A project report on

BCA-CC-606

Furniture Shop management system

Submitted to **Smt. K.B. Parekh College of Computer Science- Mahuva**

(Affiliated to Maharaja Krishnakumarsinhji Bhavnagar University)

In partial fulfillment for the award of degree of

BACHELOR OF COMPUTER APPLICATIONS

Submitted by

JAYESH D. KALSARIYA (BCA SEMESTER -6 SEATNO:)
SUFIYAN S. KHILJI (BCA SEMESTER -6 SEATNO:)

Guided by
Mr. Amit Bhaliya
Assistant Professor
Smt. K.B. Parekh College of Computer Science- Mahuva
March - 2020

Smt. K. B. Parekh College of Computer Science Mahuva-364290

(Affiliated to Maharaja Krishnakumarsinhji Bhavnagar University)

Date: 20/03/2020

TO WHOMSOEVER IT MY CONCERN

This is to certify that the Student **Mr. Jayesh D. Kalsariya and Mr. Sufiyan S. Khilji Of** Smt. K. B. Parekh College of Computer Science Mahuva has satisfactorily completed his/her Project **FURNITURE SHOP MANAGEMENT SYSTEM** during the period December 2019 to March 2020 in the partial fulfilment of BCA-CC-606.

Name & Signature of Project Guide: **signature and seal of Principal**

Address:
Smt. K. B. Parekh College of Computer Science, Prabhat Nagar Road, Near Parekh College Campus, Cooperative Housing Society, Mahuva, Gujarat 364290 Ph-02844/228332

Email:kbpbcamahuva2000@gmail.com

ACKNOWLEDGEMEN

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 BCA and heartfelt thanks to our esteemed guide, **Mr. Amit Bhaliya**, for providing me with the right guidance and advice at the crucial junctures and for showing me the right way.

I extend my BCA thanks to our respected Head of the College **Mr. Pranav Pathak**, 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.

TABLE OF CONTENTS

TABLE OF FEGURE

Chapter 1: Introduction

- Furniture is the soul of a house; it gives a sense of fulfilling of needs. Types of furniture are of many designs and categories. It can be as small as a mouse to as gigantic as an elephant.

1.1 Background

Project Description	It is a web application. This website for is created to help increase its sales as well as to acquire more customers in the furniture market.
Project Duration	2 to 3 Month.
Project Guide	Mr. Amit Bhaliya Assistant Professor Training & Placement Coordinator
Platform	Windows 10
Technologies Used	Microsoft .NET Framework 4.5 C#.NET
Tools Used	Microsoft Visual Studio 2008 MS Access 2007 MS Word 2007.

- The aim of this system is to becomes self-reliant and attain financial
- Independence by engaging in furniture making.
- It was realized that the number of temporary customers are increasing due to increasing demand of furniture.
- I came up with a furniture management system that will end all this.
- Problems and bring the business to its standards.

1.2 Objective

- FURNITURE SHOP MANAGEMENT SYSTEM is a web application designed primarily for use in the furniture item delivery service and it also provide the information about our furniture store.
- This system will allow furniture store to increase scope of business by reducing the labor cost involved.
- The system also allows to quickly and easily manage an online items which customers can browse and use to place orders with just few clicks.

- The main point of developing this system is to help furniture store Administrator manage the furniture shop business and help customer for online ordering.

- Eliminate paper work and increase level of accuracy.

- Increase speed of service, sales volume and customer satisfaction.

1.3 Purpose

This online application enables the end users to register online, select the furniture from the furniture menu. An online orders.

By just selecting the furniture that the user want to have.

The user will be given a username and a password to login. Admin can view Customer details and product detail.

1.4 Scope of System

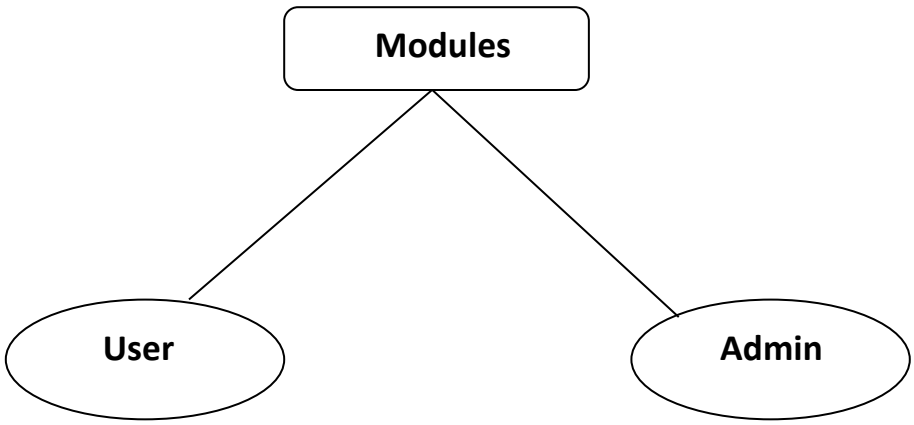
System Profile:

This furniture center is committed to being the best in all areas of its business.

Online ordering system will be a website whose main language of programming will be ASP.NET. Its main aim is to simplify and improve the efficiency of the ordering process for both customer and shop, minimize manual data entry and ensure data accuracy and security during both order placement process. Customers will also be able to view product menus.

MODULES:

There is mainly two modules



MODULES FRONT-PAGE:-

Home:

User can see furniture shop Details. Gallery, contact etc..

Gallery:

User can see all furniture like sofa, Bed, Tables etc.

About us:

User can see details about our Furniture website.

Contact:

User can see contact details our furniture Shop. And review.

Sign Up:

User Registration.

Login:

MODULES AFTER LOGIN BY USER:-

View Product:

User can see Product Details.

Order:

User can see their all orders details. And new order.

Feedback:

User can provide feedback.

Help:

Help menu.

Change Password:

User can change his her password.

Logout:

User can logout from the website.

MODULES AFTER LOGIN BY ADMIN:-

Add Product:

Admin can add new furniture product.

View Product:

Admin can see stock details.

Order Detail:

Admin can see all the orders details which is given by The customer/user.

Suggestions:

Admin can see Suggestion which is given by the user.

Customer Data:

Admin can see all the details of user/customer which is Register or login in website.

Change Password:

Admin can change password.

Logout:

Admin can logout from website.

❖ Scope:

Scope and Limitation for Online Furniture shop System is a still uses a manual procedure in keeping records of their clients and past, current and upcoming. In making an order the client must fill-up some forms such as waiver/ gate pass and the ordering.

This type of process best applies to walk-in customers only since they have the privilege of looking…

Chapter 2: Requirement and Analysis

2.1 Problem definition

- The existing system is manual system.
- Needs to be converted into automated system.
- As it has a risk of mismanagement of data, less Security, no proper coordination between die rent Applications and Users, fewer users - friendly, accuracy not guaranteed and not in reach of distant users.

2.2 Requirement Specification

- A system's requirement analysis is an important component of the system development process.
- This perhaps the most important and essential ingredient of the system analysis phase and its proper completion ensures the success of the entire system.
- It establishes what the new system must do, it involves identifying who needs what information, where, when and how.
- It also identifies the data, process and interface requirements for the users of the new system.
- Errors and omissions in requirement analysis result in user dissatisfaction with the final system and it will force to be highly cost and incur heavily loss.

- The ultimate goal of the requirement analysis is the creation of the requirement specification for the new system.

Functional Requirement

- The only requirement is to automate the whole system as a good source of providing the reliable information to that the user so that he can get the maximum benefit of the services provided by the campus/organization.

Non-functional Requirement

The supplementary specification applies to furniture. This specification defines the non-functional requirement of the system such as:

- **Functionality**

Since it web application, one or more user may use it at a time using the web over the internet.

- **Usability**

Web Browser interface

Any operating system running the latest version of the browser

- **Reliability *:***

The system is available during online time mode using the internet.

❖ **Performance*:***

The performance depends on hardware specification of the server used.

2.3 Hardware Requirements

- ❖ Processor Dual core or above
- ❖ HDD 500 GB
- ❖ RAM 1 GB

2.4 Software Requirements

Frontend Technology

1. ASP.NET
2. Browser

Backend tools

1. MS Access 2007

2.5 Planning Scheduling

Software Project Planning

- Goal is to establish a pragmatic strategy for controlling, tracking, and monitoring a complex technical project

- Must deal with:

- Project complexity: has a strong effect but is heavily influenced by past practitioner experience

- Project size: as size increases the interdependency of elements also grows. Watch out for scope creep (when customers change requirements mid-cycle)

- The degree of structural uncertainty: the degree to which requirements are solidified and the ease of functional decomposition.

The purpose of project planning is to ensure that the end result is completed on time, within budget, and exhibits quality!

❖ Project Planning

The main focus of the project was to create a single working "furniture shop" management system that acts as both a terminal for taking orders and a terminal for generating reports and making changes to items on the menu.

Project planning was done to define the scope of the project, assess risks, and estimate and schedule project activities and thereby lay the foundation for the execution, monitoring and control of the project.

- **Study of the Problem**

The furniture is critical to set up online order, customers to browse through the furniture categories**.** This is a small scale project for furniture shop.

CUSTOMER

CUSTOMER ROLE:

The customers can login/logout the System. He /She can view his/her furniture details.

❖ Scheduling

The project scheduling is a mechanism to communicate what tasks need to get done and which organizational resources will be allocated complete those tasks in what timeframe.

A project scheduling is a document collecting all the work needed to deliver the project on time.

Spiral Model

The spiral model combines the idea of iterative development with the systematic, controlled aspects of the waterfall model. This Spiral model is a combination of iterative development process model and sequential linear development model i.e. the waterfall model with a very high emphasis on risk analysis. It allows incremental releases of the product or incremental refinement through each iteration around the spiral.

❖ Spiral Model – Design

The spiral model has four phases. A software project repeatedly passes through these phases in iterations called Spirals.

❖ Identification

This phase starts with gathering the business requirements in the baseline spiral. In the subsequent spirals as the product matures, identification of system requirements, subsystem requirements and unit requirements are all done in this phase.

This phase also includes understanding the system requirements by continuous communication between the customer and the system analyst. At the end of the spiral, the product is deployed in the identified market.

❖ Design

The Design phase starts with the conceptual design in the baseline spiral and involves architectural design, logical design of modules, physical product design and the final design in the subsequent spirals.

❖ Construct or Build

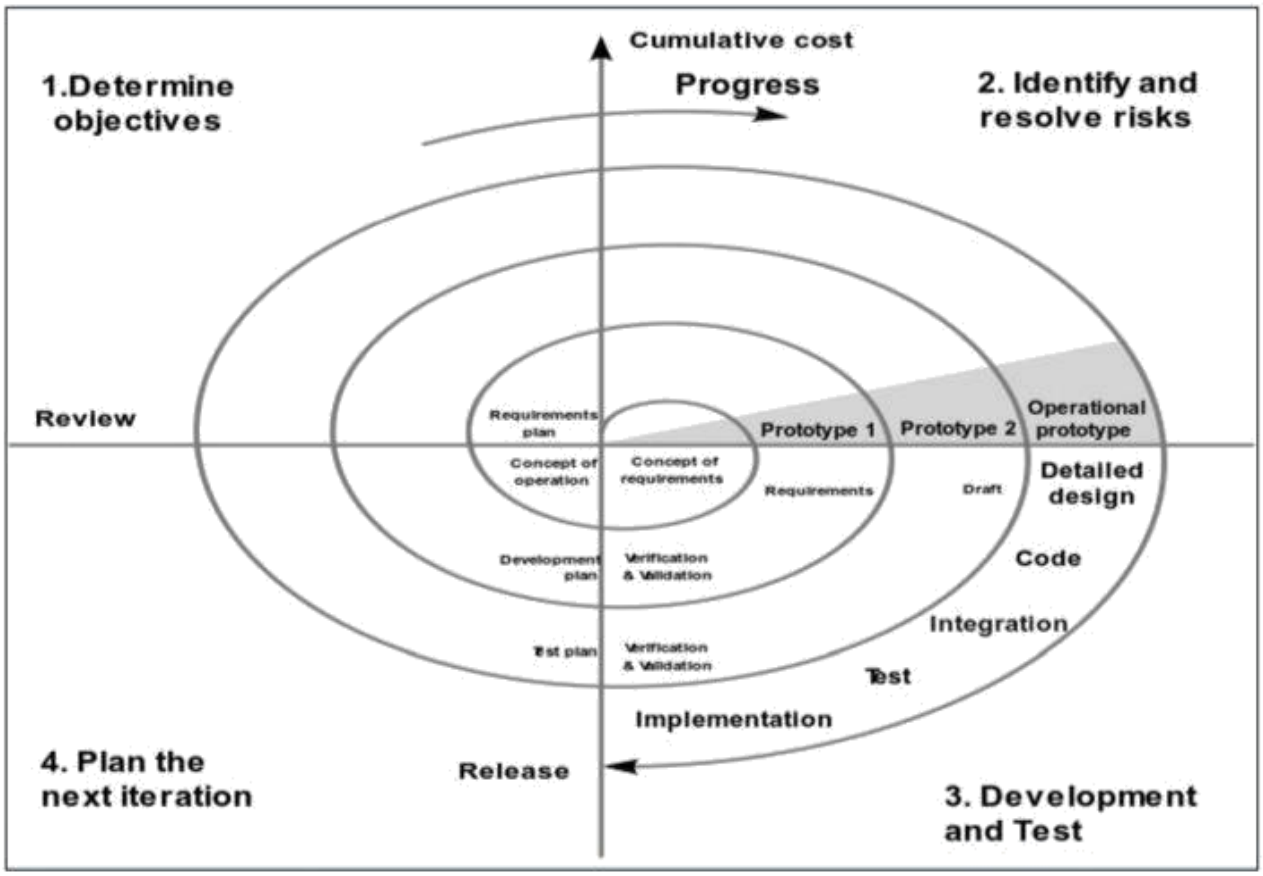
The Construct phase refers to production of the actual software product at every spiral. In the baseline spiral, when the product is just thought of and the design is being developed a POC (Proof of Concept) is developed in this phase to get customer feedback.

Then in the subsequent spirals with higher clarity on requirements and design details a working model of the software called build is produced with a version number. These builds are sent to the customer for feedback.

❖ Evaluation and Risk Analysis

Risk Analysis includes identifying, estimating and monitoring the technical feasibility and management risks, such as schedule slippage and cost overrun. After testing the build, at the end of first iteration, the customer evaluates the software and provides feedback.

The following illustration is a representation of the Spiral Model, listing the activities in each phase.



[Spiral model]

Based on the customer evaluation, the software development process enters the next iteration and subsequently follows the linear approach to implement the feedback suggested by the customer. The process of iterations along the spiral continues throughout the life of the software.

❖ Spiral Model Application

The Spiral Model is widely used in the software industry as it is in sync with the natural development process of any product, i.e. learning with maturity which involves minimum risk for the customer as well as the development firms.

❖ The following pointers explain the typical uses of a Spiral Model −

- When there is a budget constraint and risk evaluation is important.
- For medium to high-risk projects.
- Long-term project commitment because of potential changes to economic priorities as the requirements change with time.
- Customer is not sure of their requirements which is usually the case.
- Requirements are complex and need evaluation to get clarity.
- New product line which should be released in phases to get enough customer feedback.
- Significant changes are expected in the product during the development cycle.

❖ Spiral Model - Pros and Cons

The advantage of spiral lifecycle model is that it allows elements of the product to be added in, when they become available or known. This assures that there is no conflict with previous requirements and design.

This method is consistent with approaches that have multiple software builds and releases which allows making an orderly transition to a maintenance activity. Another positive aspect of this method is that the spiral model forces an early user involvement in the system development effort.

On the other side, it takes a very strict management to complete such products and there is a risk of running the spiral in an indefinite loop. So, the discipline of change and the extent of taking change requests is very important to develop and deploy the product successfully.

❖ The advantages of the Spiral SDLC Model are as follows –

Changing requirements can be accommodated.

Allows extensive use of prototypes.

Requirements can be captured more accurately.

Users see the system early.

Development can be divided into smaller parts and the risky parts can be developed earlier which helps in better risk management.

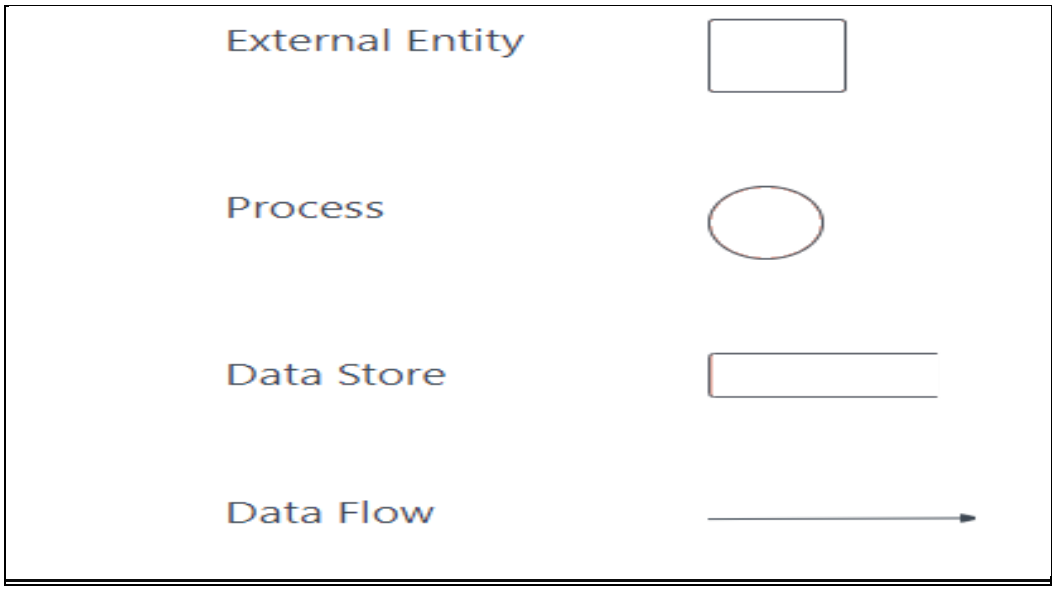
Chapter 3 : System Design

DFD

➢ Data flow diagram shows the way information flows through a process or system. It includes data inputs and outputs, data stores, and the various sub processes the data moves through. DFDs are built using standardized symbols and notation to describe various entities and their relationships.

➢ Data flow diagrams visually represent systems and processes that would be hard to describe in a chunk of text. You can use these diagrams to map out an existing system and make it better or to plan out a new system for implementation. Visualizing each element makes it easy to identify inefficiencies and produce the best possible system.

Symbol of DFD



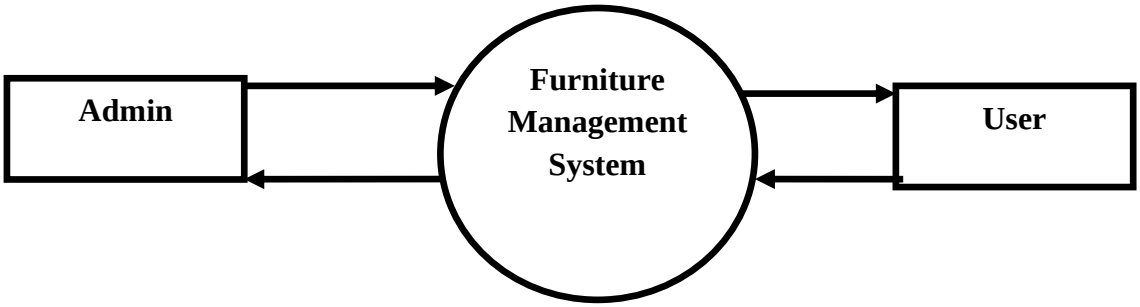
[Figure 1: Symbol of DFD]

Data flow diagram levels

❖ Level-0 DFD

➢ Also known as context diagrams, are the most basic data flow diagrams. They provide a broad view that is easily digestible but offers little detail.

❖ Level-0 DFD

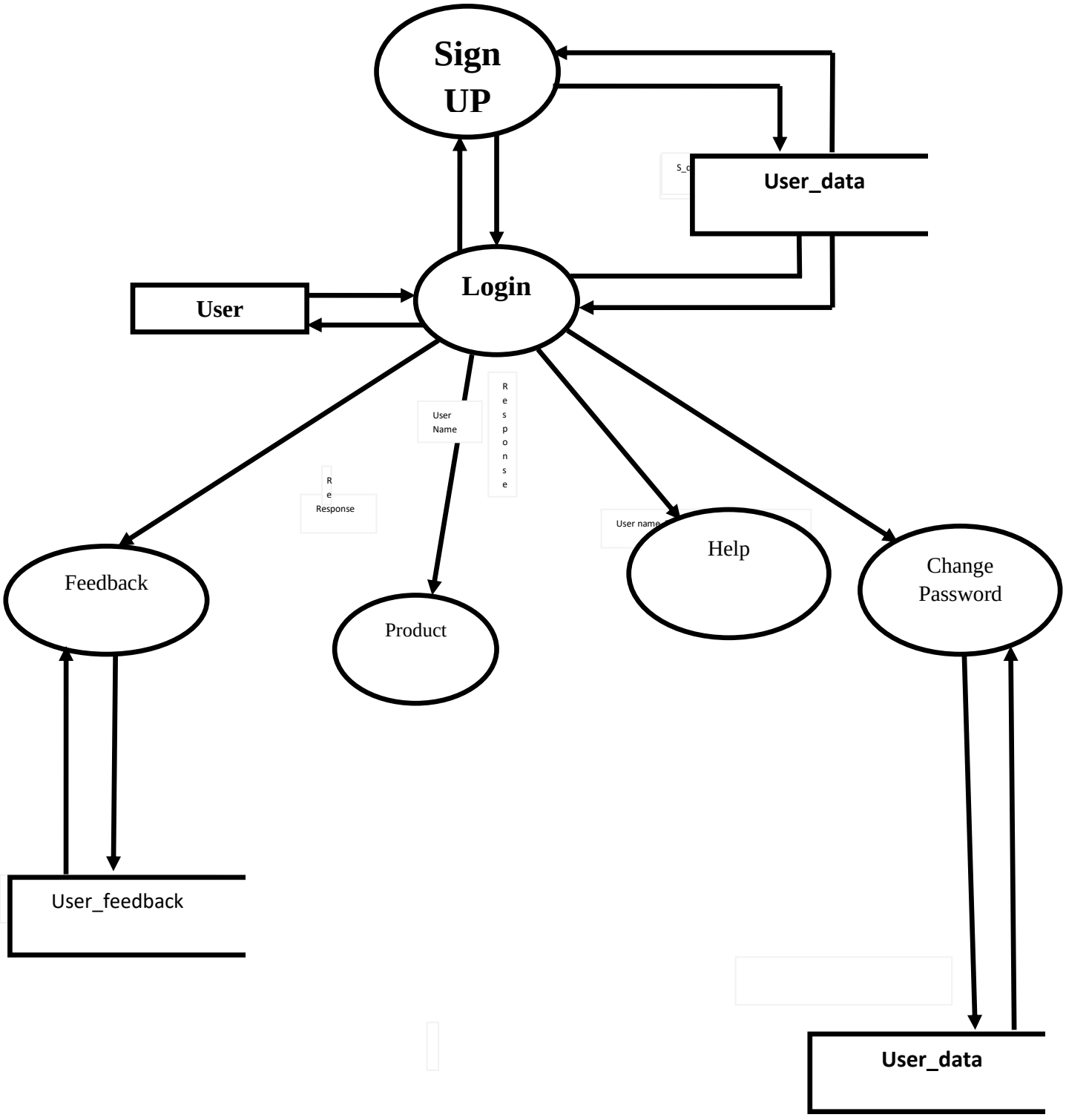


[System: o level DFD]

Level-1:-

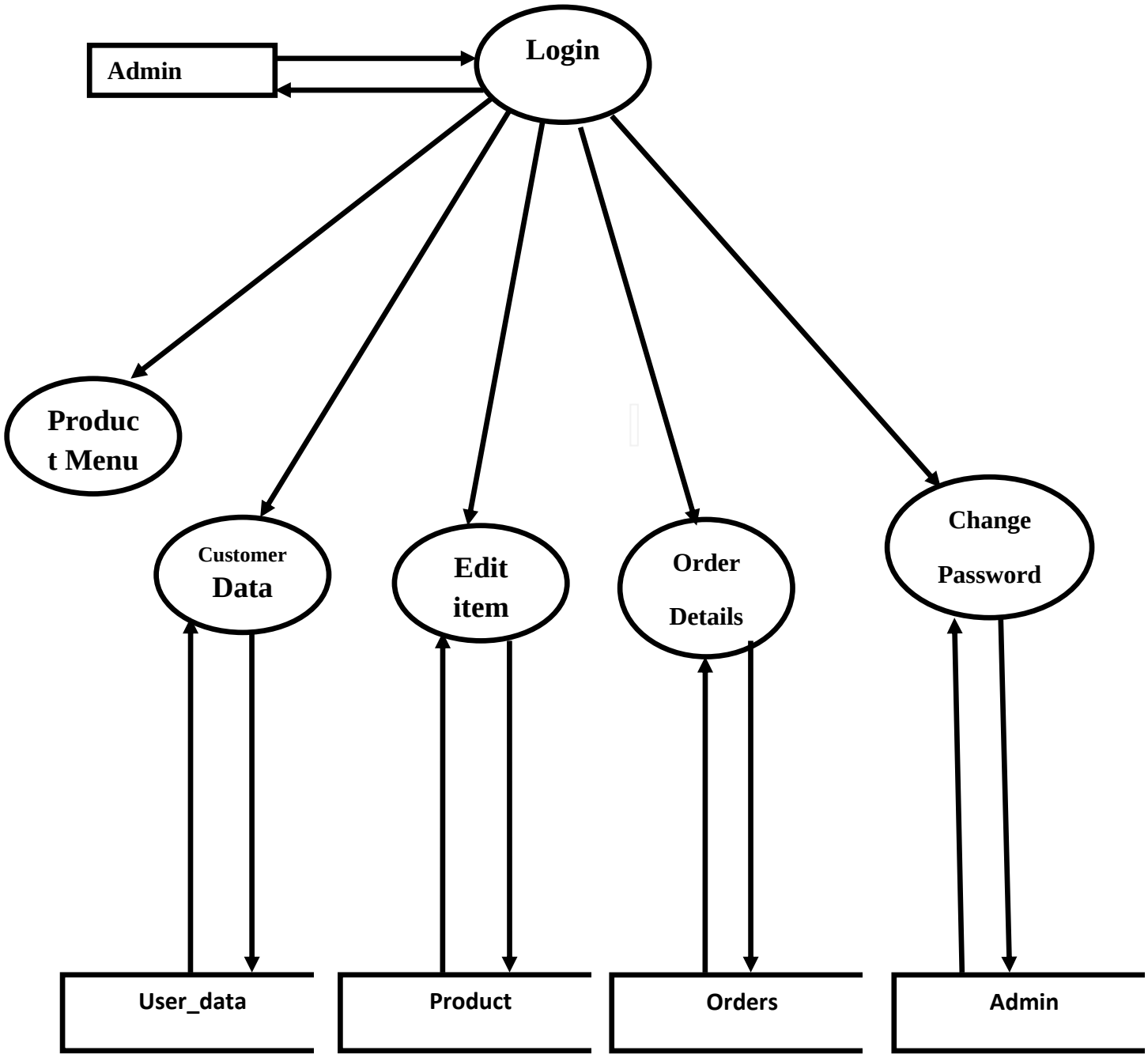
➢ Level 1 DFDs are still a general overview, but they go into more detail than a context diagram. In a level 1 data flow diagram, the single process node from the context diagram is broken down into sub processes. As these processes are added, the diagram will need additional data flows and data stores to link them together.

- **level-1 User:**



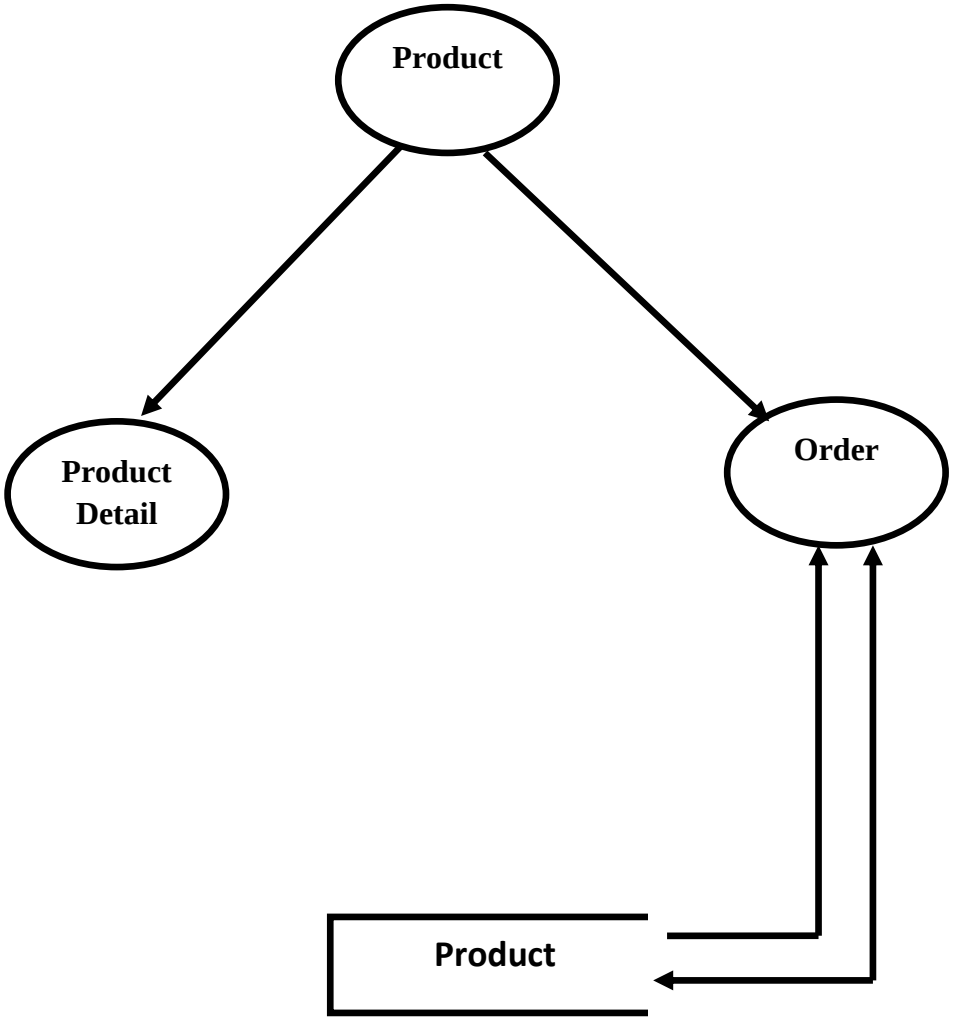
[User: 1st Level]

- **level-1 Admin:**



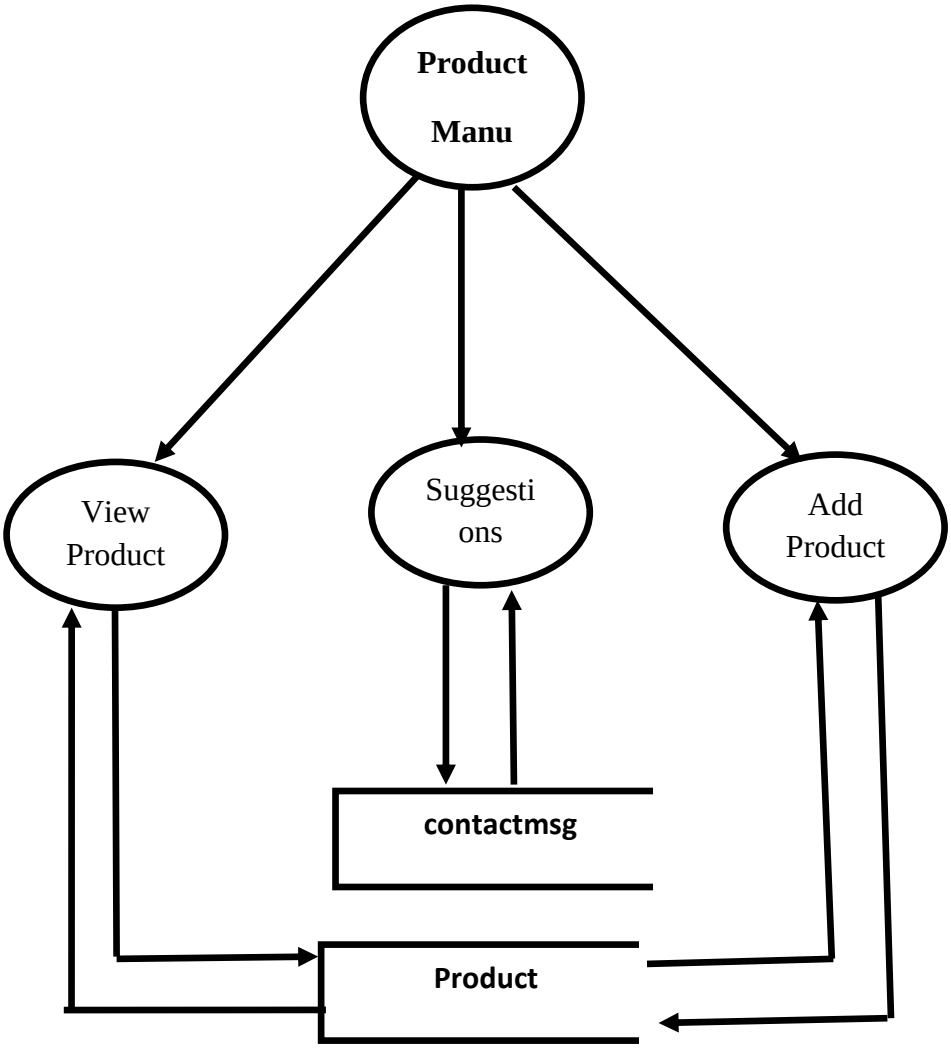
[Admin 1st Level DFD]

- **2nd Level DFD :User**



[User 2nd Level DFD]

- **2nd Level DFD : Admin**

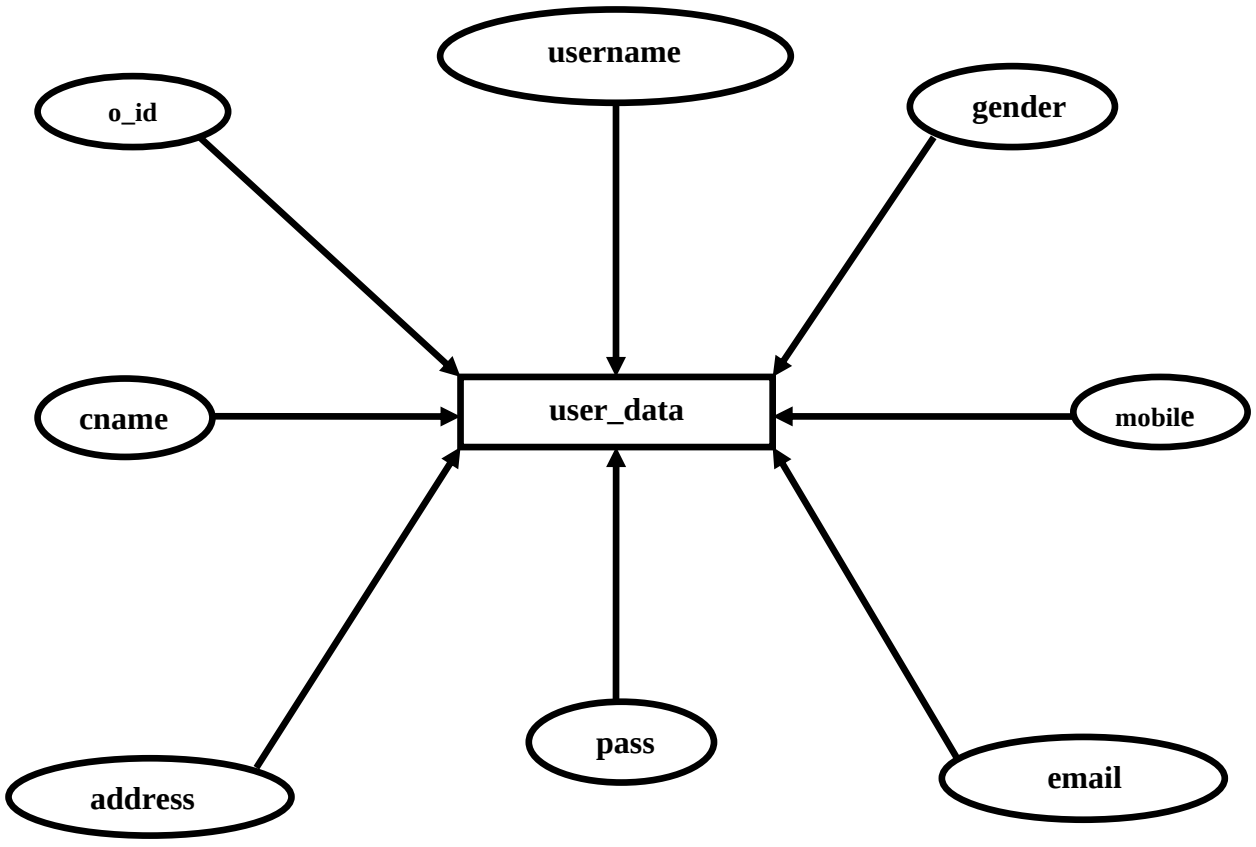


[Admin 2nd Level DFD]

E-R Diagram

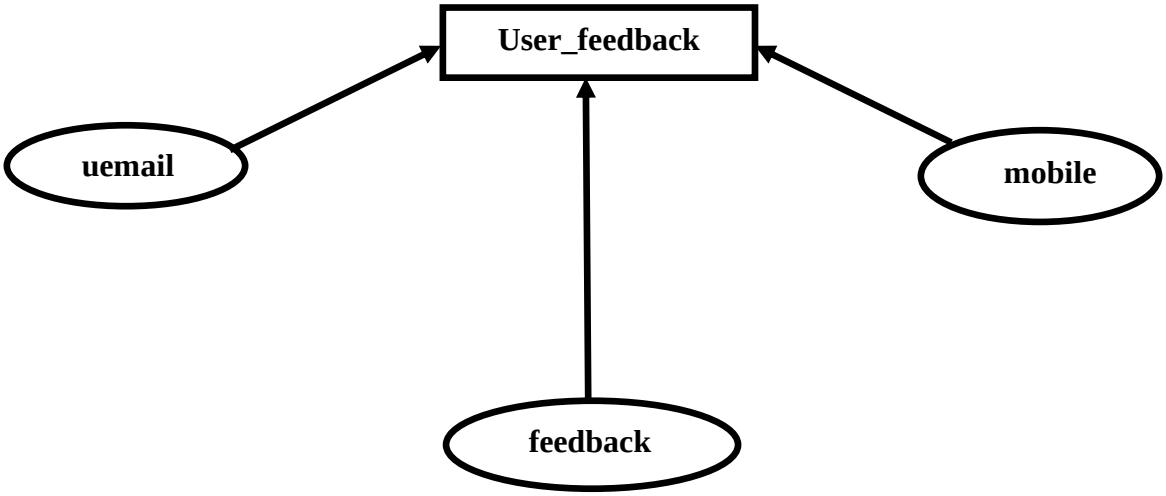
Entity Relationship Diagram, also known as ERD, ER Diagram or ER model, is a type of structural diagram for use in database design. An ERD contains different symbols and connectors that visualize two important information. The major entities within the system scope, and the inter-relationships among these entities.

➢ Table : user_data

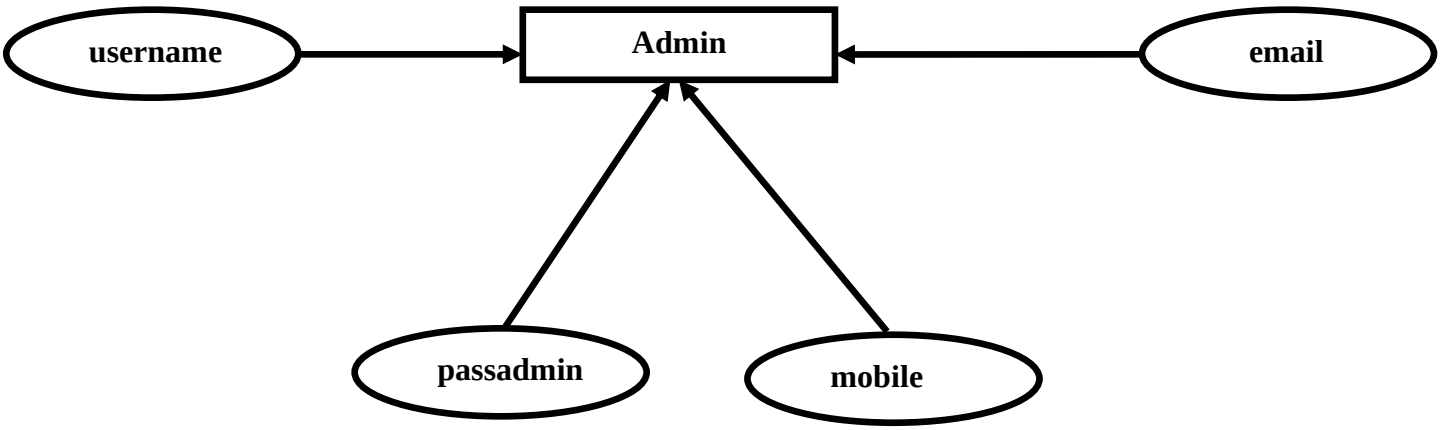


[Table user_data: ER Diagram]

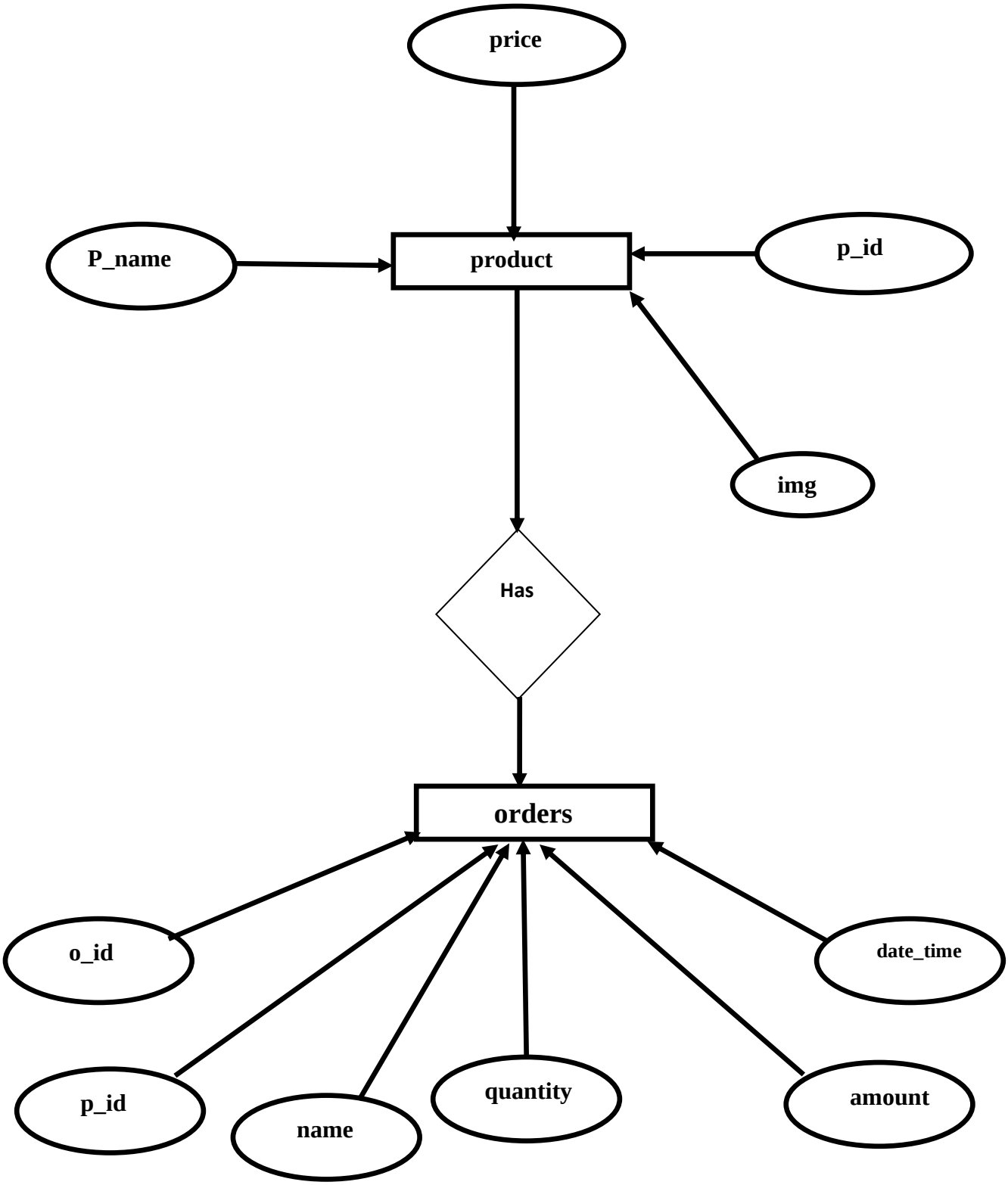
- **Table : User_feedback**



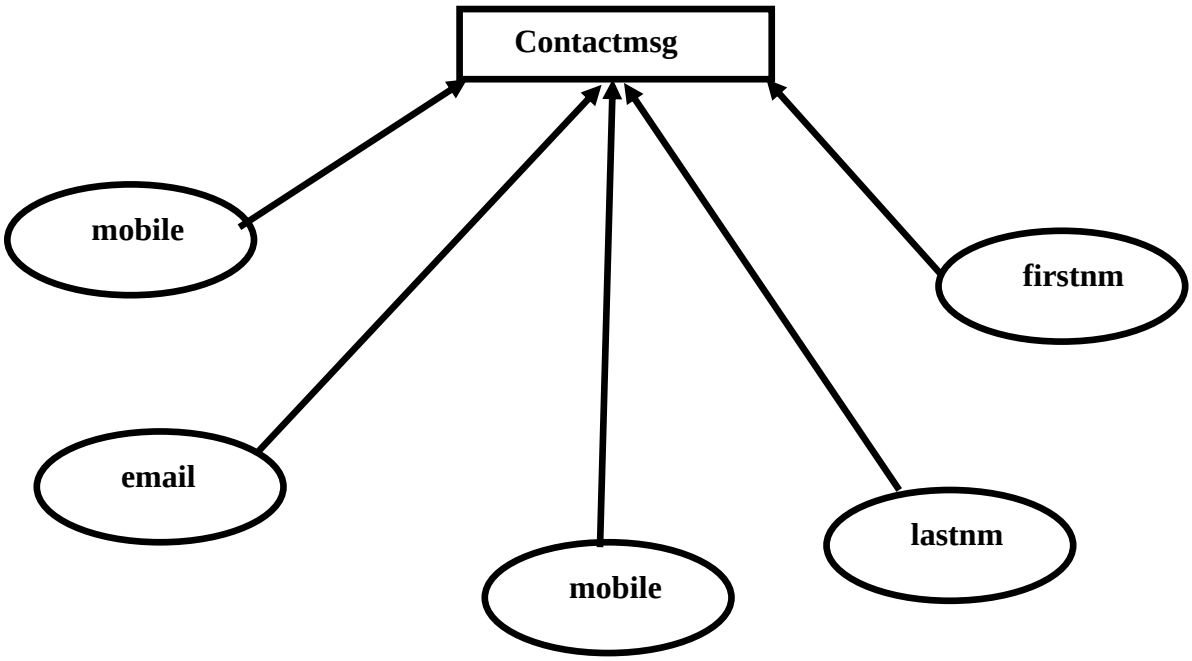
[Table user_feedback: ER Diagram]



[Table: Admin]



[Table: product, orders: ER Diagram]



[Table : contactmsg]

Data dictionary

Table No:			**1**		
Table Name:			**User_data**		
Seq. no	**Column Name**	**Size**	**Column type**	**Column description**	**Pk/fk**
1	o_id	10	Auto Number	Customer ID	**Primary key**
2	cname	20	Text	Customer Name	
3	username	30	Text	Customer username	
4.	gender	10	Text	Gender	
5.	mobile	10	Number(double)	Mobile	
6.	email	30	Text	Email Id	
7.	pass	10	Text	User password	
8.	address	30	text	Address	

[Table: user_data]

Table No:			**2**		
Table Name:			**User_feedback**		
Seq. no	**Column Name**	**Size**	**Column type**	**Column description**	**Pk/fk**
1.	uemail	30	Text	User Email ID	
2.	mobile	10	Number	Mobile Number	
3.	feedback	30	Text	Customer Feedback	

[Table : user_feedback]

Table No:			**3**		
Table Name:			**product**		
Seq. no	**Column Name**	**Size**	**Column type**	**Column description**	**Pk/fk**
1.	P_id	10	Auto number	Product Id	**Primary key**
2.	P_name	20	Text	Product Name	
3.	price	20	Number	Product price	
4.	img	50	Text	Product Image	

[Table: product]

Table No:			**4**		
Table Name:			**orders**		
Seq. no	**Column Name**	**Size**	**Column type**	**Column description**	**Pk/fk**
1.	o_id	10	number	Order id	
2.	P_id	10	Number	Product id	fk
3.	name	20	text	Product Name	
4.	amount	10	number	Product Price	
5.	Quantity	10	Number	Product quantity	
6	date_time	10	Date / Time	Order Date	

[Table: orders]

Table No:			**5**		
Table Name:			**Admin**		
Seq. no	**Column Name**	**Size**	**Column type**	**Column description**	**Pk/fk**
1.	username	30	Text	Admin username	
2.	passadmin	15	Text	Admin password	
3.	mobile	12	Number(Double)	Admin mobile number	
4	Email	30	Text	Admin email id	

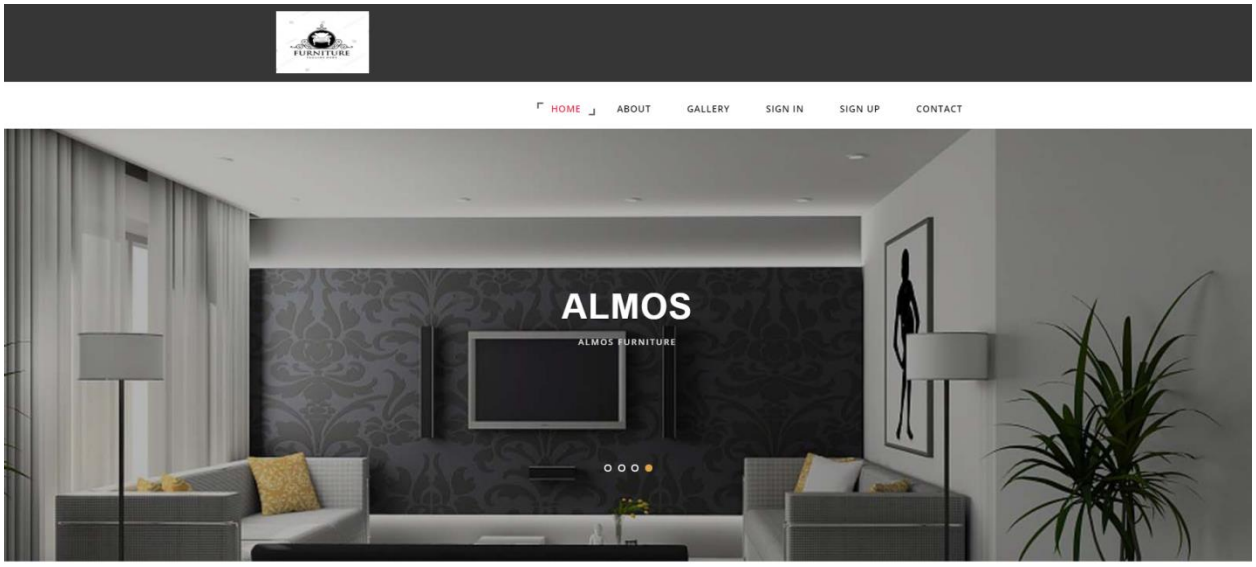
[Table: Admin]

Table No:			**6**		
Table Name:			**Contactmsg**		
Seq. no	**Column Name**	**Size**	**Column type**	**Column description**	**Pk/fk**
1.	firstnm	15	Text	First Name	
2.	lastnm	15	Text	Last Name	
3.	mobile	12	Number(Double)	Mobile Number	
4	Email	30	Text	Email id	
5	Msg	30	Text	Message	

[Table: contact_msg]

Input & output design

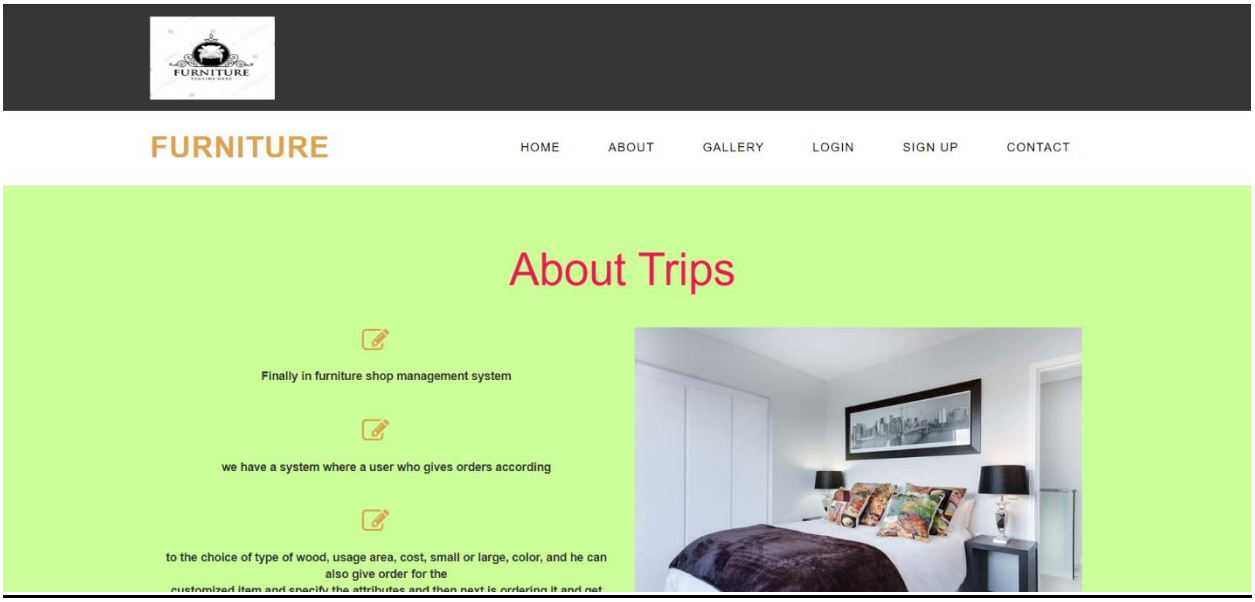
❖ Front Page View:



[Front Page: Home]

- User can see front view.

❖ About:

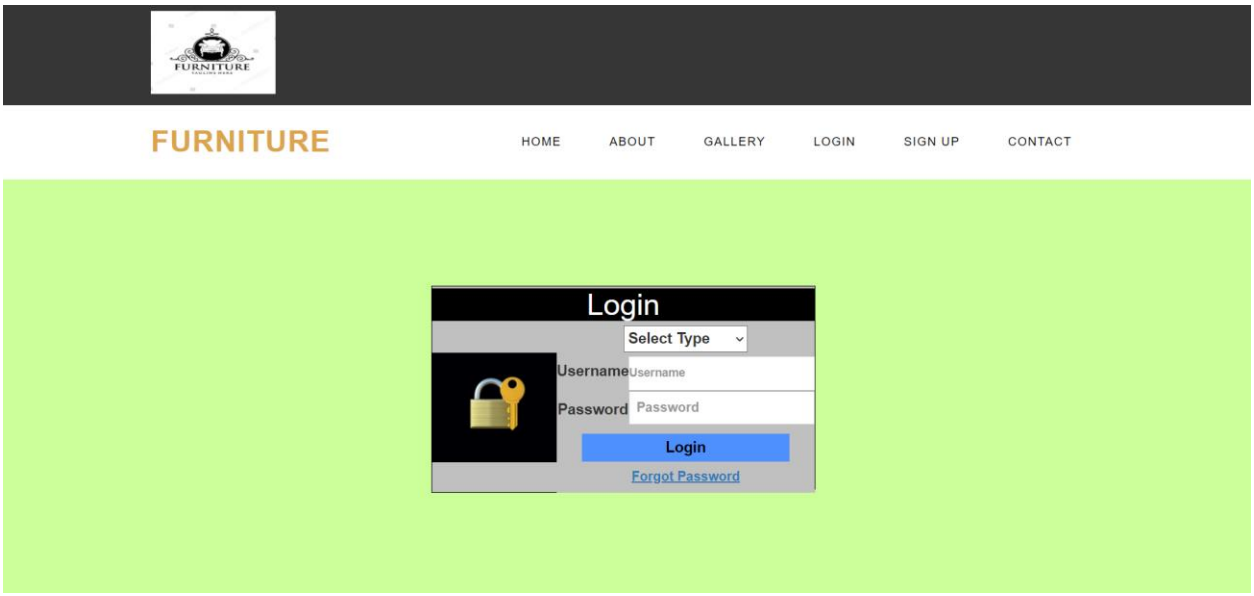


[About us]

❖ Gallery:

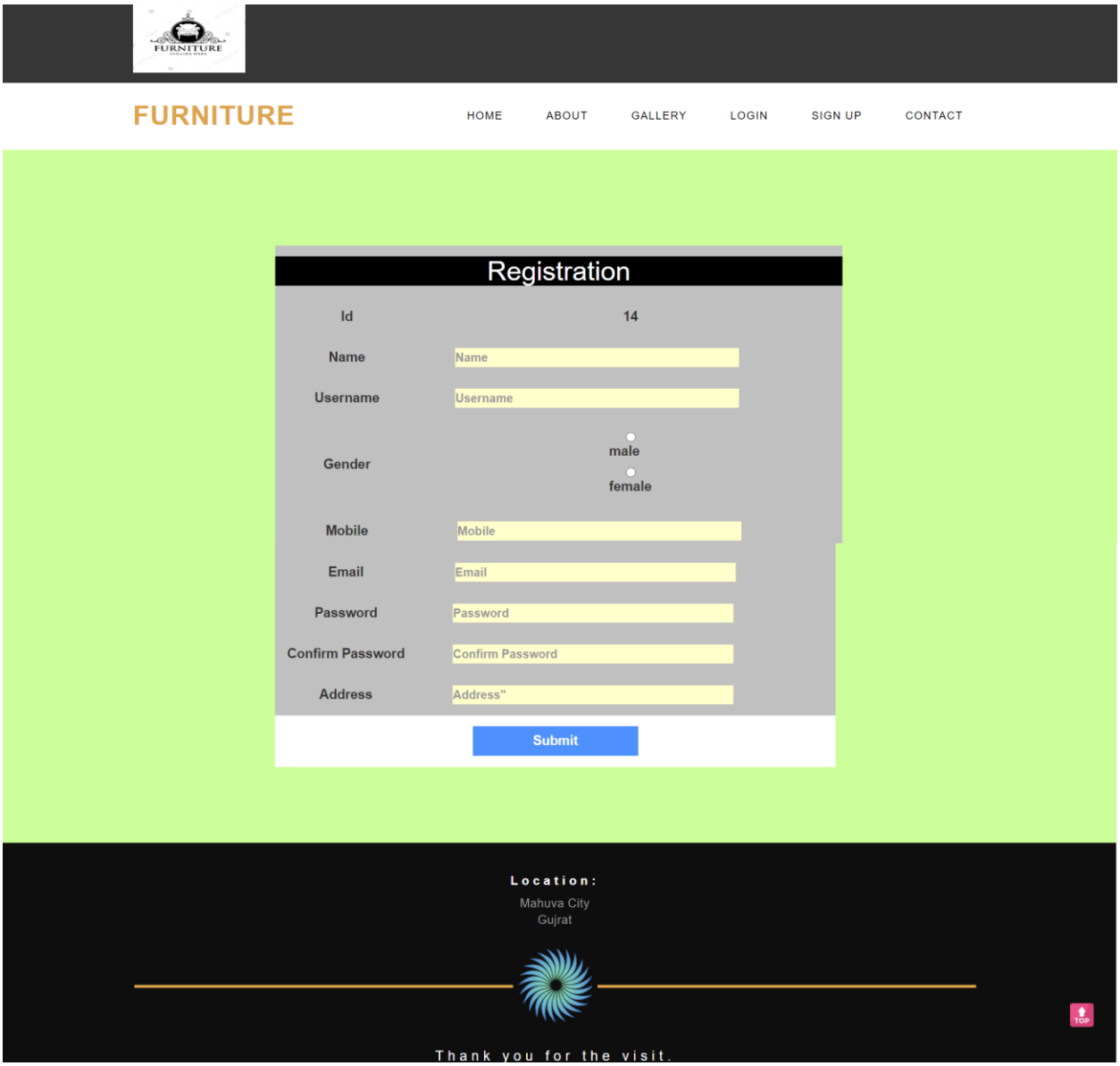
[Gallery]

❖ Sign In:



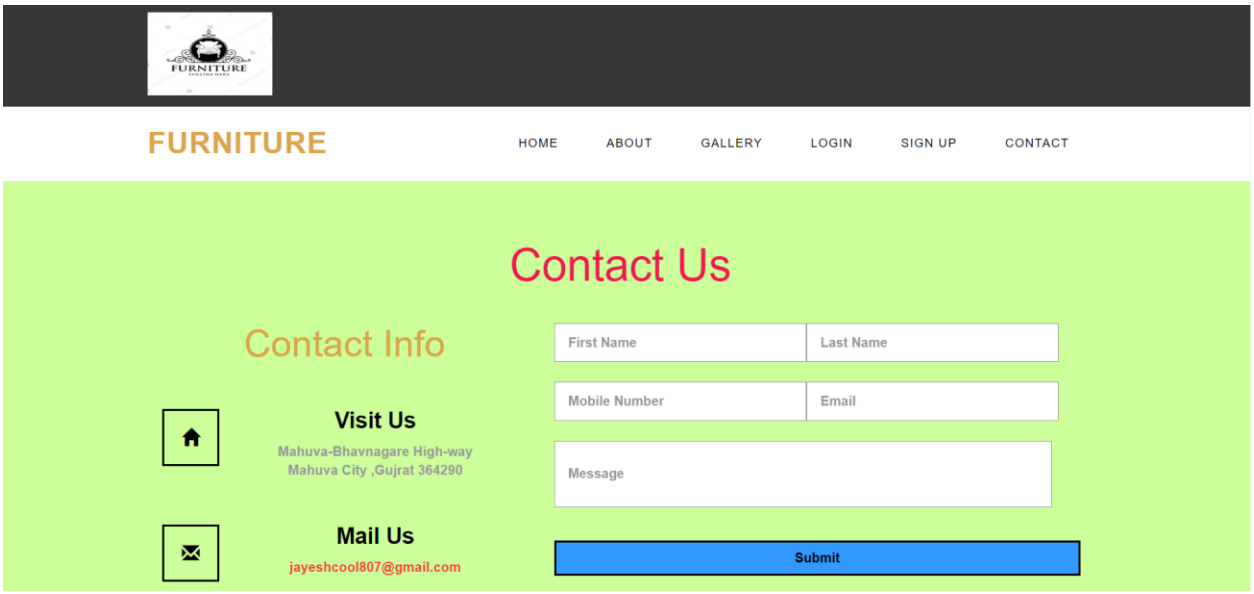
[Login menu]

❖ Sign Up:



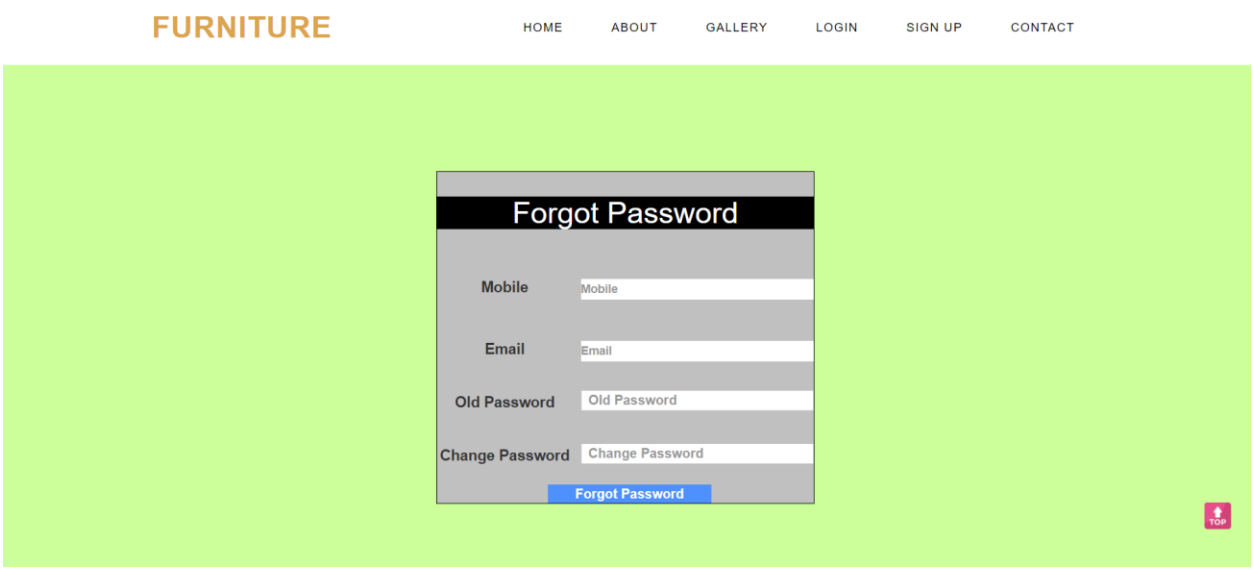
[User: Registration]

❖ Contact:



[Contact]

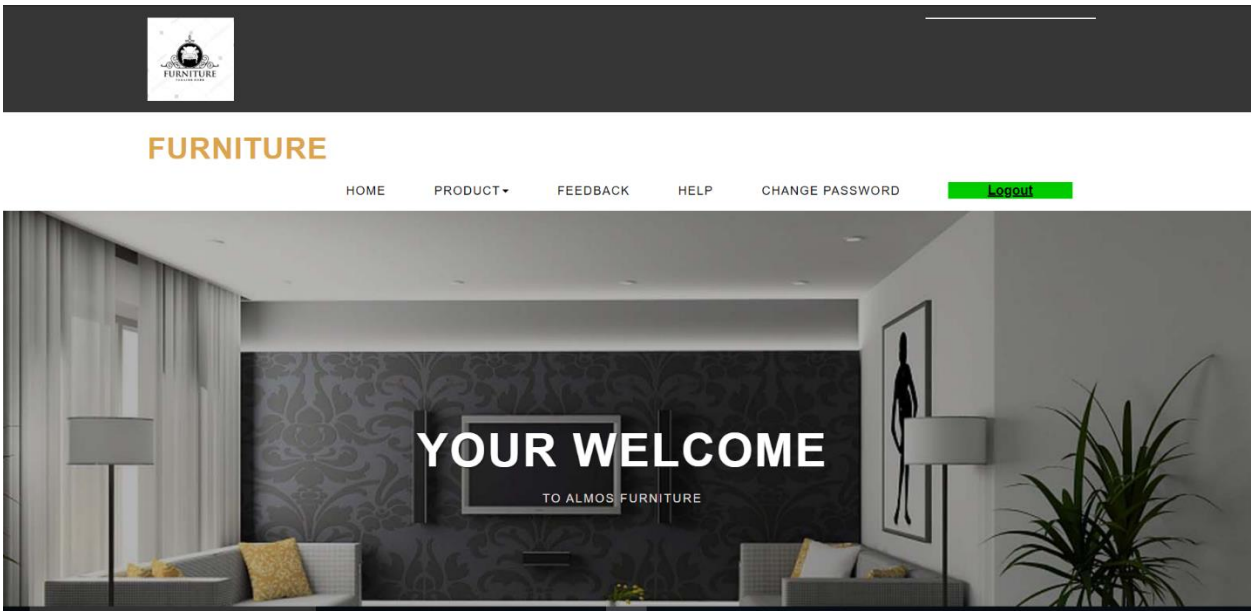
❖ User - Forgot Password:



[User – Forgot Password]

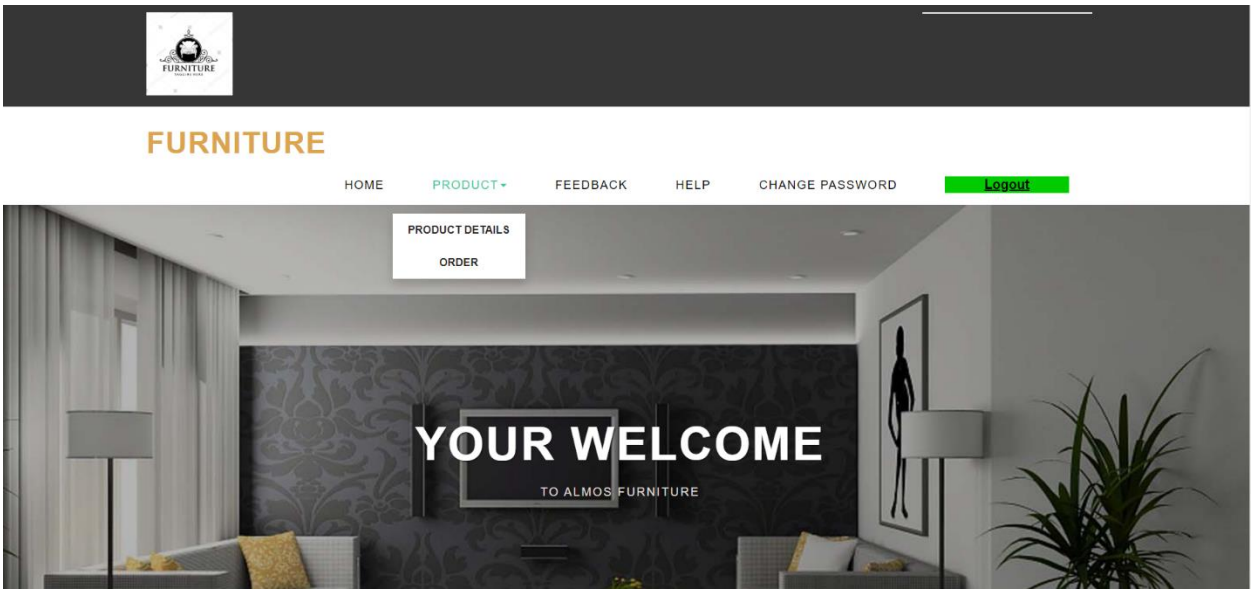
User Side

❖ User authority:



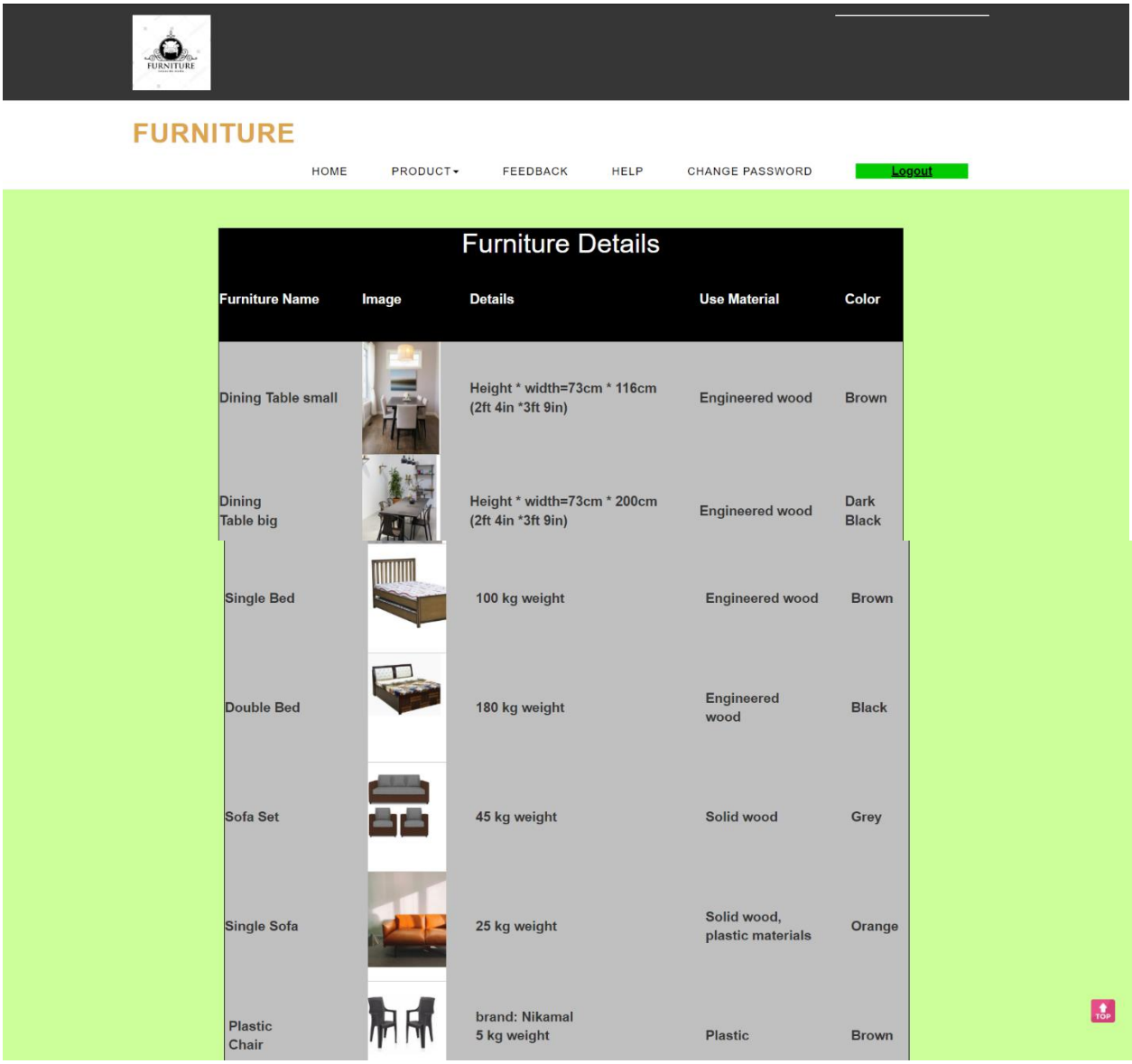
[User Authority]

❖ Product:



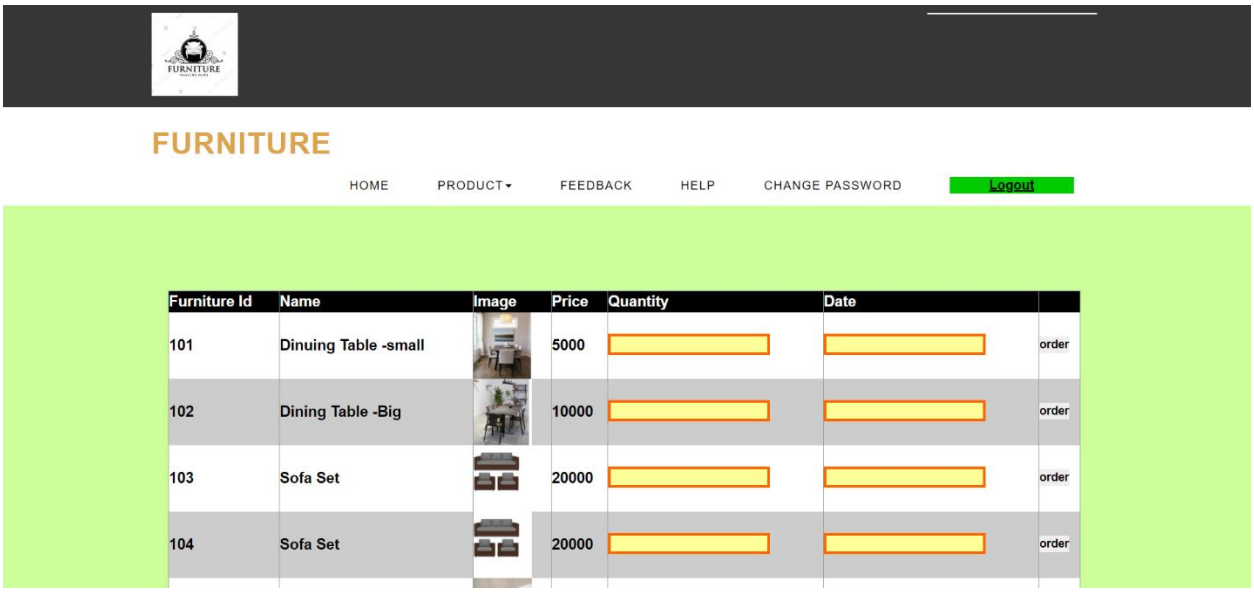
[Product]

❖ **View**

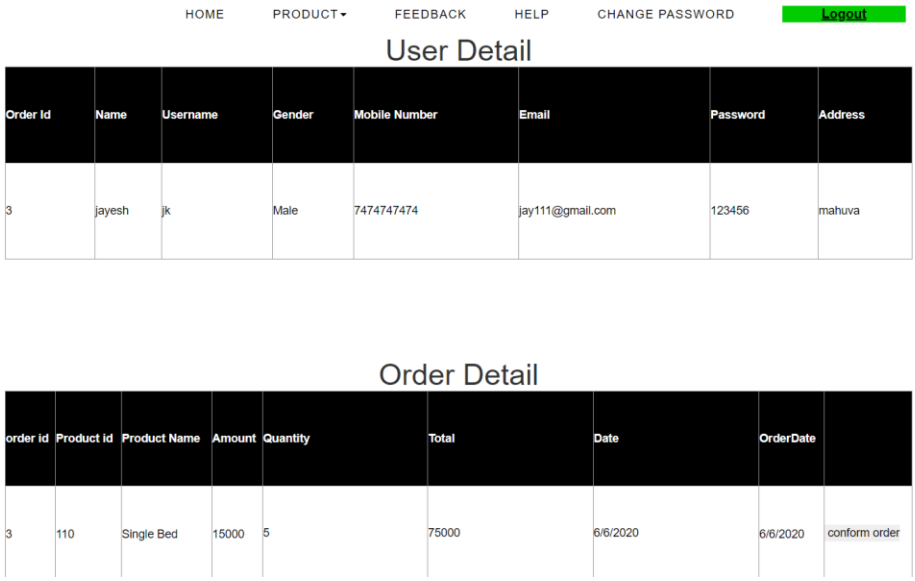


[View Product]

❖ Furniture(Order):

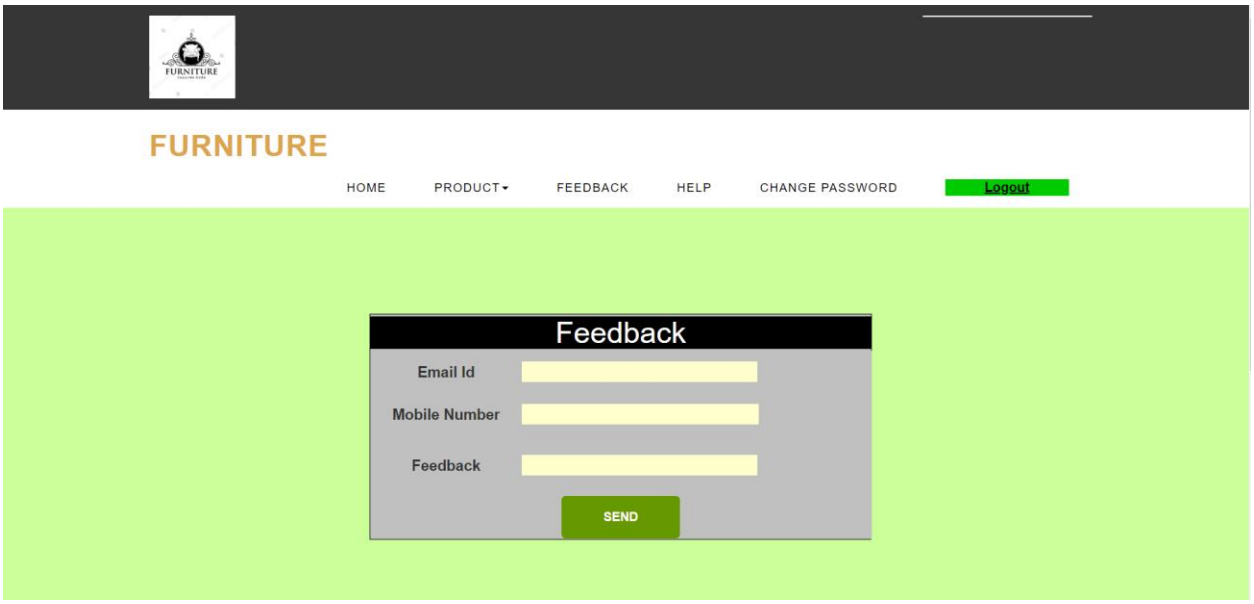


[Order]



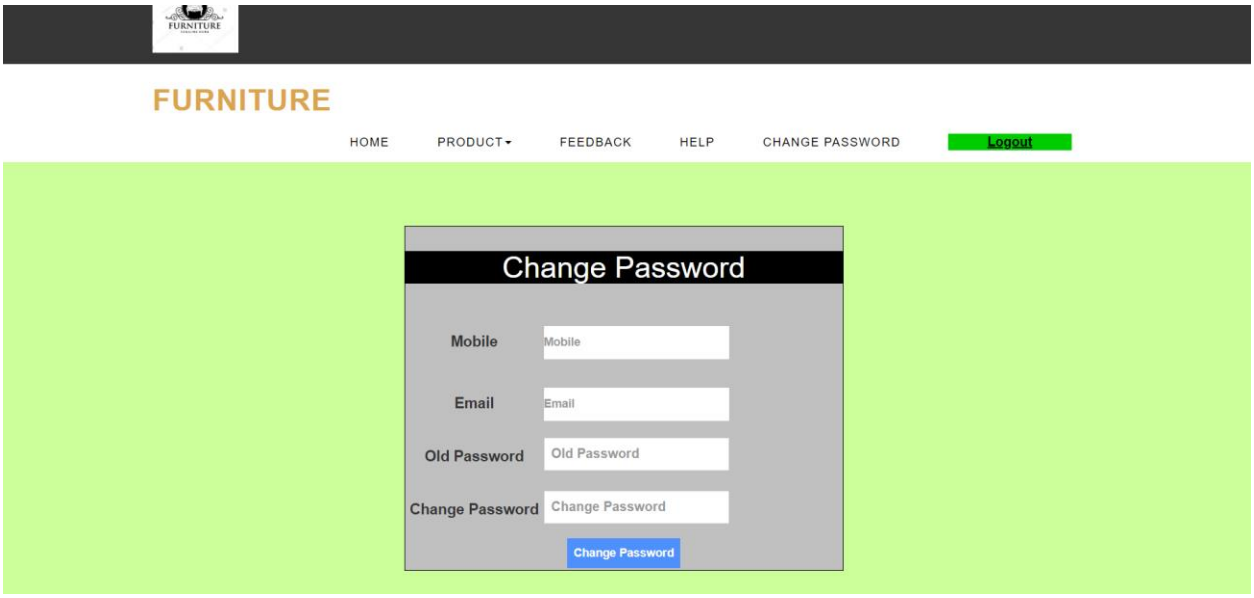
[Order Details]

❖ Feedback:



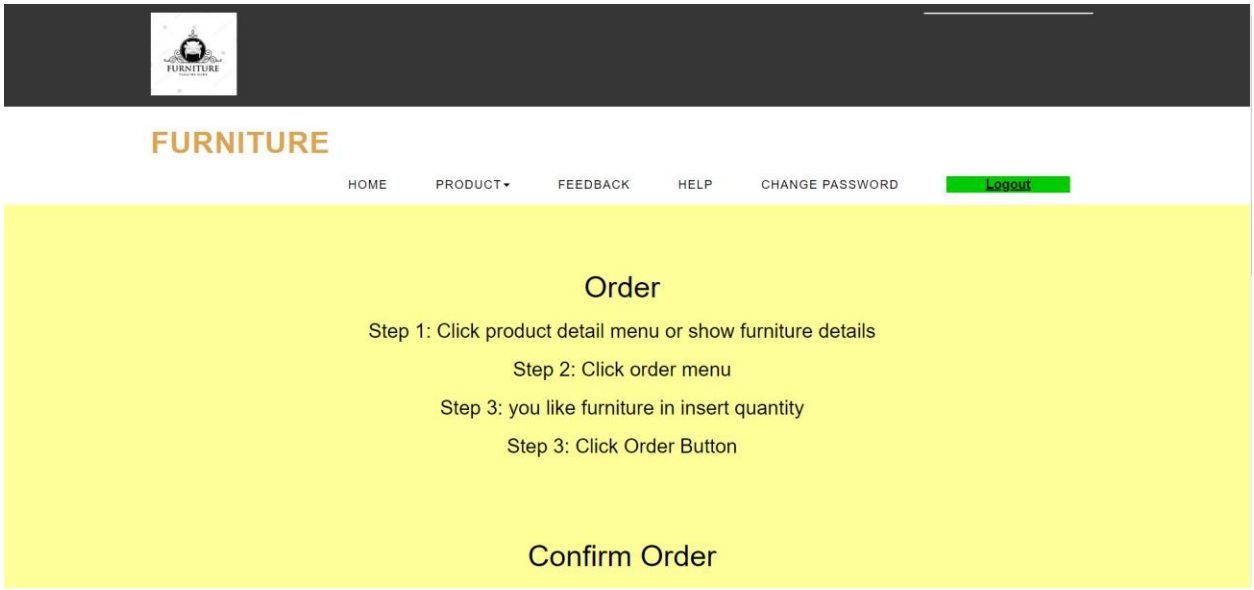
[Feedback]

✧ Change Password



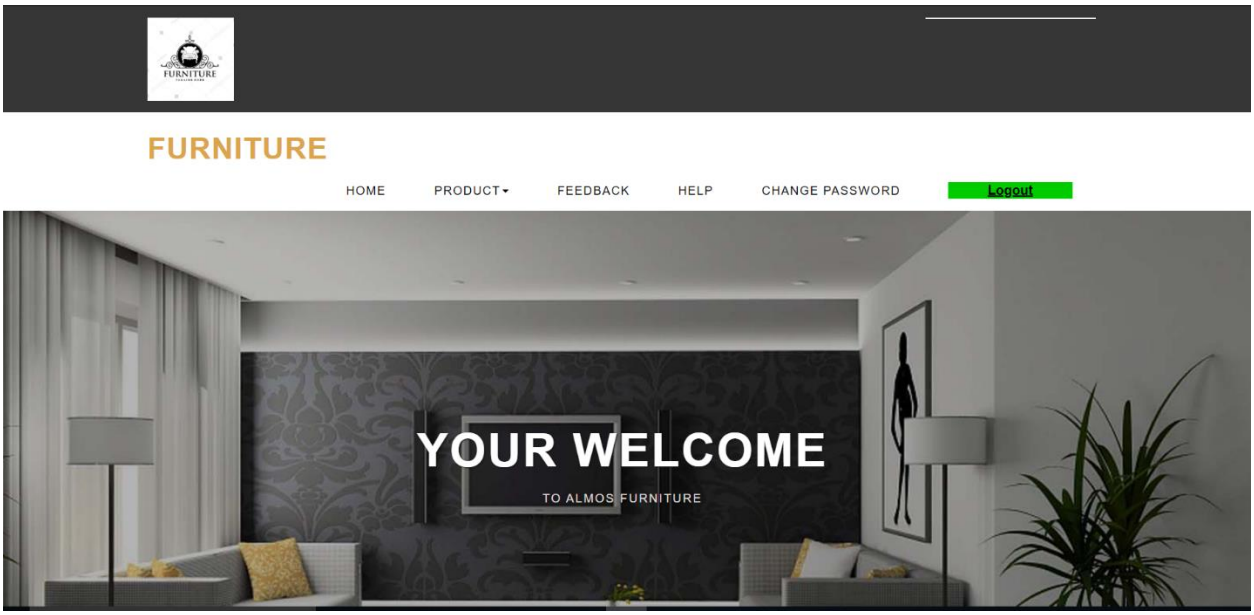
[User: Change Password]

❖ **User- Help:**



[User Help]

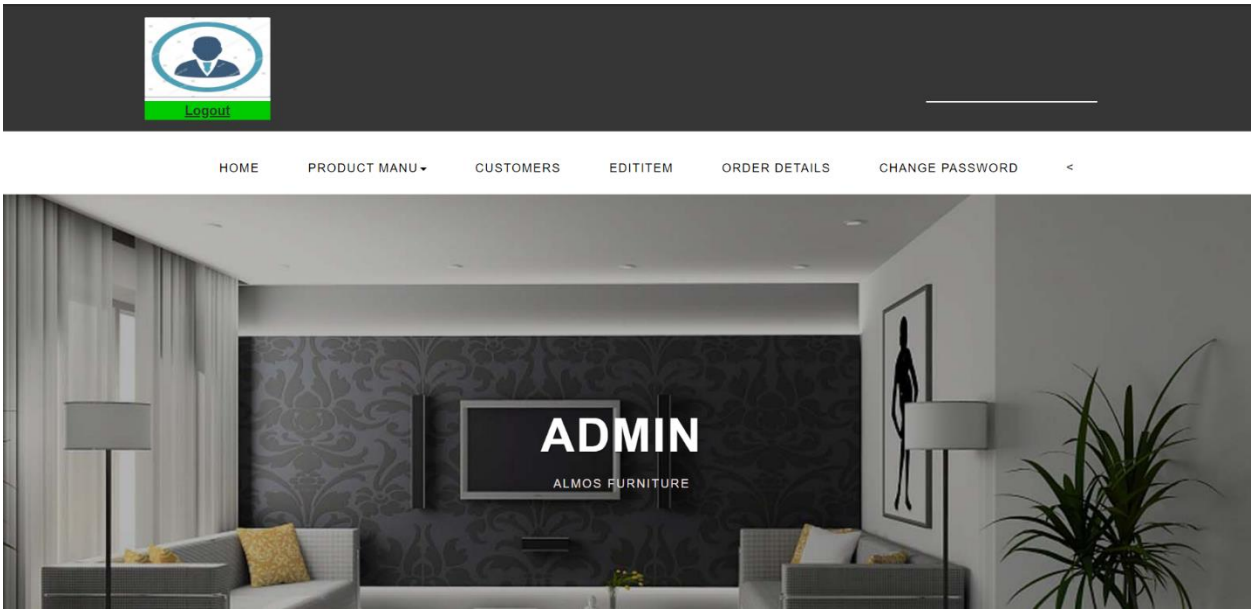
❖ **Logout:**



[Logout]

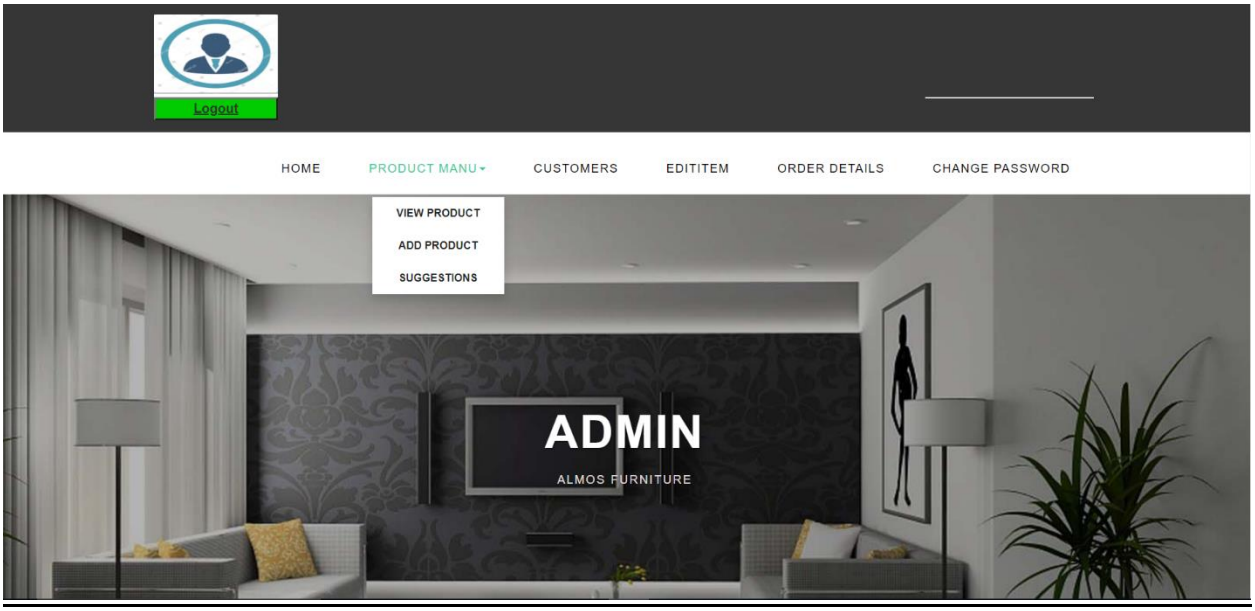
Admin Side

❖ **Admin authority:**

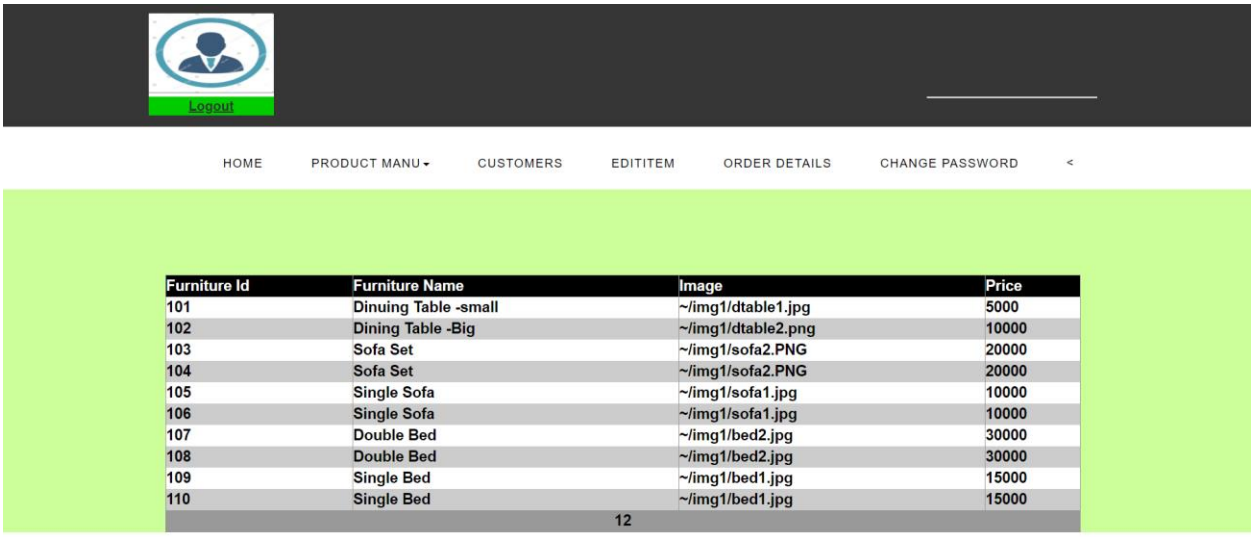


[Admin authority]

❖ Product Manu:



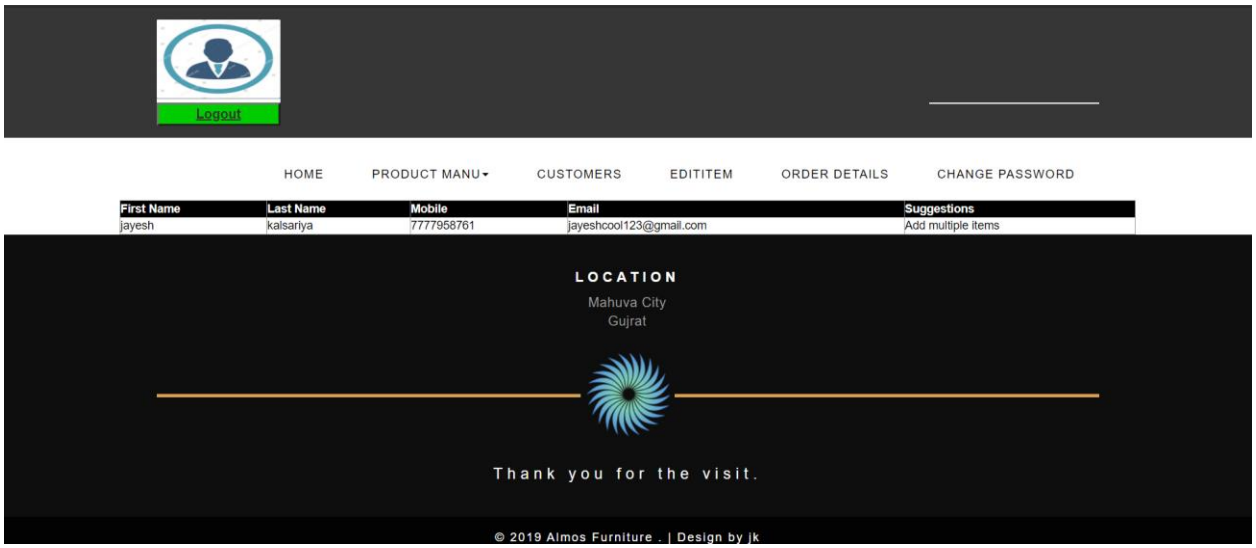
❖ View Product:



Furniture Id	Furniture Name	Image	Price
101	Dinuing Table -small	~/img1/dtable1.jpg	5000
102	Dining Table -Big	~/img1/dtable2.png	10000
103	Sofa Set	~/img1/sofa2.PNG	20000
104	Sofa Set	~/img1/sofa2.PNG	20000
105	Single Sofa	~/img1/sofa1.jpg	10000
106	Single Sofa	~/img1/sofa1.jpg	10000
107	Double Bed	~/img1/bed2.jpg	30000
108	Double Bed	~/img1/bed2.jpg	30000
109	Single Bed	~/img1/bed1.jpg	15000
110	Single Bed	~/img1/bed1.jpg	15000
12			

[View Product]

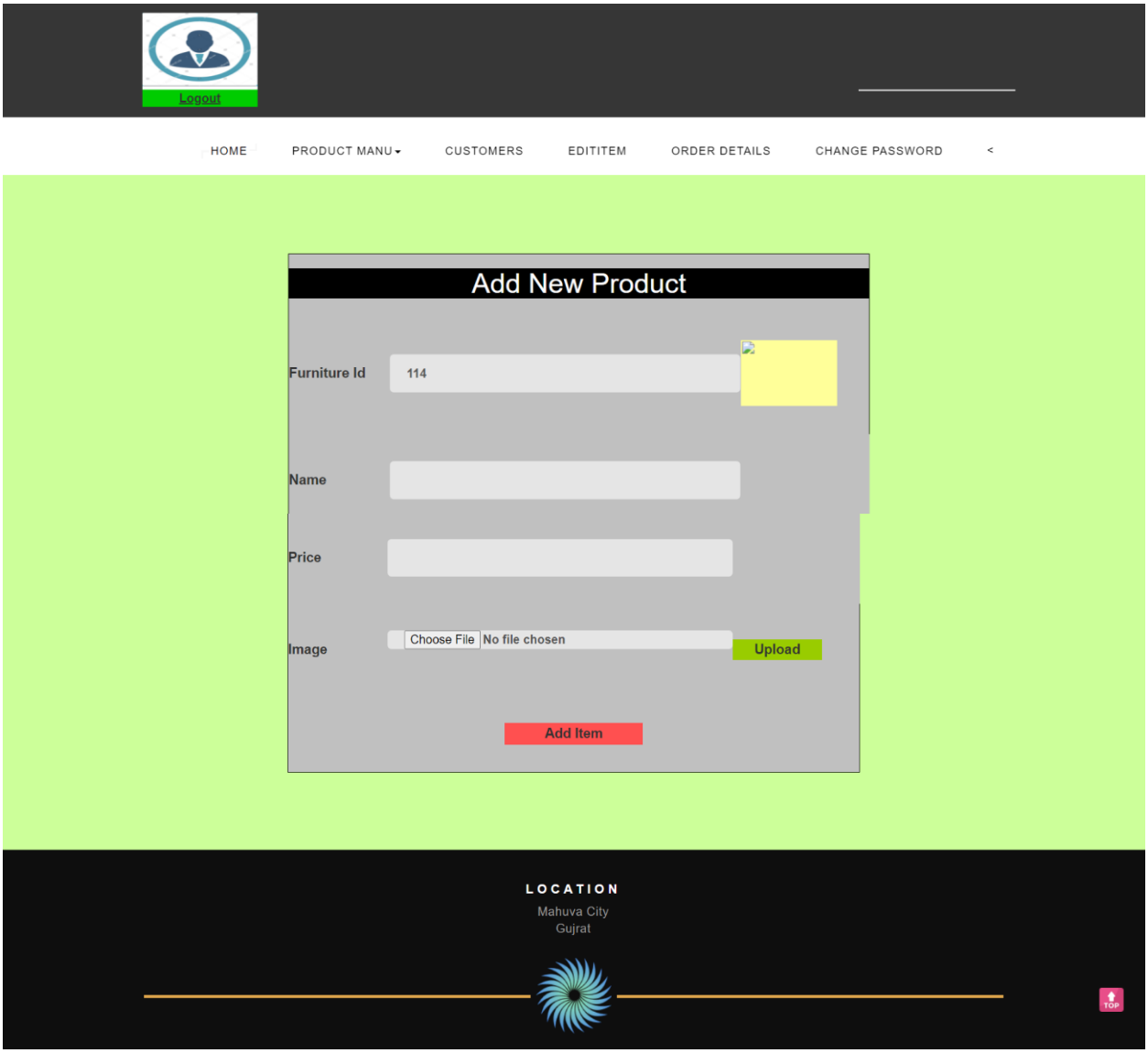
❖ Suggestions:



First Name	Last Name	Mobile	Email	Suggestions
jayesh	kalsariya	7777958761	jayeshcool123@gmail.com	Add multiple items

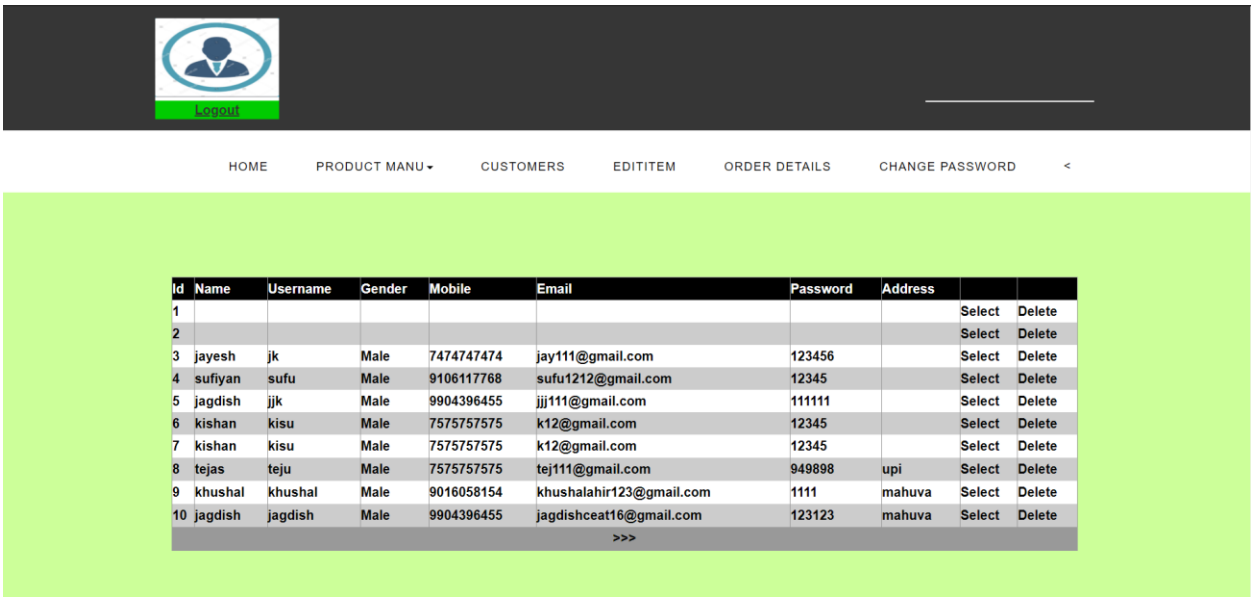
[Admin: Suggestions]

❖ Add Product:



[Add Product]

❖ Customer Detail:

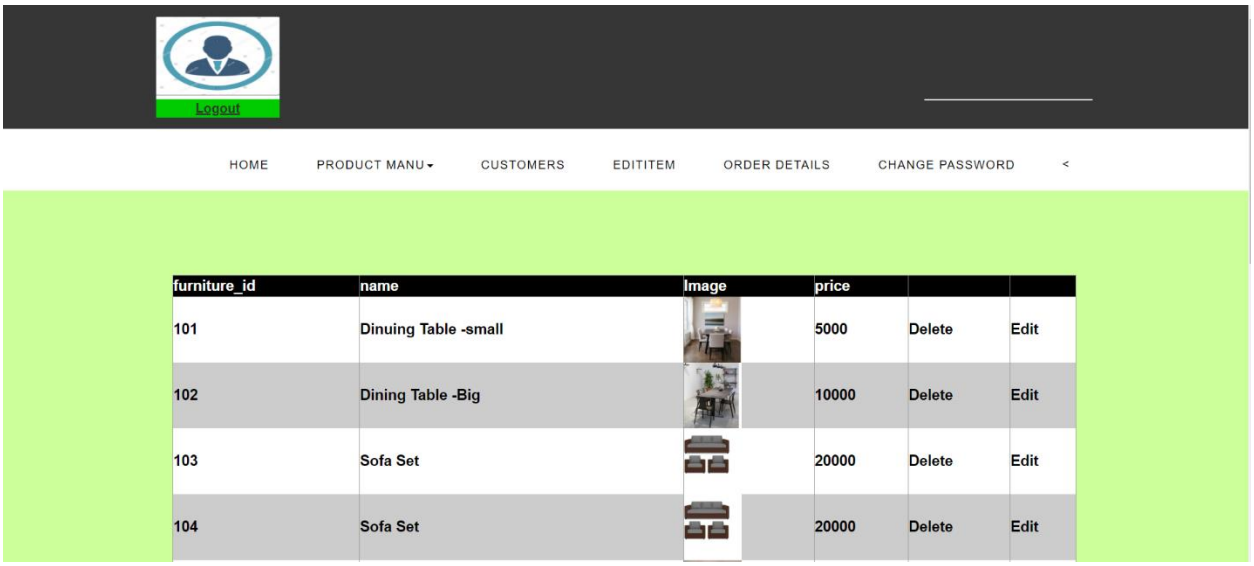


Id	Name	Username	Gender	Mobile	Email	Password	Address		
1								Select	Delete
2								Select	Delete
3	jayesh	jk	Male	7474747474	jay111@gmail.com	123456		Select	Delete
4	sufiyan	sufu	Male	9106117768	sufu1212@gmail.com	12345		Select	Delete
5	jagdish	jjk	Male	9904396455	jjj111@gmail.com	111111		Select	Delete
6	kishan	kisu	Male	7575757575	k12@gmail.com	12345		Select	Delete
7	kishan	kisu	Male	7575757575	k12@gmail.com	12345		Select	Delete
8	tejas	teju	Male	7575757575	tej111@gmail.com	949898	upi	Select	Delete
9	khushal	khushal	Male	9016058154	khushalahir123@gmail.com	1111	mahuva	Select	Delete
10	jagdish	jagdish	Male	9904396455	jagdishceat16@gmail.com	123123	mahuva	Select	Delete

>>>

[Admin: Customer Data]

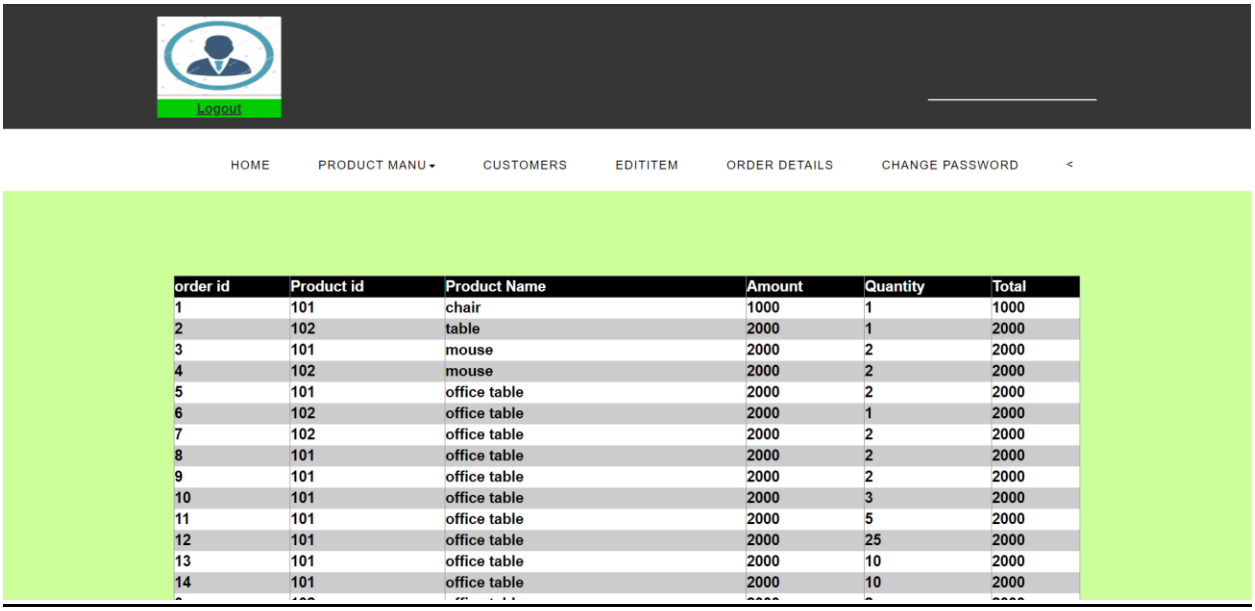
❖ Edit Item Menu:



furniture_id	name	Image	price		
101	Dinuing Table -small		5000	Delete	Edit
102	Dining Table -Big		10000	Delete	Edit
103	Sofa Set		20000	Delete	Edit
104	Sofa Set		20000	Delete	Edit

[Admin: Edit Item]

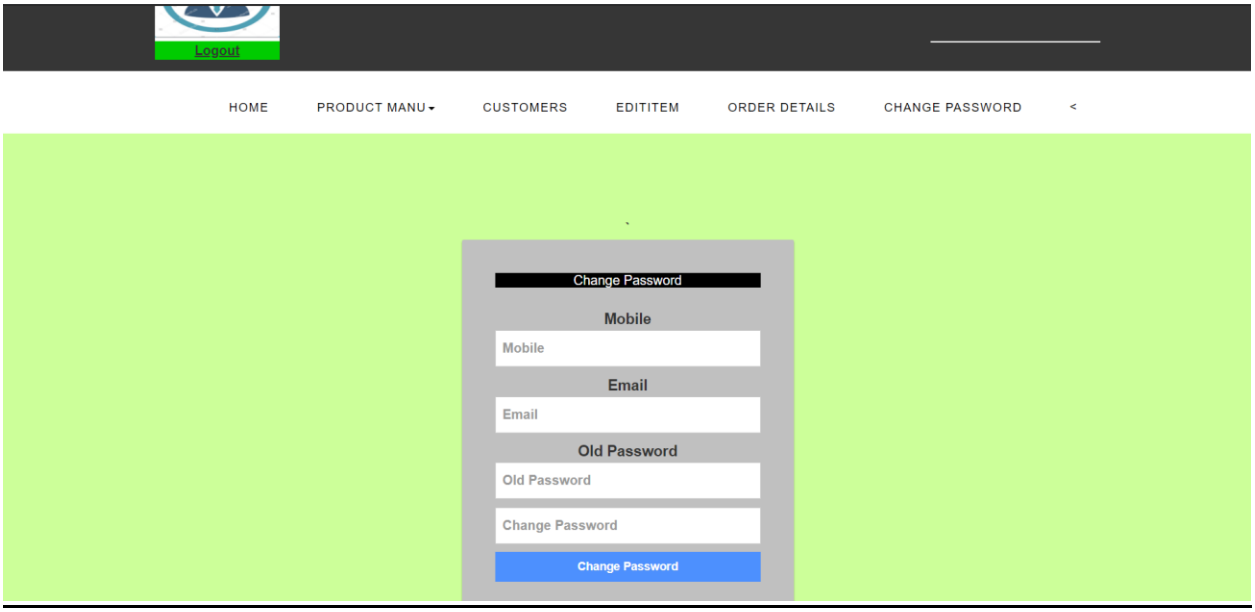
❖ Order Details:



order id	Product id	Product Name	Amount	Quantity	Total
1	101	chair	1000	1	1000
2	102	table	2000	1	2000
3	101	mouse	2000	2	2000
4	102	mouse	2000	2	2000
5	101	office table	2000	2	2000
6	102	office table	2000	1	2000
7	102	office table	2000	2	2000
8	101	office table	2000	2	2000
9	101	office table	2000	2	2000
10	101	office table	2000	3	2000
11	101	office table	2000	5	2000
12	101	office table	2000	25	2000
13	101	office table	2000	10	2000
14	101	office table	2000	10	2000

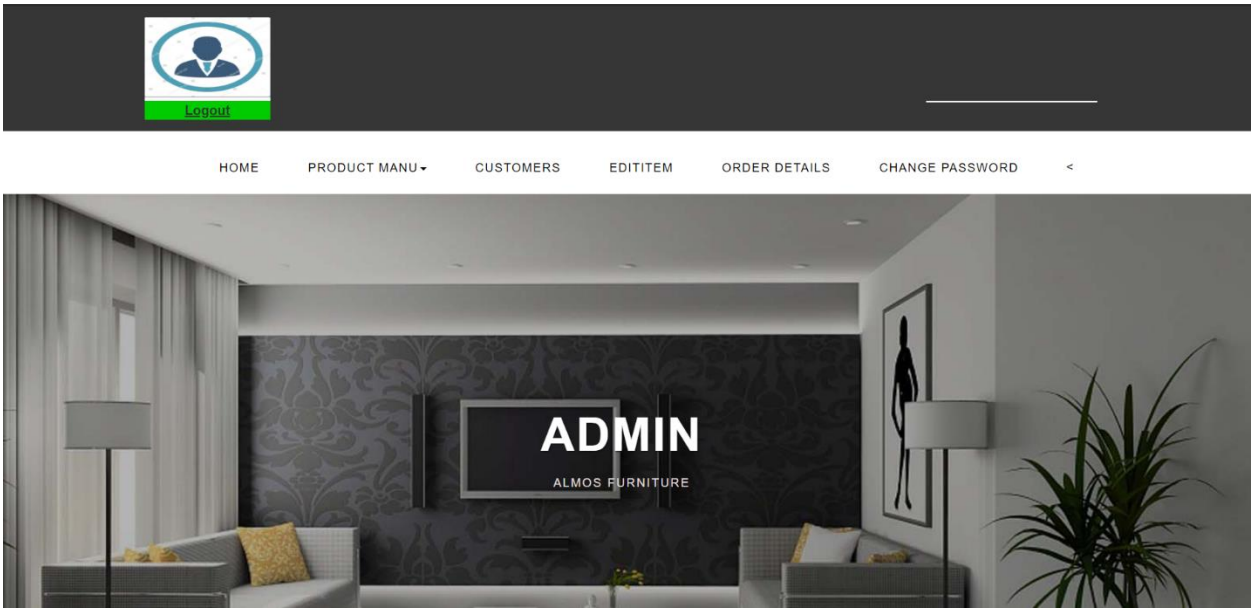
[Admin: User Order Detail]

❖ Change Password(Admin):



[Admin: Change password]

❖ Admin : Logout:



[Admin: Logout]

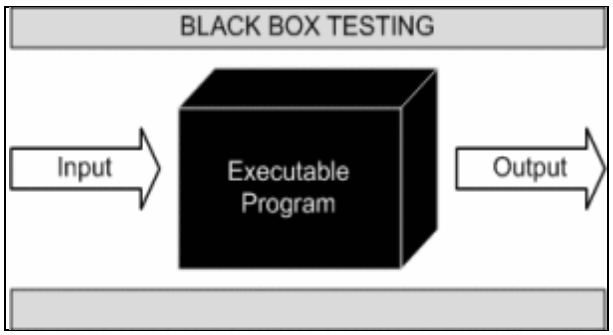
Chapter 4: Testing & Implementation:

4.1 Testing approach used

➢ **Definition:**

➢ **Black box testing:** Testing, either functional or non-functional, without reference to the internal structure of the component or system.

➢ Black Box, also known as Behavioral Testing, is a software testing methods in which the internal structure/design/implementation of the item being tested is not known to the tester. These tests can be functional or non-functional, though usually functional.



[Figure 61 Black Box Texting]

➢ This method is named so because the software program, in the eyes of the tester, is like a black box; inside which one cannot see.

➢ This method attempts to find errors in the following categories:

- Incorrect or missing functions
- Interface errors
- Errors in data structures or external database access
- Behavior or performance errors
- Initialization and termination errors.

White Box Testing

- White Box Testing (also known as Clear Box Testing, Open Box Testing, Glass Box Testing, Transparent Box Testing, Code-Based Testing or Structural Testing) is a software testing method in which the internal structure/design/implementation of the item being tested is known to the tester. The tester chooses inputs to exercise paths through the code and determines the appropriate outputs. Programming know-how and the implementation knowledge is essential. White box testing is testing beyond the user interface and into the nitty-gritty of a system.

- This method is named so because the software program, in the eyes of the tester, is like a white/transparent box; inside which one clearly sees.

Advantages

- Testing can be commenced at an earlier stage. One need not wait for the GUI to be available.

- Testing is more thorough, with the possibility of covering most paths.

Disadvantages

- Since tests can be very complex, highly skilled resources are required, with a thorough knowledge of programming and implementation.

- Test script maintenance can be a burden if the implementation changes too frequently.

- Since this method of testing is closely tied to the application being tested, tools to cater to every kind of implementation/platform may not be readily available.

❖ Grey Box Testing

➢ Grey Box testing is testing technique performed with limited information about the internal functionality of the system. Grey Box testers have access to the detailed design documents along with information about requirements.

➢ Grey Box tests are generated based on the state-based models, UML Diagrams or architecture diagrams of the target system.

[Figure 62 Grey Box Texting]

❖ Grey-box testing Techniques:

➢ Regression testing
➢ Pattern Testing
➢ Orthogonal array testing
➢ Matrix testing

Benefits:

➢ Grey-box testing provides combined benefits of both white-box and black-box testing

➢ It is based on functional specification, UML Diagrams, Database Diagrams or architectural view

- Grey-box tester handles can design complex test scenario more intelligently

- The added advantage of grey-box testing is that it maintains the boundary between independent testers and developers.

Drawbacks:

- In grey-box testing, complete white box testing cannot be done due to inaccessible source code/binaries.

- It is difficult to associate defects when we perform Grey-box testing for a distributed system.

Chapter 5: Conclusion

5.1 Conclusion

- Finally in furniture shop management system, we have a system where a user who gives orders according to the choice of type of wood, usage area, cost, small or large, color, and he can also give order for the customized item and specify the attributes and then next is ordering it and get the item.

- Admin assigns the wood, tools, and staff to the customized item to make and then complete it on time as mentioned. So it all working fine.

5.2 Limitations

- No online
- You must have pc/laptop
- Limited area covered
- Security

5.3 Future Scope of System

- Nothing is perfect in this world. So, we are also no exception. Although, we have tried our best to present the information effectively, yet, there can be further enhancement in the Application.

- We have taken care of all the critical aspects, which need to take care of during the development of the Project.

- Like the things this project also has some limitations and can further be enhances by
- Someone, because there are certain drawbacks that do not permit the system to be 100%
- Accurate.

Some key Feature we can add in This System Like:

We can provide facilities like offer letter, joining letter and Experience letter.

5.4 Bibliography

https://www.w3schools.com/

https://www.wikipedia.org/

https://www.google.com/

https://www.stackoverflow.com/s