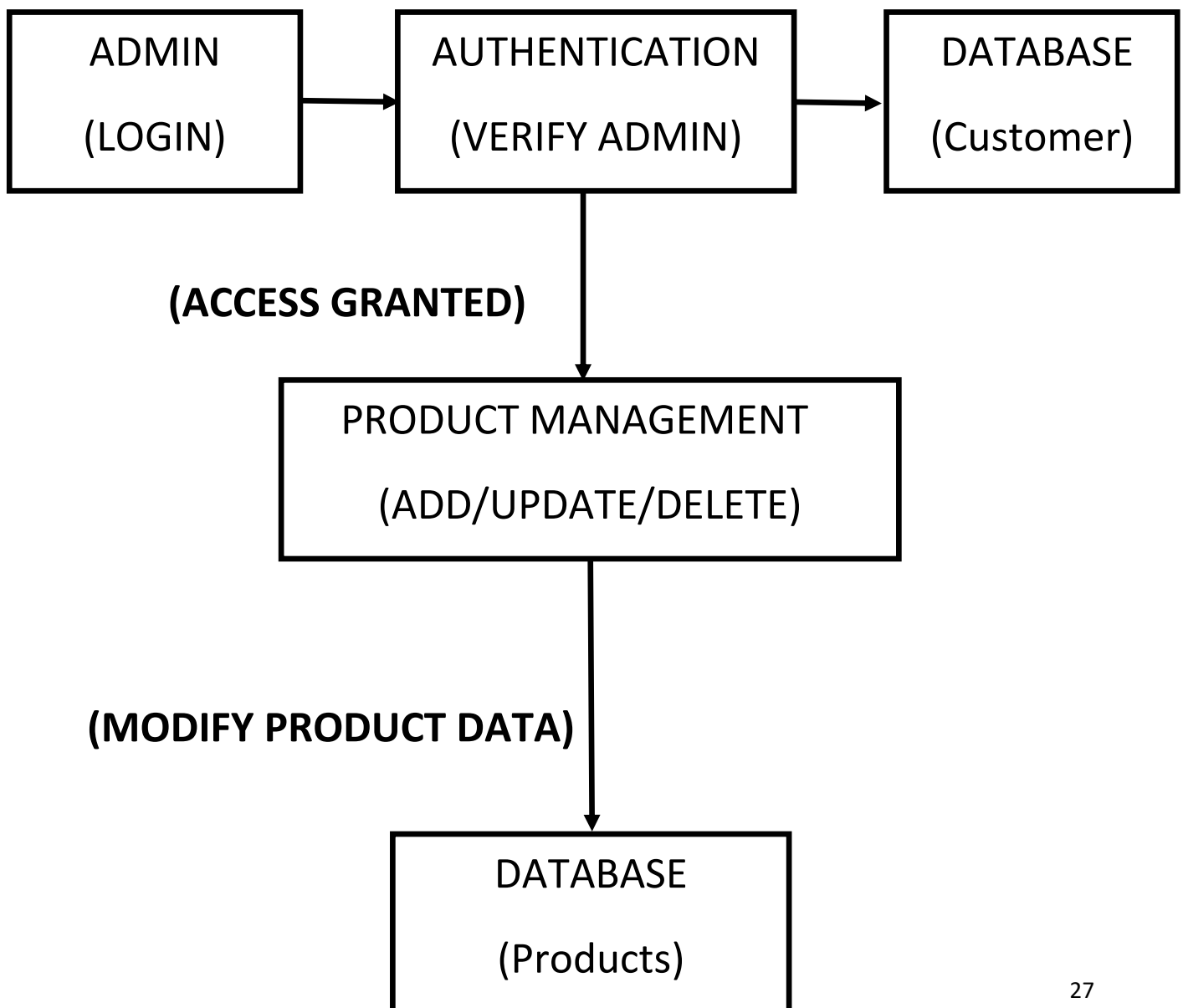


(4.2) DATA FLOW DIAGRAM

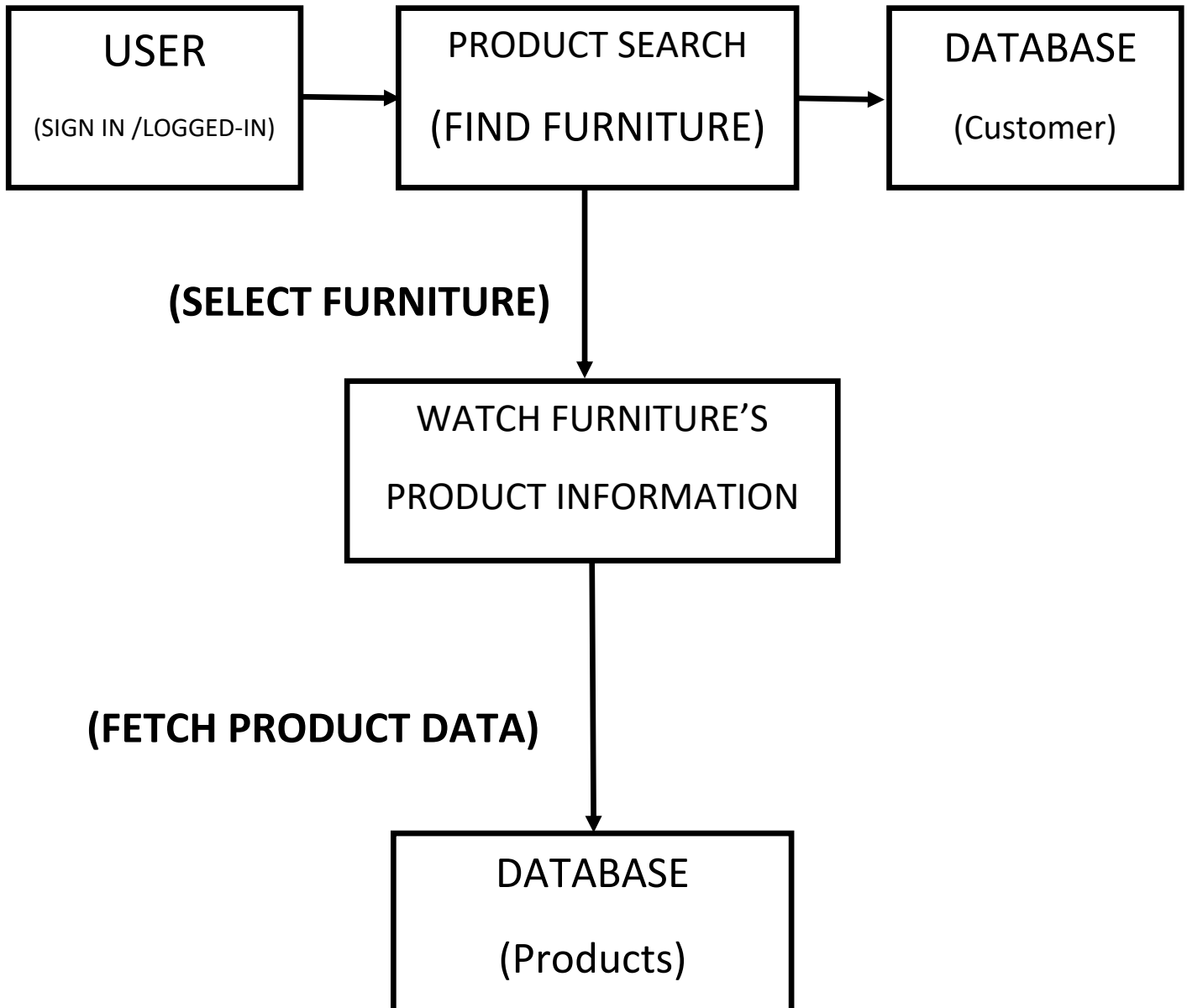
Context level diagram:-

First level DFD

Admin side DFD (1st level):-

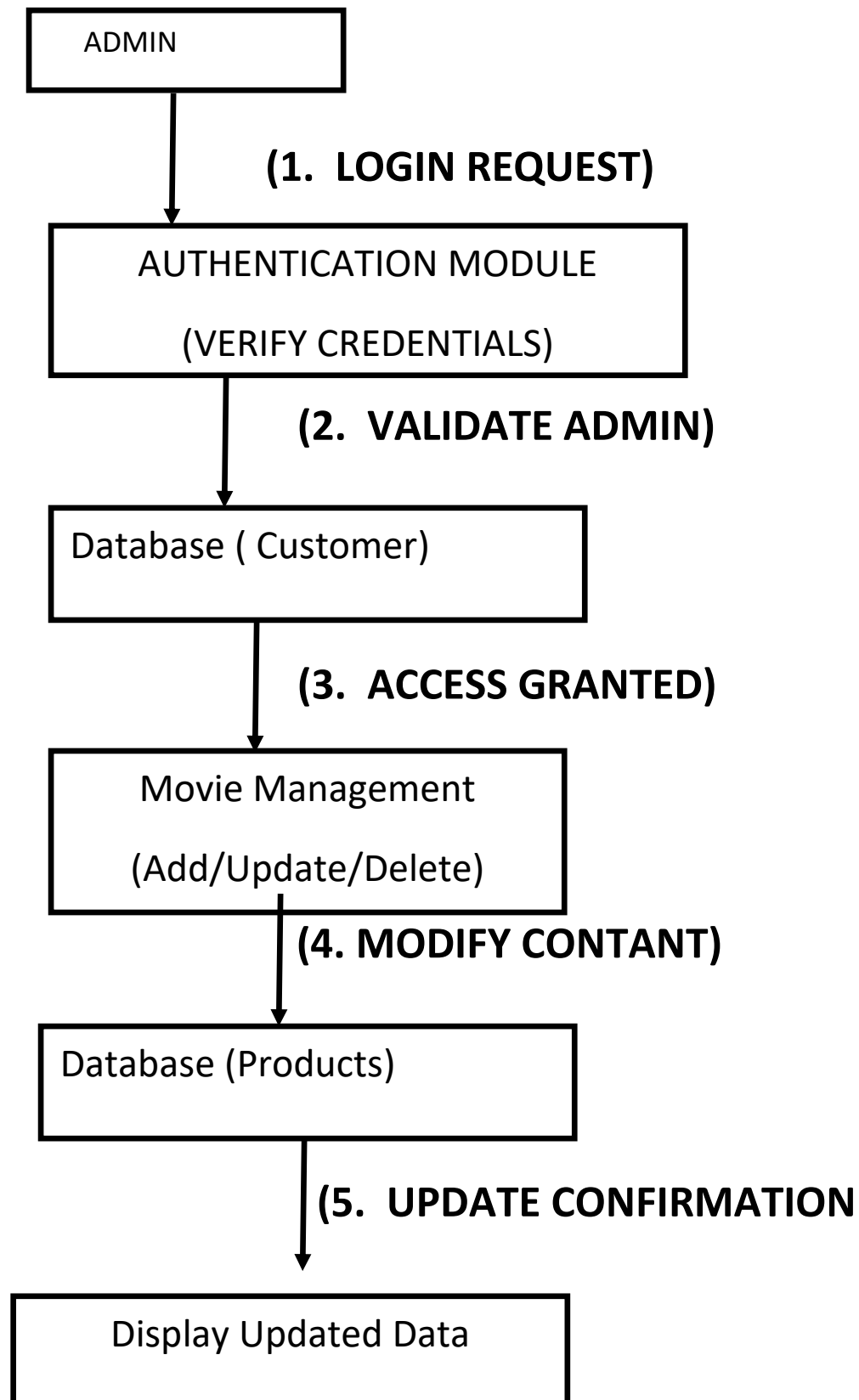


User side DFD (1st level):-

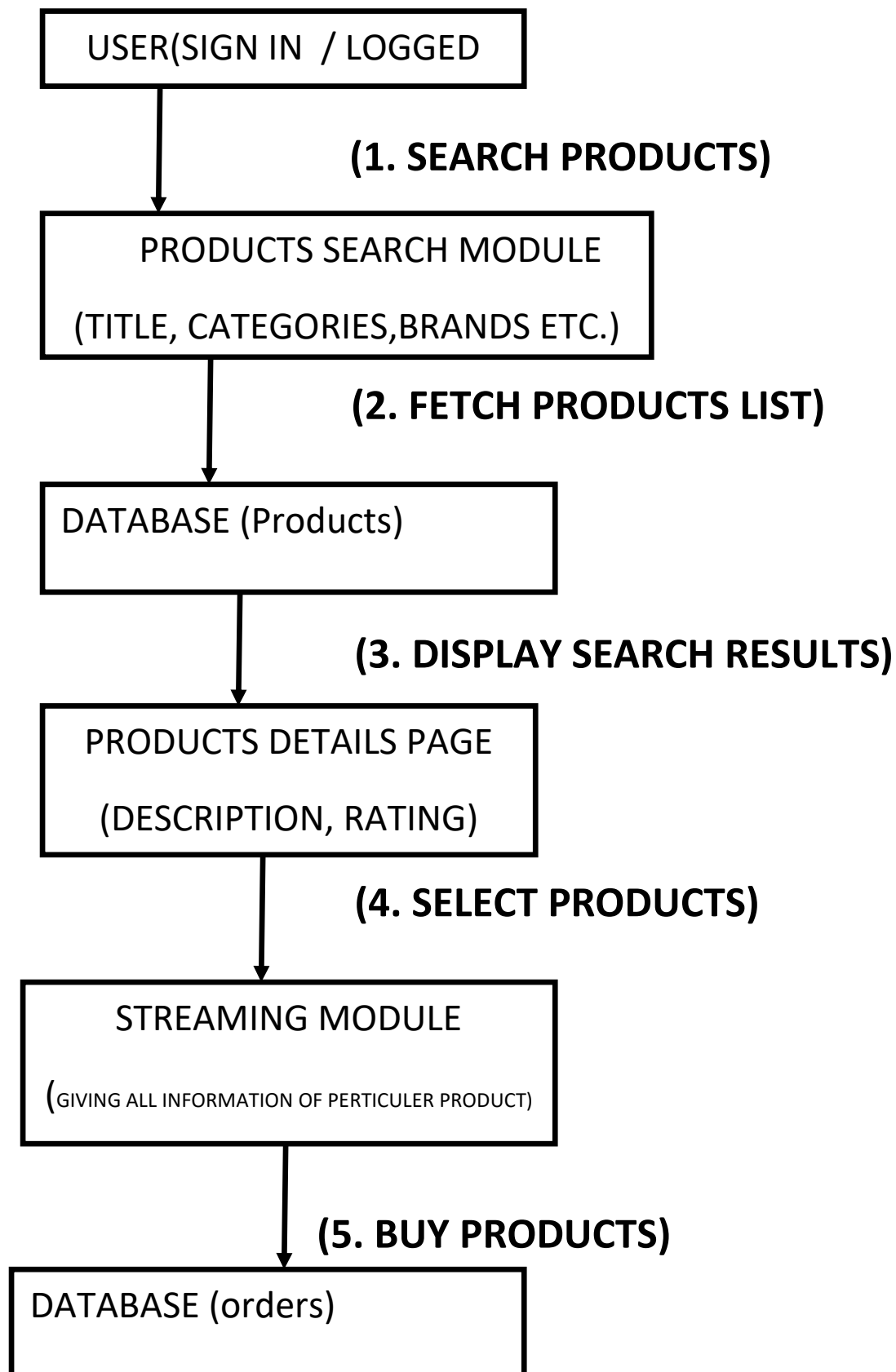


Second level DFD

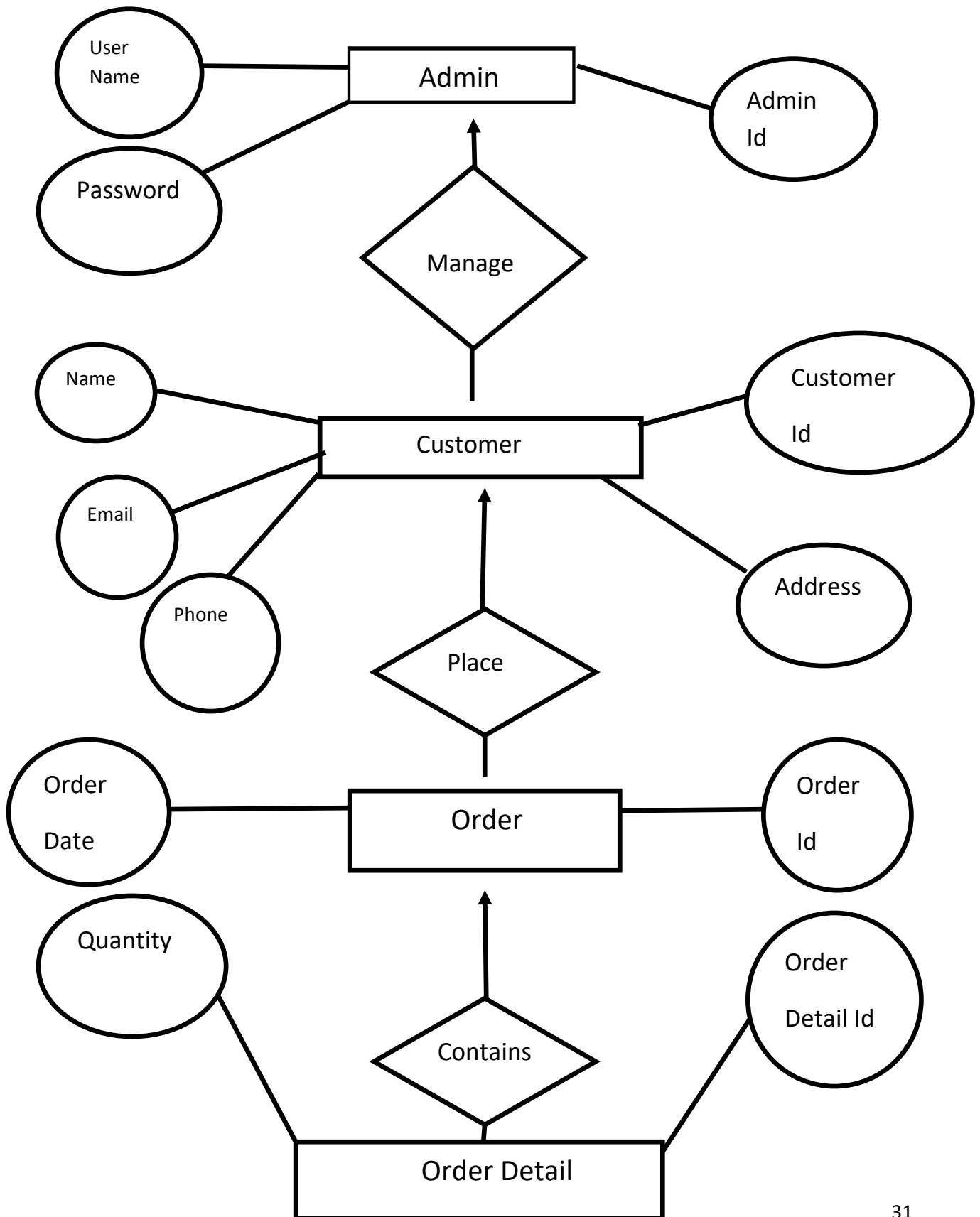
Admin side DFD (2nd level):-

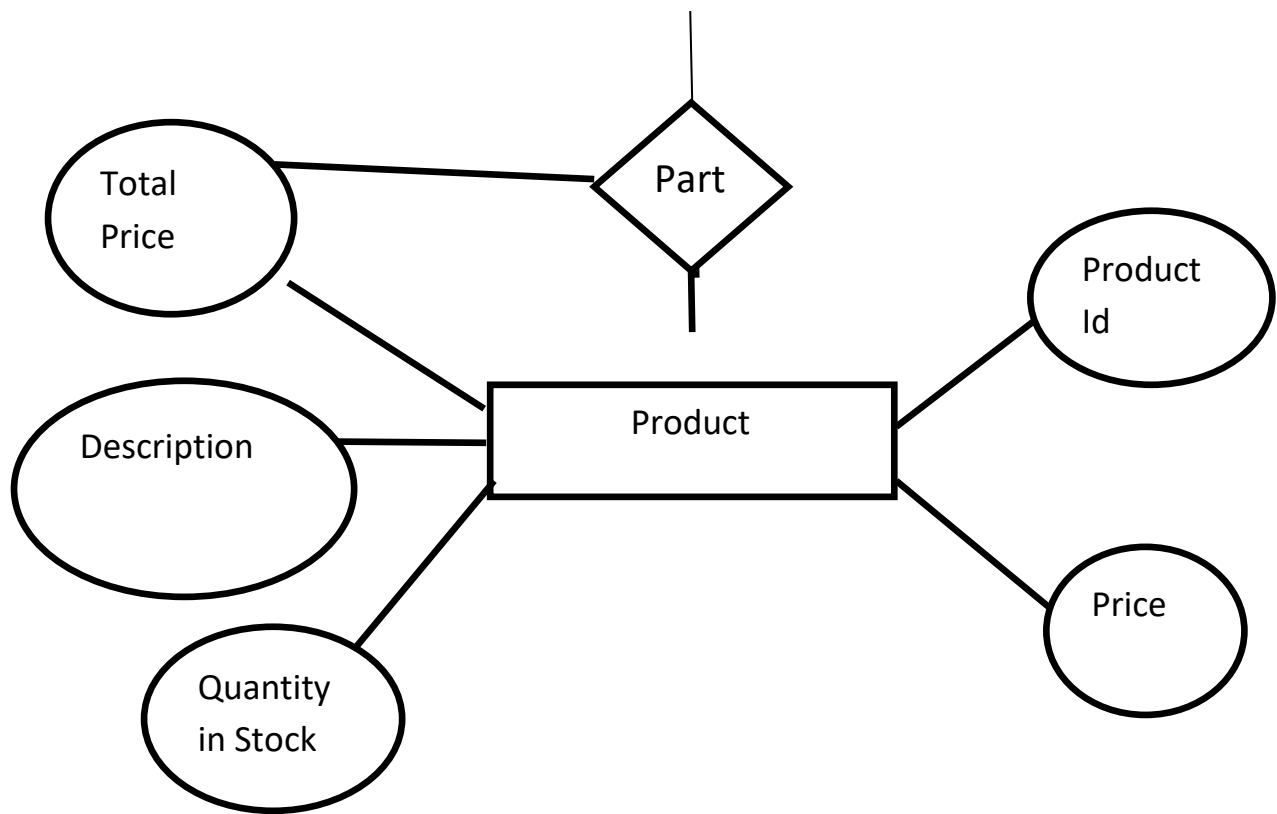


User side DFD (2nd level):-



(4.3) E-R DIAGRAM:-





(4.4) DATA DICTIONARY

TABLENAME:- Customers

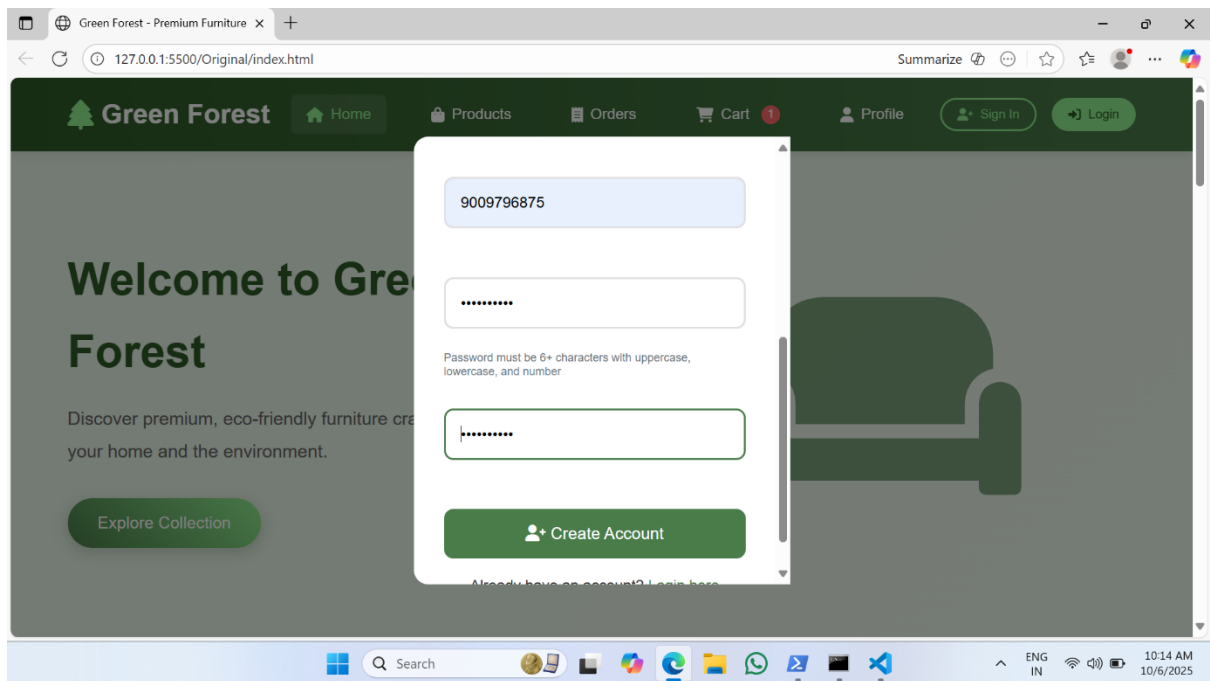
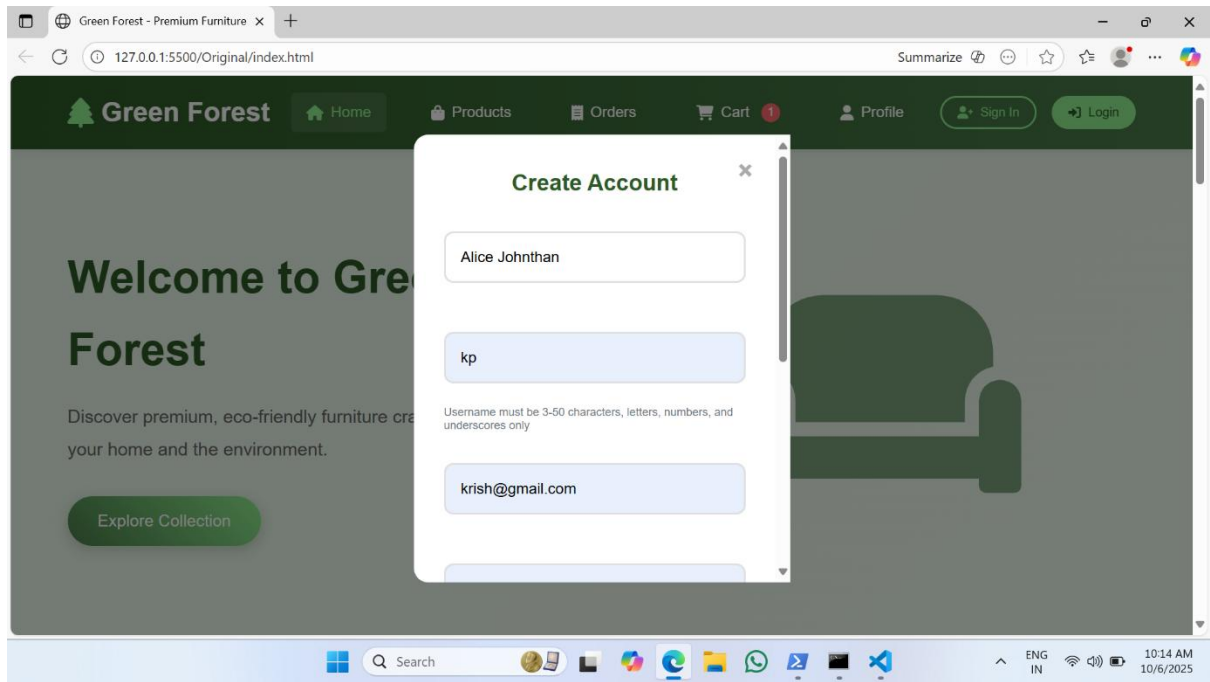
PRIMARY KEY :- E-mail

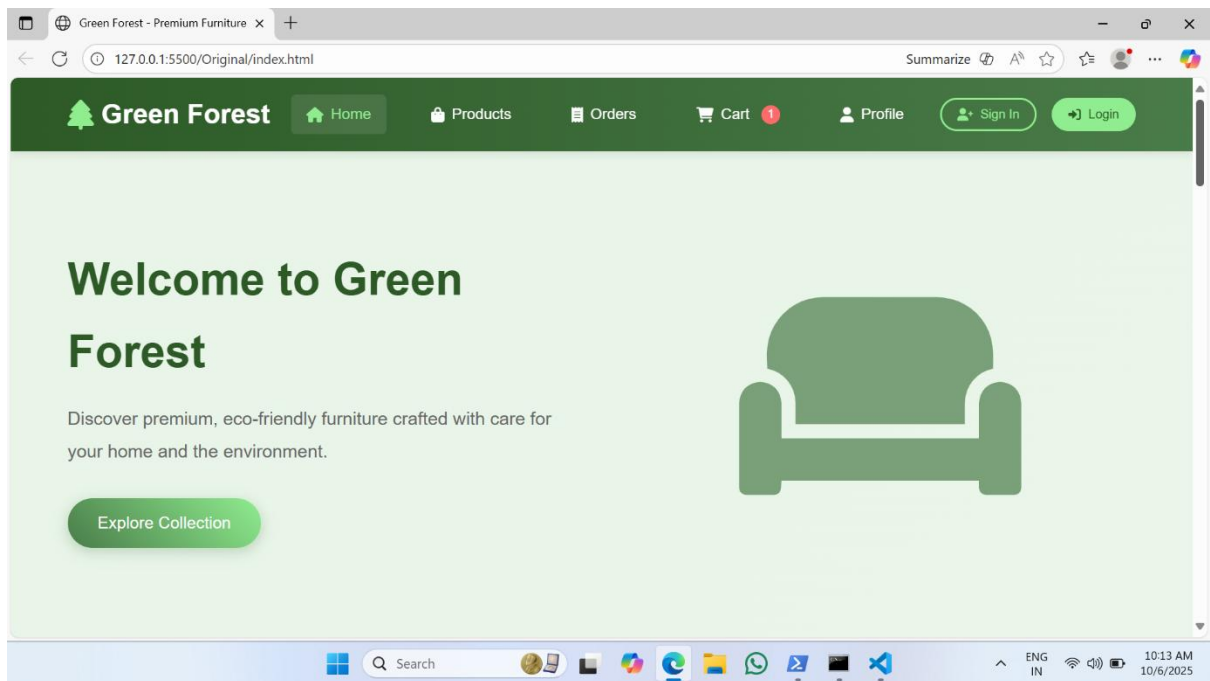
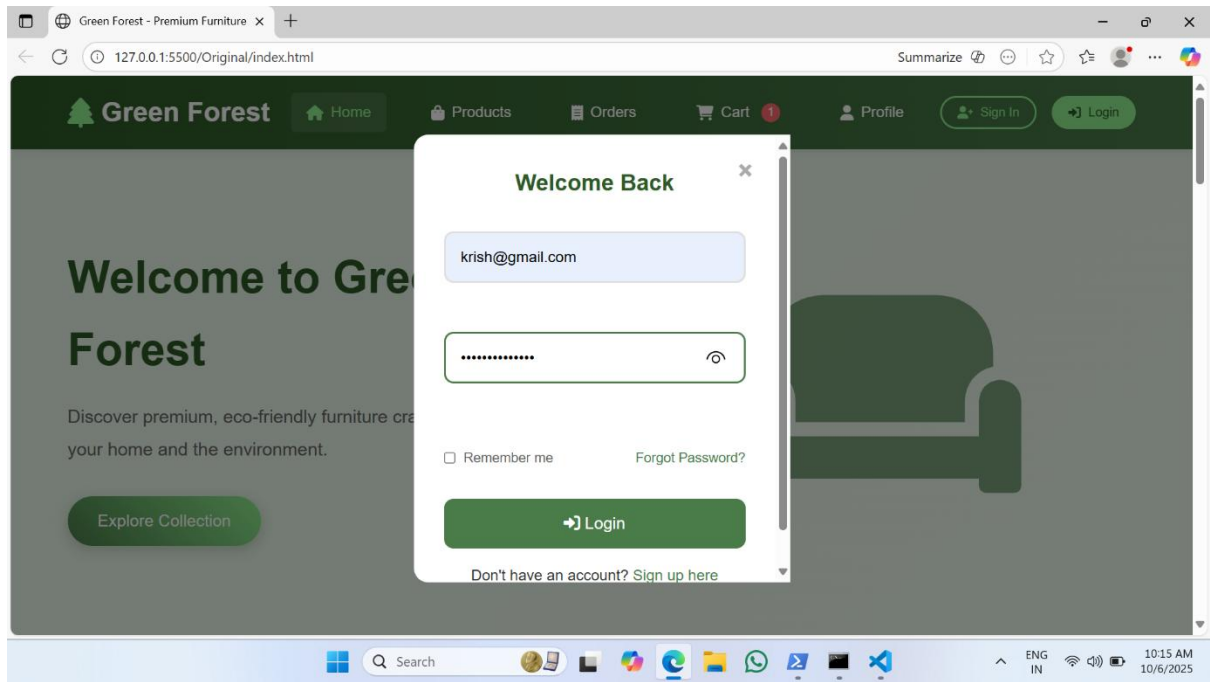
FIELDNAME	DATATYPE	DATA SIZE	CONSTRAIN
Id	INT	11	NOT NULL
Fullname	VARCHAR	50	NOT NULL
Username	VARCHAR	50	NOT NULL
Email	VARCHAR	50	UNIQUE
password	VARCHAR	20	NOT NULL

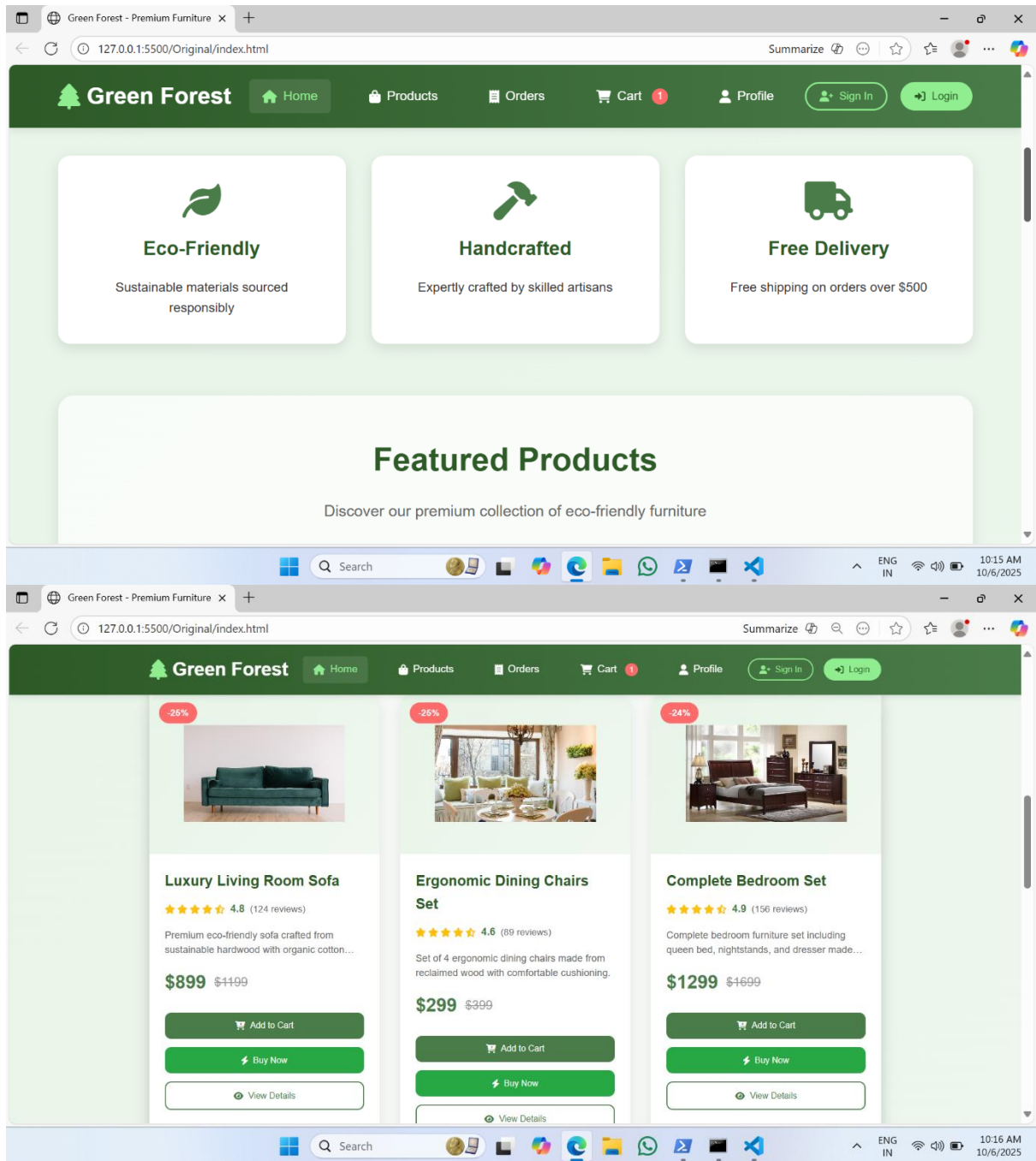
TABLENAME:- Orders

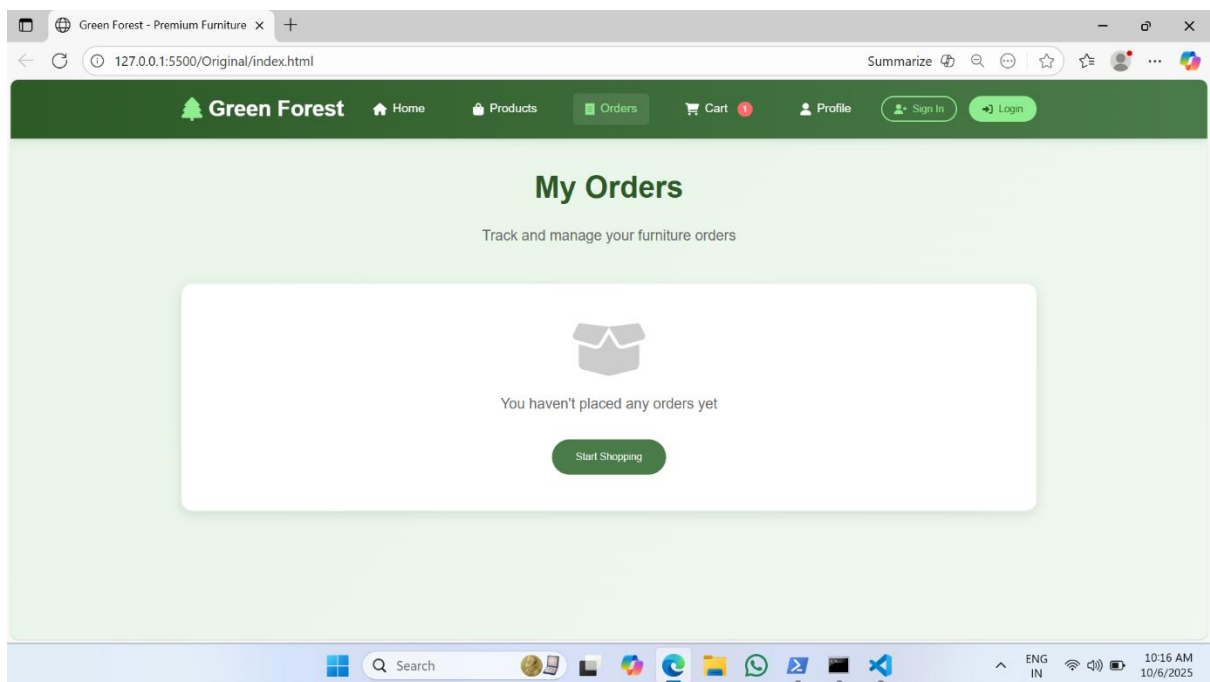
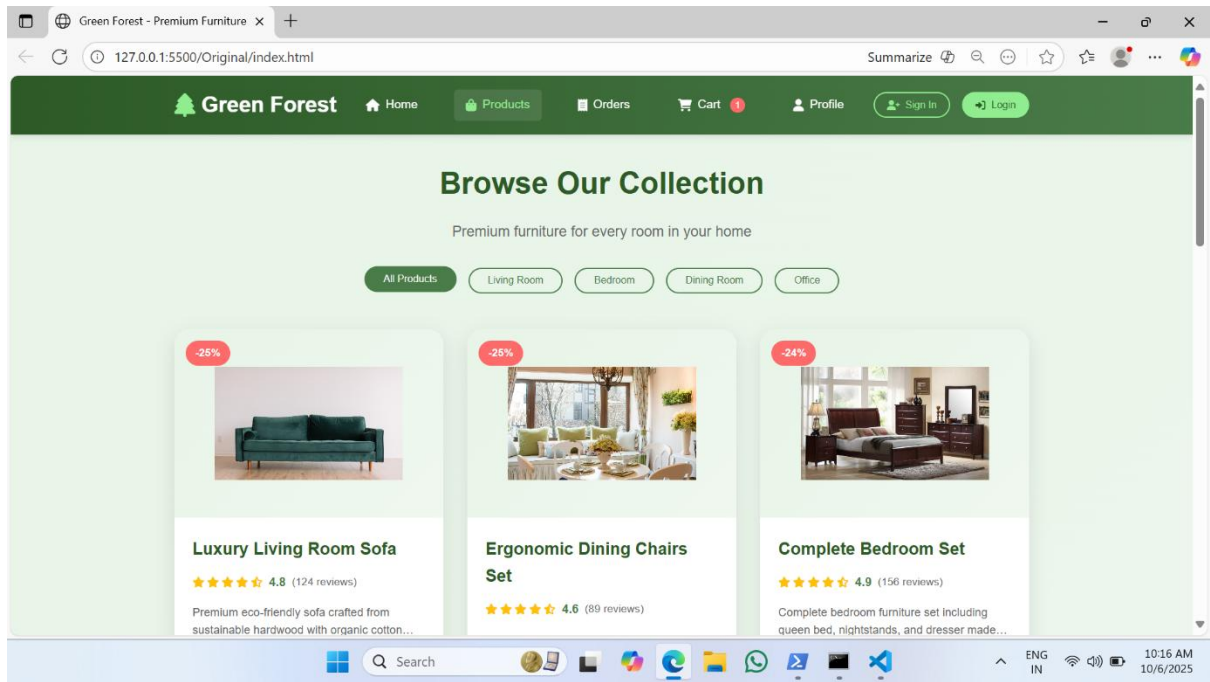
PRIMARY KEY :-ID

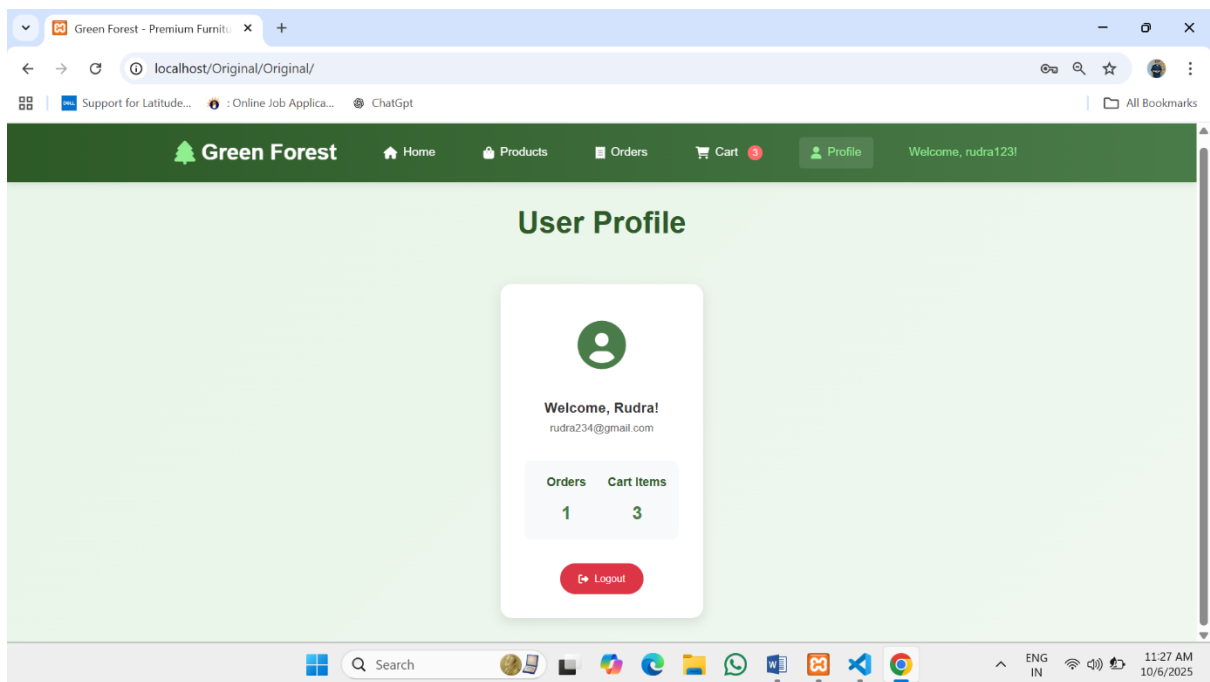
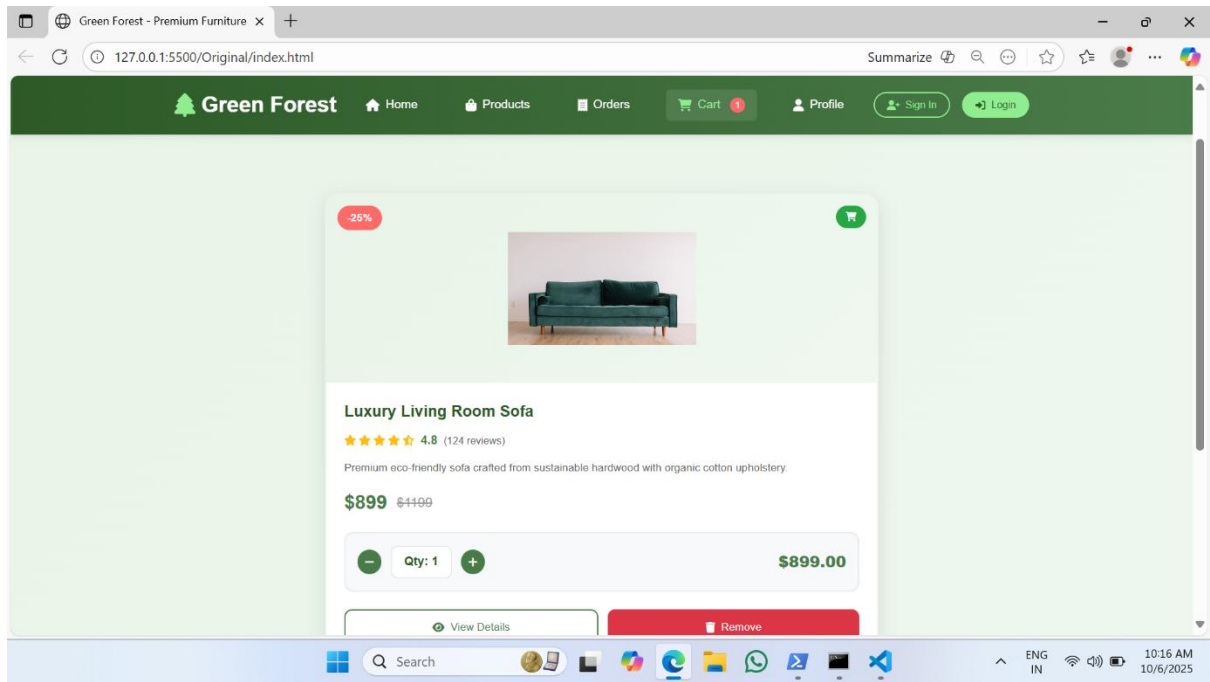
FIELDNAME	DATATYPE	DATASIZE	CONSTRAIN
id	INT	11	PRIMARY KEY
Use_id	INT	50	FOREIGN KEY
First_name	VARCHAR	50	NOT NULL
Last_name	VARCHAR	50	NOT NULL
Email	VARCHAR	50	NOT NULL
Mobile	VARCHAR	12	NOT NULL
Address	VARCHAR	12	NOT NULL
Product_id	INT	11	NOT NULL
Payment_method	VARCHAR	20	NOT NULL
City	VARCHAR	50	NOT NULL
Price	INT	50	NOT NULL

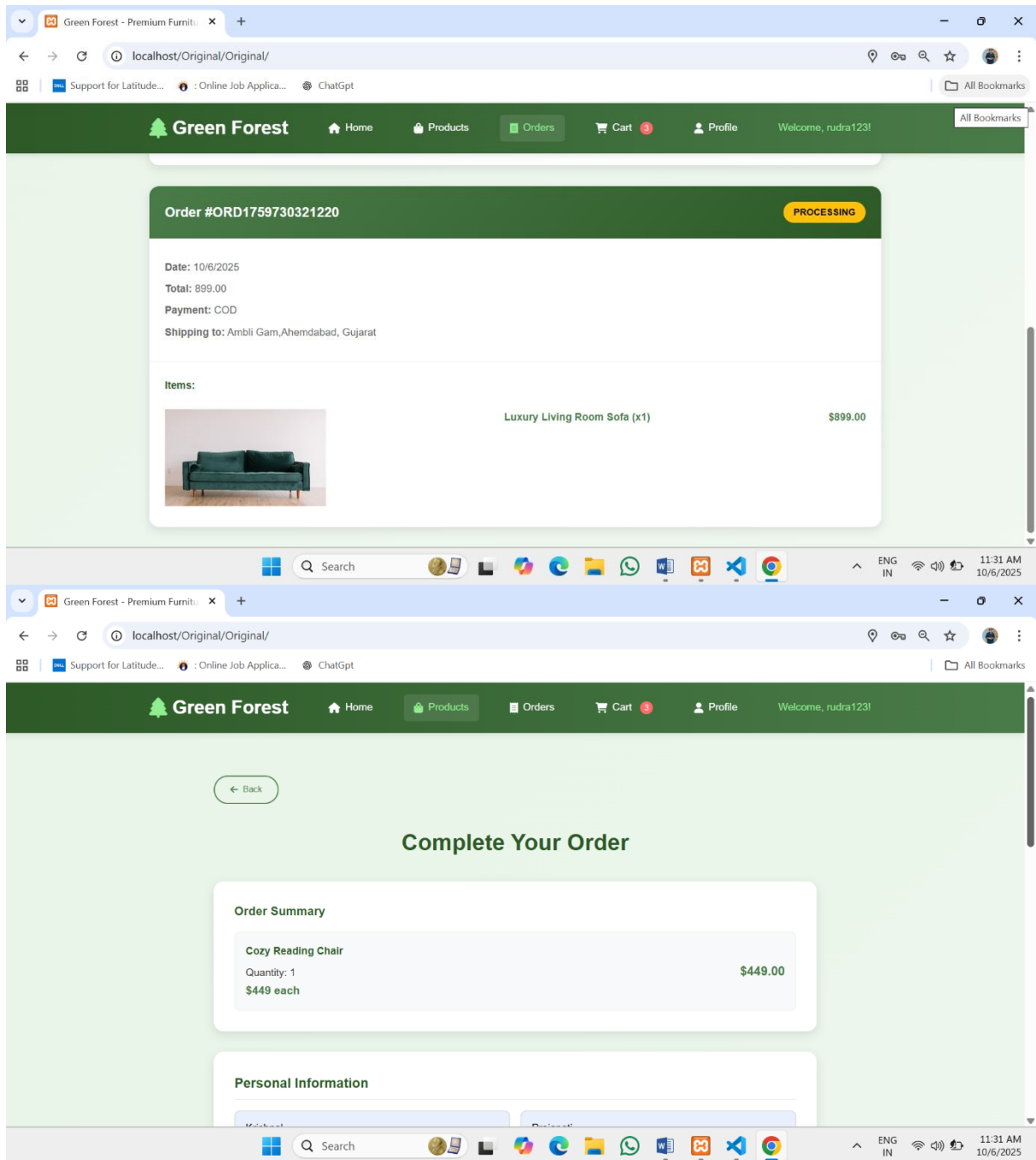












Green Forest - Premium Furnitu

localhost/Original/Original/

Support for Latitude...Online Job Applica...ChatGptAll Bookmarks

Green Forest

HomeProductsOrdersCart3Profile

Welcome, rudra123!

Personal Information

Krishnal

Prajapati

krishnalprajapati8484@gmail.com

09023960947

Shipping Address

Ambli Gam

AhemdabadGujarat

380058India

Payment Method

☒ Cash on Delivery

☐ Credit/Debit Card

☐ PayPal

Order Notes (Optional)

Any special instructions for your order...

Total: \$449.00

Confirm Order

Search

ENG IN

11:32 AM 10/6/2025