IACSD

INSTITUTE FOR ADVANCED COMPUTING AND SOFTWARE DEVELOPMENT AKURDI, PUNE

Documentation On

"Vitthal Jewellers"-One Stop Online Store For All Types Of Jewellery

PG-DAC SEPT 2022

Submitted By:

Group No:103

Roll No:	Name:
229136	Ashutosh Chavan
229236	Vitthal Shirole.

Mr. Rohit Puranik
Centre Coordinator

Mr.Narendra Pawar
Project Guide

ABSTRACT

This project is a web-based shopping system for an existing shop. The project objective is to deliver the online shopping application into web platform.

This project is an attempt to provide the advantages of online shopping to customers of a real jewellery shop. It helps buying the jewellery in the shop anywhere through internet by using a website device. Thus, the customer will get the service of online shopping and home delivery from his favourite jewellery shop. This system can be implemented to any jewellery shop in the locality

If shops are providing an online portal where their customers can enjoy easy shopping from anywhere, the shops won't be losing any more customers to the trending online shops such as PNG or TANISHQ. Since this application is available on one click it is easily accessible and always available.

ACKNOWLEDGEMENT

I take this occasion to thank God, almighty for blessing us with his grace and taking our endeavour to a successful culmination. I extend my sincere and heartfelt thanks to our esteemed guide, **Mr. Narendra Pawar** 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.

Ashutosh Chavan (229136)

Vitthal Shirole (229236)

Table of Contents

LIST OF FIGURES

INTRODUCTION

The project is an online jewellery shopping website that utilizes a client-server architecture. The website's front-end is developed using React for the user interface, while the back-end is developed using Spring Boot. MySQL is used as the database technology, and JWT authentication and email OTP verification are implemented to enhance security.

The website's front-end is designed to provide users with a user-friendly interface that is easy to navigate. Users can browse the website's catalogue of jewellery products, add them to their shopping cart, and proceed to checkout. The front-end is also responsible for handling user authentication and sending OTP verification emails.

The back-end is responsible for processing user requests and serving data to the front-end. Spring Boot is used to build the back-end, which provides a robust, scalable, and maintainable infrastructure for the website. MySQL is used to store the website's data, including user information, product information, and order information.

JWT authentication is used to secure user information and prevent unauthorized access to the website's data. JWT tokens are generated upon successful user authentication and are used to authenticate subsequent requests to the website's back-end. Email OTP verification is also implemented to provide an additional layer of security during the user registration process.

Overall, this project aims to provide a seamless online shopping experience for users while ensuring the security and integrity of their data. The use of React, Spring Boot, MySQL, JWT authentication, and email OTP verification makes this project a robust and reliable solution for online jewellery shopping.

Features: -

1. Products Available-Gold,Silver,Platinum,Diamong,Antique,Bullion

2. Search for Designs from different metal products easily

3. Category of Gold-

Ring, Chain, Mangalsutra,Pendant,Bangles,Bracelets.

4. Category of Silver-

Ring, Chain, Mangalsutra, Pendant,Bangles,Bracelets.

5. Category of Platinum-

Ring, Chain, Mangalsutra, Pendant,Bangles,Bracelets.

6. Category of Diamond-

Ring,Chain,Mangalsutra,Pendant,Bangles,Bracelets.

7. Cart feature

8. Date and time of product delivery will be notified by the system

9. The Manager can add/delete Staffs .

10. Allows the customers to maintain cart.

1.1 PROJECT OBJECTIVE

The objective of the project is to make an application in android platform to purchase items in an existing shop. In order to build such an application complete web support, need to be provided. A complete and efficient web application which can provide the online shopping experience is the basic objective of the project. The web application can be implemented in the form of an android application with web view.

1.2 PROJECT OVERVIEW

The central concept of the application is to allow the customer to shop virtually using the internet and allow customers to buy the items and articles of their desire from the store. The information pertaining to the products are stores on an RDBMS at the server side (store).

The server processes the customers, and the items are shipped to the address submitted by them. The application was designed into two modules first is for the customers who wish to buy the articles. Second is for the storekeepers who maintains and updates the information pertaining to the articles and those of this product is a departmental store where the application is hosted on the web and the administrator maintains the database. The application, which is deploy the customer database, the details of the items are brought forward from the database for the customer view based on the selection through the menu and the database of all the products are updated at the end of each transaction. Data entry into the application can be done through various screens designed for various levels of users. Once the authorized personal feed the relevant data into the system, several reports could be generated as per the security.

1.3 PROJECT SCOPE

This system can be implemented to any shop in the locality or to multinational branded shops having jewellery outlet chains. The system recommends a facility to accept the orders 24X7 and a home delivery system which can make customers happy. If shops are providing an online portal where their customers can enjoy easy shopping from anywhere, the shops won't be losing any more customers to the trending online shops such as PNG or TANISHQ. Since the application is available and always available.

1.4 STUDY OF THE SYSTEM

1.4.1 MODULES:

The system after careful analysis has been identified to be presented with the following modules and roles.

The modules involved are:

- Manager
- Staff
- Customer

1.4.1.1 Manager:

The manager is the super user of this application. Only admin have access into this admin page. Admin may be the owner of the shop. The administrator has all the information about the users and about all products.

This module is divided into different sub modules.

1. Manage Staff
2. Manage Products
3. Manage Customers
4. Manage Orders

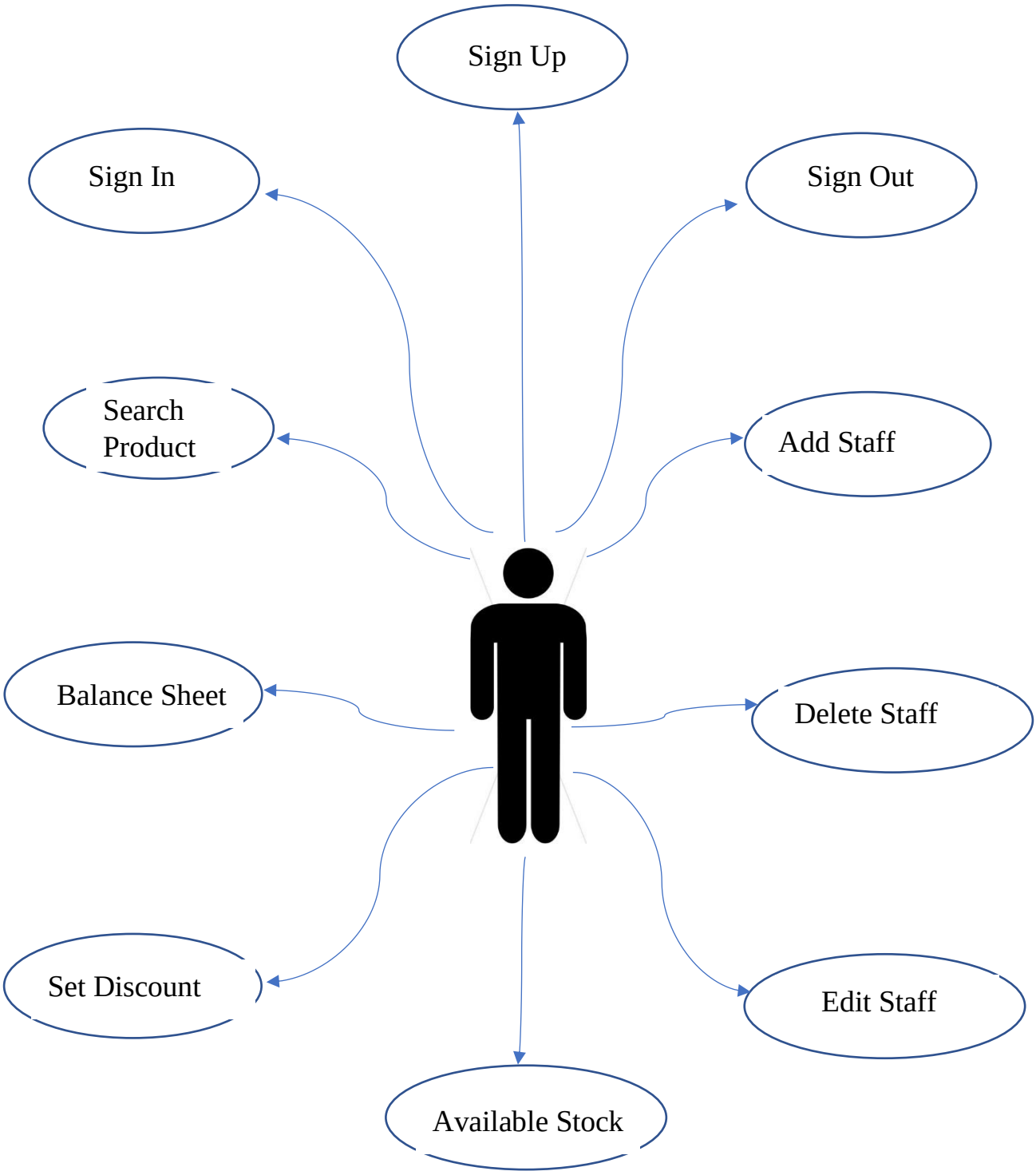


Figure 1. Manager Activity Diagram

➢ **Add Staff**

Manager dashboard contains table of staff under him one for each subcategory, since during festive season workload is high, he can add extra manpower from there

➢ **Delete Staff**

In contradiction to above point in some scenario like employee resignation or termination, manager can delete staff under him

➢ **Search Products**

Manager will have a list view of all the existing products. He can also search for a particular product by name.

➢ **See Dashboard and take decisions**

Manager can see table of products available under each category and take decision to add or reduce stock as per customer inclination.

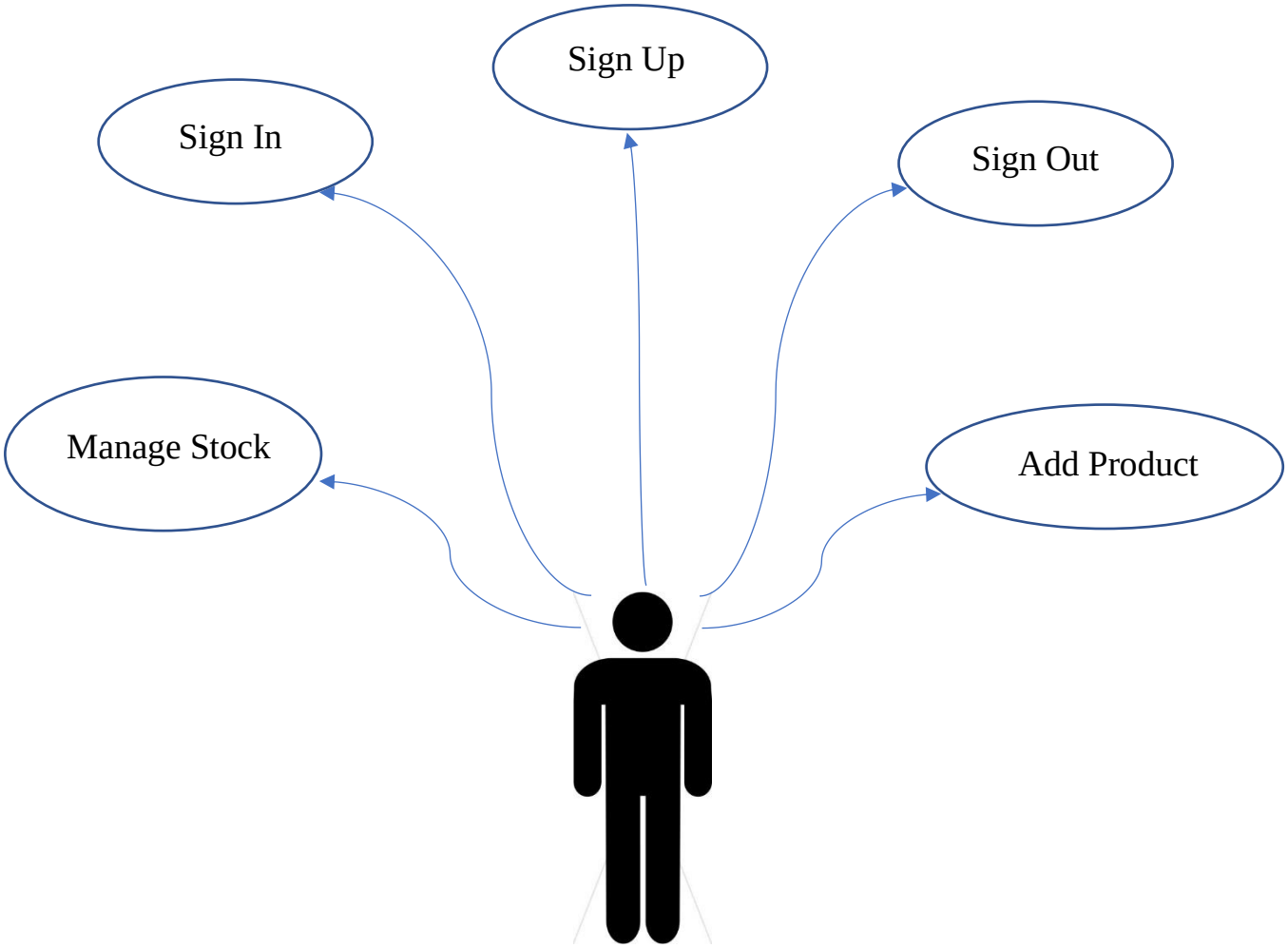


Figure 2. Staff Activity Diagram

➢**Manage Stock**

Staff assigned to particular subcategory (like ring,chain) of category(gold) can manage stock and maintain it

➢ **Add Product**

He can add products into catalogue of his assigned category and subcategory which will be showcased on home.

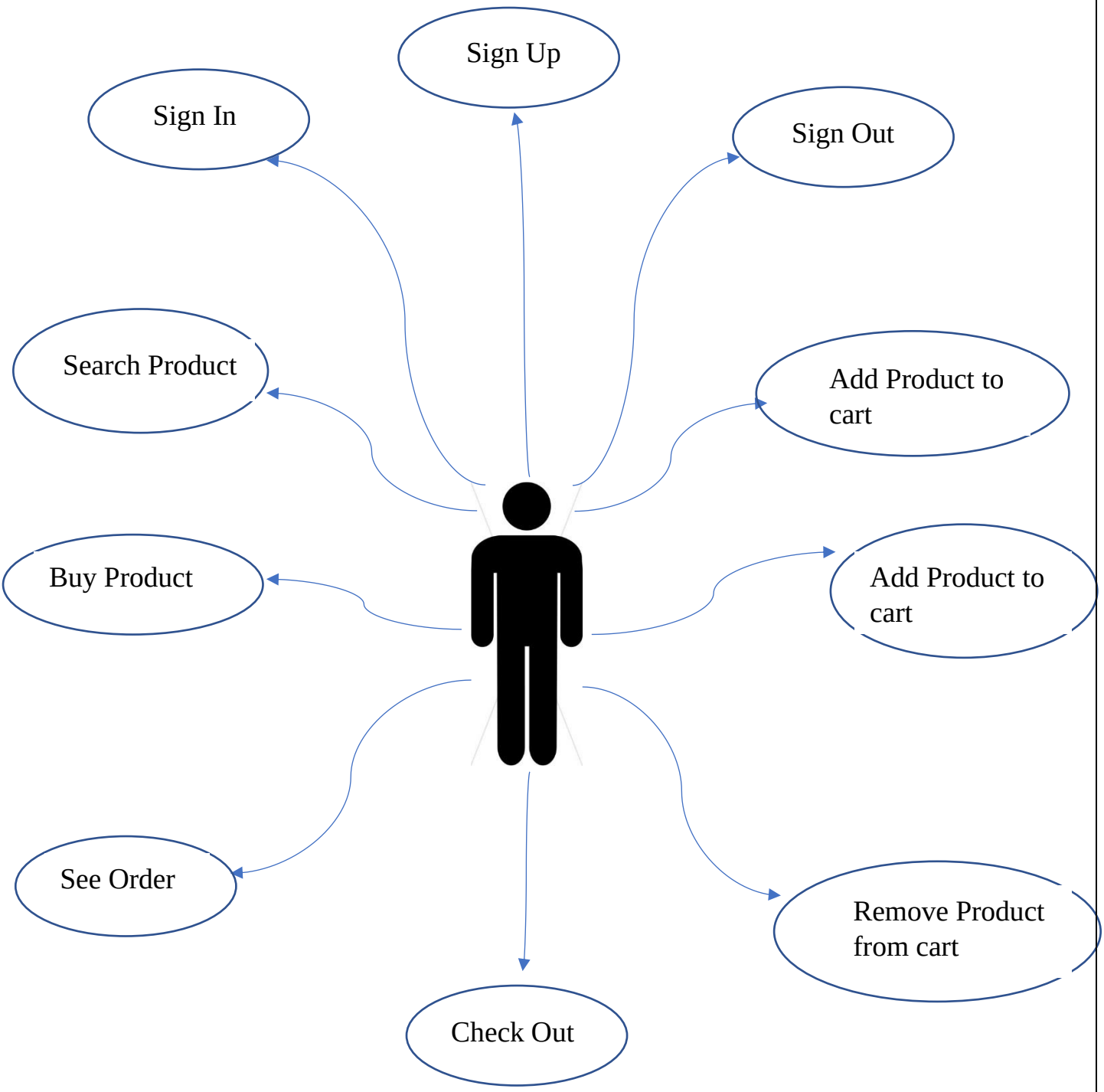


Figure 3. Customer Activity Diagram

SYSTEM ANALYSIS

System analysis is the process of gathering and interpreting facts, diagnosing problems, and using the information to recommend improvements on the system. System analysis is a problem-solving activity that requires intensive communication between the system users and system developers.

System analysis or study is an important phase of any system development process. The system is viewed as a whole, the inputs are identified, and the system is subjected to close study to identify the problem areas. The solutions are given as a proposal. The proposal is reviewed on user request and suitable changes are made. This loop ends as soon as the user is satisfied with the proposal.

2.1 EXISTING SYSTEM

✓ It is less user-friendly.

✓ User must go to shop and select products.

✓ It is difficult to identify the required product.

✓ Description of the product limited.

✓ It is a time-consuming process

✓ Not in reach of distant users.

2.2 PROPOSED SYSTEM

In the proposed system customer need not go to the shop for buying the products. He can order the product he wish to buy through the application in his Smartphone. The shop owner will be admin of the system. Shop owner can appoint moderators who will help owner in managing the customers and product orders. The system also recommends a home delivery system for the purchased products.

2.3 SYSTEM REQUIREMENT SPECIFICATION

2.3.1 GENERAL DESCRIPTION

Product Description:

The system consists of two parts. A web application which can provide the online shopping service for the customer to access the web service from his Smartphone/System. Web application should be able to help the customer for selecting his item and to help the owner in managing the orders from the customers.

Problem Statement:

As online shopping became a trend nowadays the regular shops are losing their customers to online brands. Customers have effortless shopping experience and saving time through shopping online. For competing with those online brands, if shops are providing an online portal where their customers can shop through internet and get the products at their doors it will increase the number of customers.

2.3.2 SYSTEM OBJECTIVES

➢ To provide a Web application for online shopping of products in an existing shop.

➢ To provide an online shopping web site for the same shop.

2.3.3 SYSTEM REQUIREMENTS

2.3.3.1 NON-FUNCTIONAL REQUIREMENTS

i. EFFICIENCY REQUIREMENT

When an online shopping cart android application implemented customer can purchase product in an efficient manner.

ii. RELIABILITY REQUIREMENT

The system should provide a reliable environment to both customers and owner. All orders should be reaching at the admin without any errors.

iii. USABILITY REQUIREMENT

The Web application is designed for user friendly environment and ease of use.

iv. IMPLEMENTATION REQUIREMENT

Implementation of the system using React in front end with Spring Boot as back end and it will be used for database connectivity. And the database part is developed by MySQL. Responsive web designing is used for making the website compatible for any type of screen.

v. DELIVERY REQUIREMENT

The whole system is expected to be delivered in four months of time with a weekly Evaluation by the project guide.

2.3.3.2 FUNCTIONAL REQUIREMENTS

USER

➢ USER LOGIN

Description of feature

This feature used by the user to login into system. A user must login with his username and password to the system after registration. If they are invalid, the user not allowed to enter the system.

Functional Requirement

Username and password will be provided after user registration is confirmed. Password should be hidden from others while typing it in the field

➢ **REGISTER NEW**

USER Description of feature

A new user will have to register in the system by providing essential details in order to view the products in the system. The admin must accept new user by unblocking him.

Functional Requirement

System must be able to verify and validate information. The system must encrypt the password of the customer to provide security.

➢ **PURCHASING AN ITEM**

Description of feature

The user can add the desired product into his cart by clicking add to cart option on the product. He can view his cart by clicking on the cart button. All products added by cart can be viewed in the cart. User can remove an item from the cart by clicking remove. After confirming the items in the cart, the user can submit the cart by providing a delivery address. On successful submitting the cart will become empty.

Functional Requirement

- System must ensure that, only a registered customer can purchase items.
- Admin account should be secured so that only owner of the shop can access that account

MODERATOR

Description of features

A moderator is considered as a staff who can manage orders for the time being. As a future update moderator may give facility to add and manage his own products. Moderators can reduce the workload of admin. Now moderator has all the privilege of an admin having except managing other moderators. He can manage users and manage products. He can also check the orders and edit his profile.

Functional Requirement

- The system must identify the login of a moderator.

ADMIN

➢ MANAGE USER

Description of features

The administrator can add user, delete user, view user and block user.

➢ MANAGE MODERATOR

Description of features

The administrator can add moderator, delete moderator, block moderator and search for a moderator.

➢ MANAGE PRODUCTS

Description of features

The administrator can add product, delete product, and view product.

➢ **MANAGE ORDER**

Description of features

The administrator can view orders and delete orders.

Functional Requirements:

• The system must identify the login of the admin.
• Admin account should be secured so that only owner of the shop can access that account.

MODERATOR

Description of features

A moderator is considered as a staff who can manage orders for the time being. As a future update moderator may give facility to add and manage his own products. Moderators can reduce the workload of admin. Now moderator has all the privilege of an admin having except managing other moderators. He can manage users and manage products. He can also check the orders and edit his profile.

Functional Requirement

The system must identify the login of a moderator.

SYSTEM DESIGN

System design is the solution for the creation of a new system. This phase focuses on the detailed implementation of the feasible system. Its emphasis on translating design. Specifications to performance specification. System design has two phases of development.

- Logical Design
- Physical Design

During logical design phase the analyst describes inputs (sources), outputs(destinations), databases (data sores) and procedures (data flows) all in a format that meets the user requirements. The analyst also specifies the needs of the user at a level that virtually determines the information flow in and out of the system and the data resources. Here the logical design is done through data flow diagrams and database design. The physical design is followed by physical design or coding. Physical design produces the working system by defining the design specifications, which specify exactly what the candidate system must do. The programmers write the necessary programs that accept input from the user, perform necessary processing on accepted data and produce the required report on a hard copy or display it on the screen.

3.1 INPUT AND OUTPUT DESIGN

3.1.1 INPUT DESIGN:

Input design is the link that ties the information system into the world of its users. The input design involves determining the inputs, validating the data, minimizing the data entry and provides a multi-user facility. Inaccurate inputs are the most common cause of errors in data processing. Errors entered by the data entry operators can be controlled by input design. The user-originated inputs are converted to a computer-based format in the input design. Input data are collected and organized into groups of similar data. Once identified, the appropriate input media are selected for processing. All the input data are validated and if any data violates any conditions, the user is warned by a message. If the data satisfies all the conditions, it is transferred to the appropriate tables in the database. In this project the student details are to be entered at the time of registration. A page is designed for this purpose which is user friendly

and easy to use. The design is done such that users get appropriate messages when exceptions occur.

3.1.2 OUTPUT DESIGN:

Computer output is the most important and direct source of information to the user. Output design is a very important phase since the output needs to be in an efficient manner. Efficient and intelligible output design improves the system relationship with the user and helps in decision making. Allowing the user to view the sample screen is important because the user is the ultimate judge of the quality of output. The output module of this system is the selected notifications

DATABASE DESIGN

3.2 DATABASE

Databases are the storehouses of data used in the software systems. The data is stored in tables inside the database. Several tables are created for the manipulation of the data for the system. Two essential settings for a database are

1. Primary key - the field that is unique for all the record occurrences
2. Foreign key - the field used to set relation between tables

3.3 SYSTEM TOOLS

3. The various system tools that have been used in developing both the front end and the back end of the project are being discussed in this chapter.

3.3.1 FRONT END:

React is a library which is developed by Facebook are utilized to implement the frontend. React (also known as React.js or ReactJS) is a free and open-source front-end JavaScript library for building user interfaces or UI components. It is maintained by Facebook and a community of individual developers and companies. React can be used as a base in the development

of single page or mobile applications. However, React is only concerned with state management and rendering that state to the DOM, so creating React applications usually requires the use of additional libraries for routing, as well as certain client-side functionality.

3.3.2 BACKEND:

The back end is implemented using MySQL which is used to design databases.

MySQL:

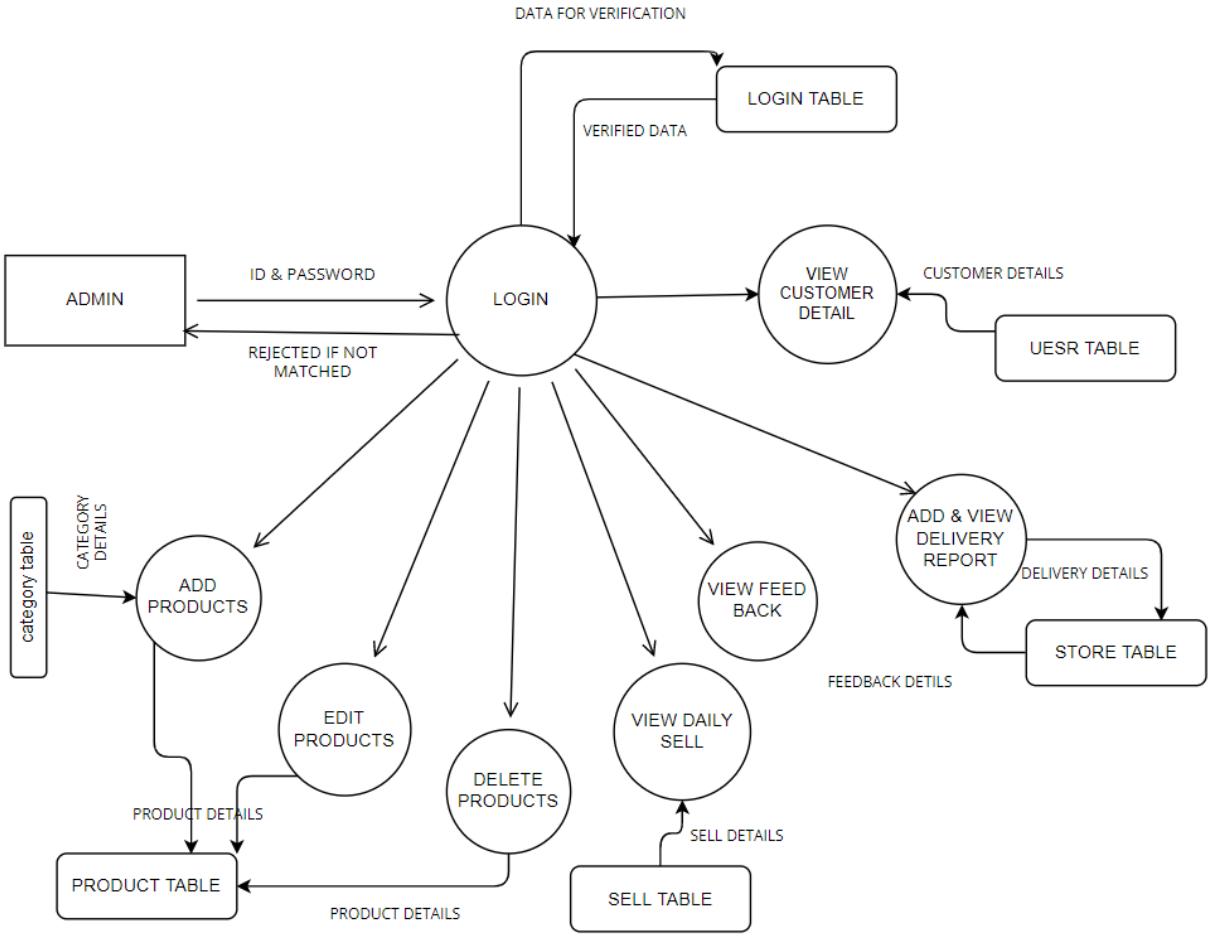
MySQL is the world's second most widely used open-source relational database management system (RDBMS). The SQL phrase stands for Structured Query Language. An application software called Navicert was used to design the tables in MySQL.

Spring-Boot:

This is used to connect MYSQL and fetch data from database and store the data in database. The Spring Framework is an application framework and inversion of control container for the Java platform. The framework's core features can be used by any Java application, but there are extensions for building web applications on top of the Java EE (Enterprise Edition) platform. Although the framework does not impose any specific programming model, it has become popular in the Java community as an addition to the Enterprise JavaBeans (EJB) model. The Spring Framework is Open-source Framework.

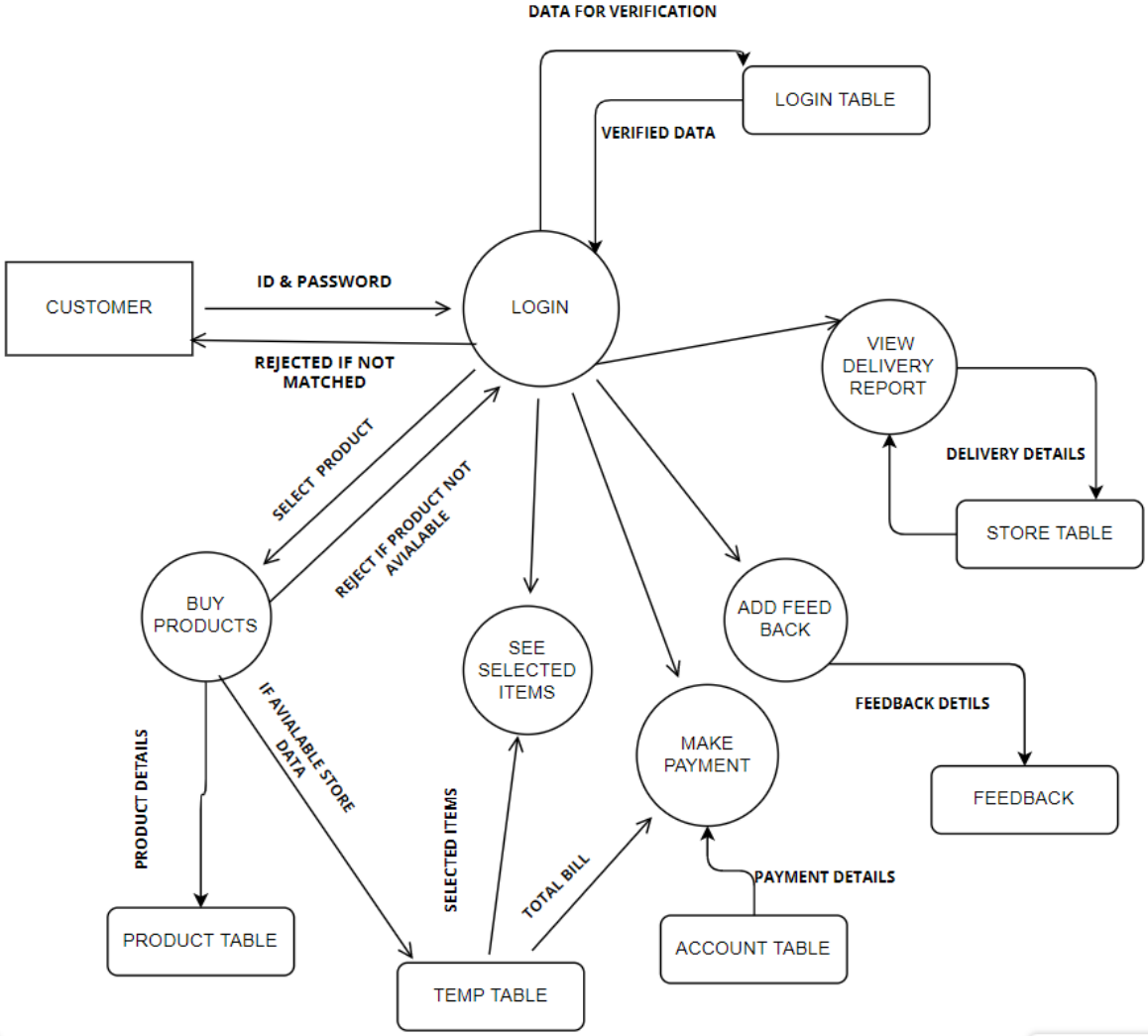
IACSD

1 Level DFD for MANAGER



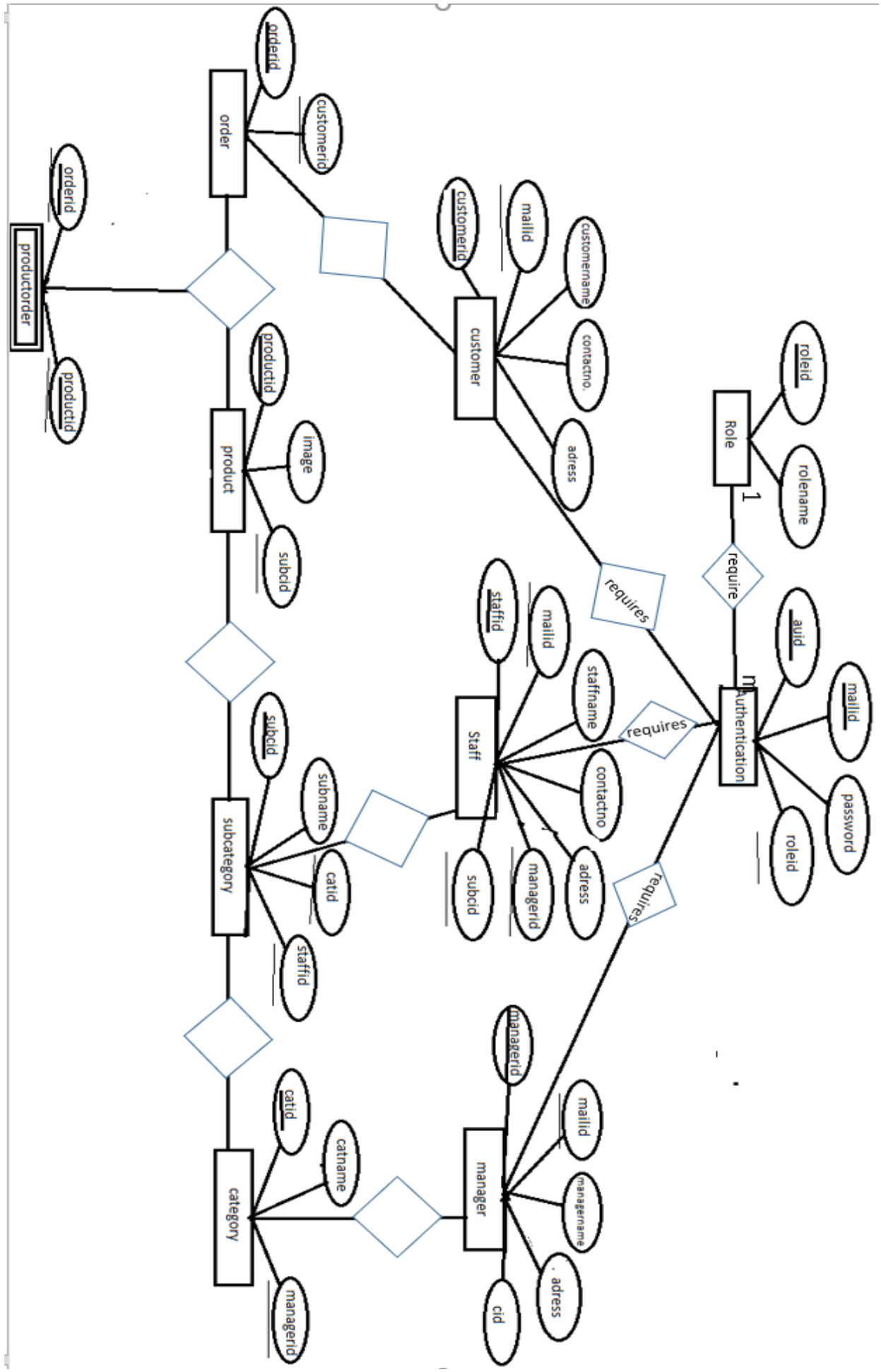
IACSD

1 Level DFD for CUSTOMER



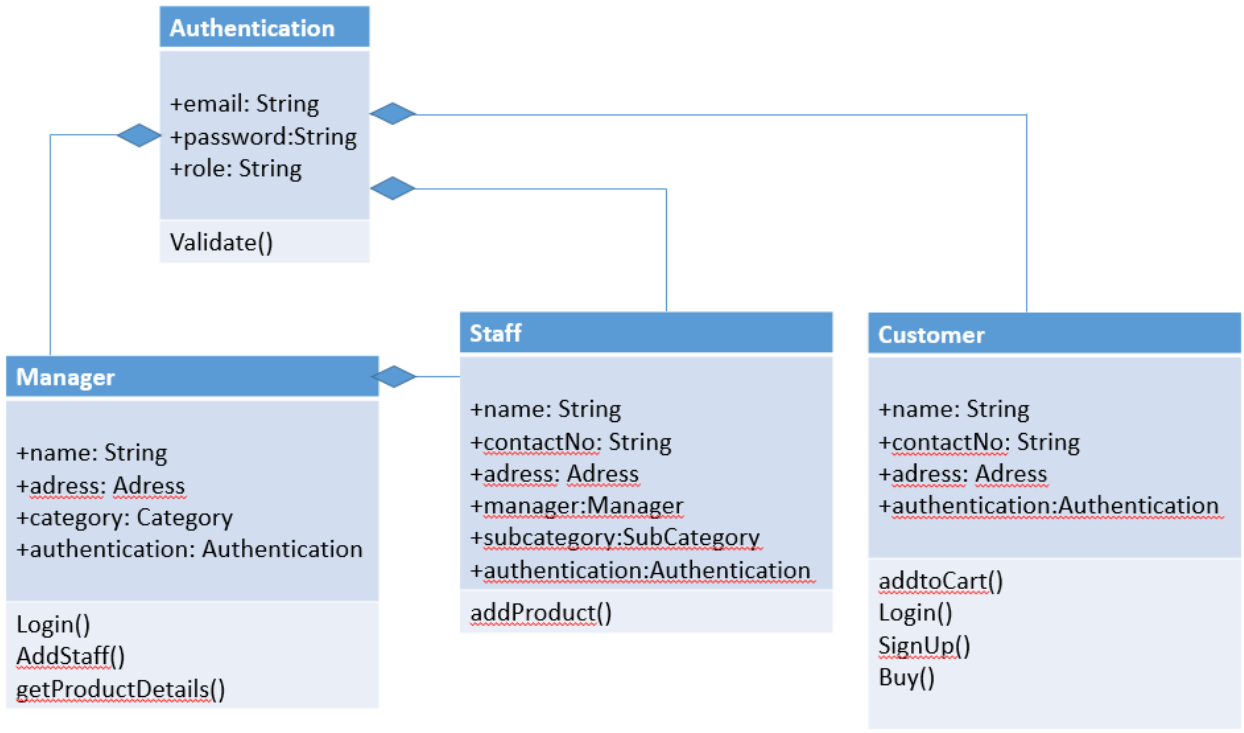
IACSD

ER Diagram



IACSD

Class Diagram



IACSD

Table Structure

Tables

	Tables_in_advjava5
▶	authentication
	cart_items
	category
	customer
	customer_response_dto
	manager
	ordar
	product
	product_order
	staff
	sub_category
	user

Authentication

	Field	Type	Null	Key	Default	Extra
▶	id	bigint	NO	PRI	NULL	auto_increment
	mail_id	varchar(20)	NO	UNI	NULL	
	password	varchar(20)	NO	UNI	NULL	
	role	varchar(255)	YES		NULL	

Cart_items

	Field	Type	Null	Key	Default	Extra
▶	id	bigint	NO	PRI	NULL	auto_increment
	quantity	bigint	YES		NULL	
	customer_id	bigint	YES	MUL	NULL	
	product_id	bigint	YES	MUL	NULL	

Category

	Field	Type	Null	Key	Default	Extra
▶	id	bigint	NO	PRI	NULL	auto_increment
	category_name	varchar(255)	YES		NULL	

Customer

IACSD

Field	Type	Null	Key	Default	Extra
id	bigint	NO	PRI	NULL	auto_increment
city	varchar(255)	YES		NULL	
state	varchar(255)	YES		NULL	
zip	int	NO		NULL	
cotact_no	int	YES		NULL	
customer_name	varchar(20)	YES		NULL	
athentication_id	bigint	YES	MUL	NULL	
cart_id	bigint	YES	MUL	NULL	
order_id	bigint	YES	MUL	NULL	

Manager

Field	Type	Null	Key	Default	Extra
id	bigint	NO	PRI	NULL	auto_increment
city	varchar(255)	YES		NULL	
state	varchar(255)	YES		NULL	
zip	int	NO		NULL	
manager_name	varchar(20)	YES		NULL	
athentication_id	bigint	YES	MUL	NULL	
categoty_id	bigint	YES	MUL	NULL	

Ordar

Field	Type	Null	Key	Default	Extra
id	bigint	NO	PRI	NULL	auto_increment
totalamount	double	YES		NULL	
totalqty	int	YES		NULL	

Product

Field	Type	Null	Key	Default	Extra
id	bigint	NO	PRI	NULL	
image	longblob	YES		NULL	
path	varchar(255)	YES		NULL	
price	double	NO		NULL	
productname	varchar(255)	YES		NULL	
weight	double	NO		NULL	
category_id	bigint	YES	MUL	NULL	
sub_category	bigint	YES	MUL	NULL	

Product_Order

IACSD

	Field	Type	Null	Key	Default	Extra
▶	order_id	bigint	NO	PRI	NULL	
	prduct_id	bigint	NO	PRI	NULL	

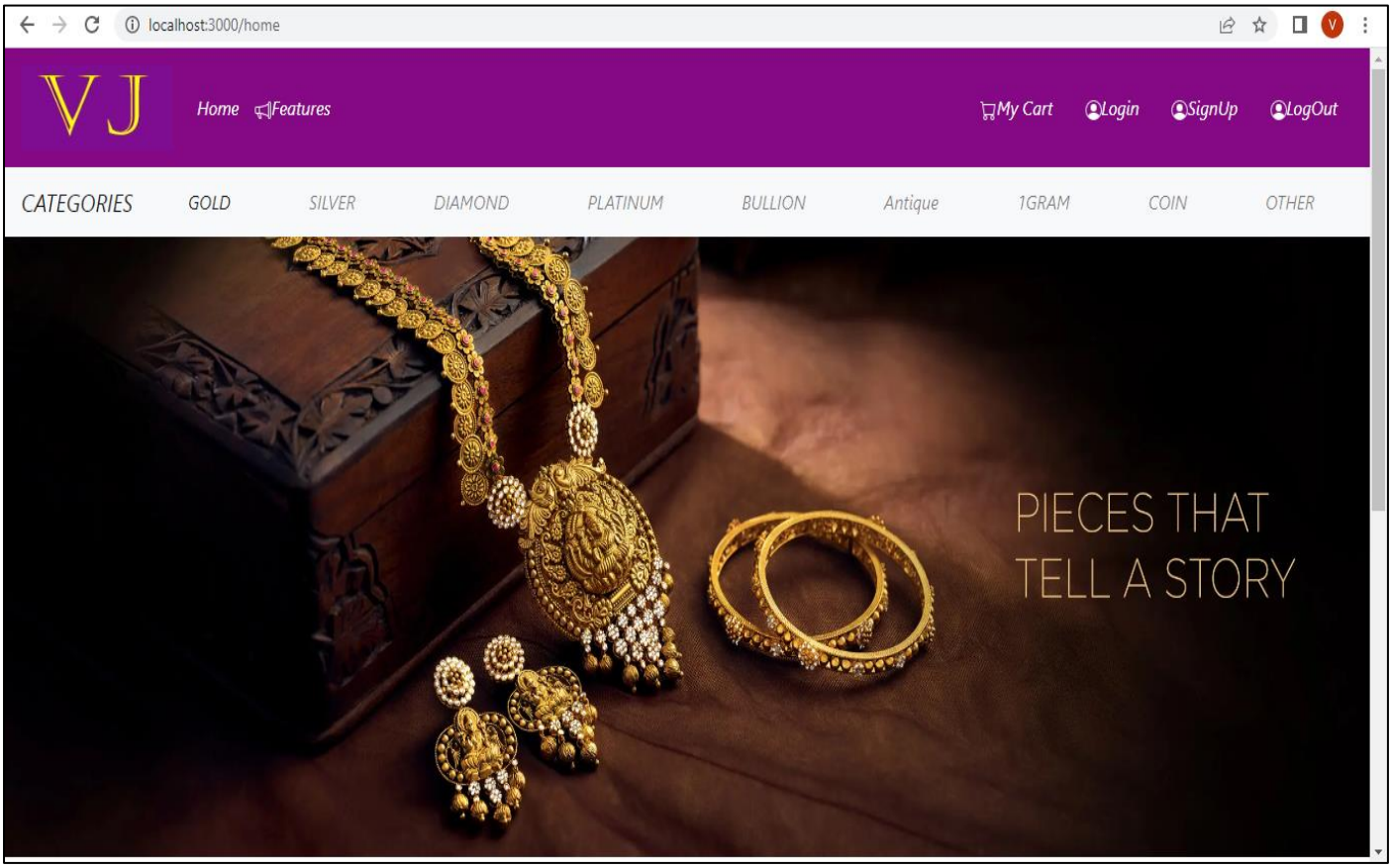
Staff

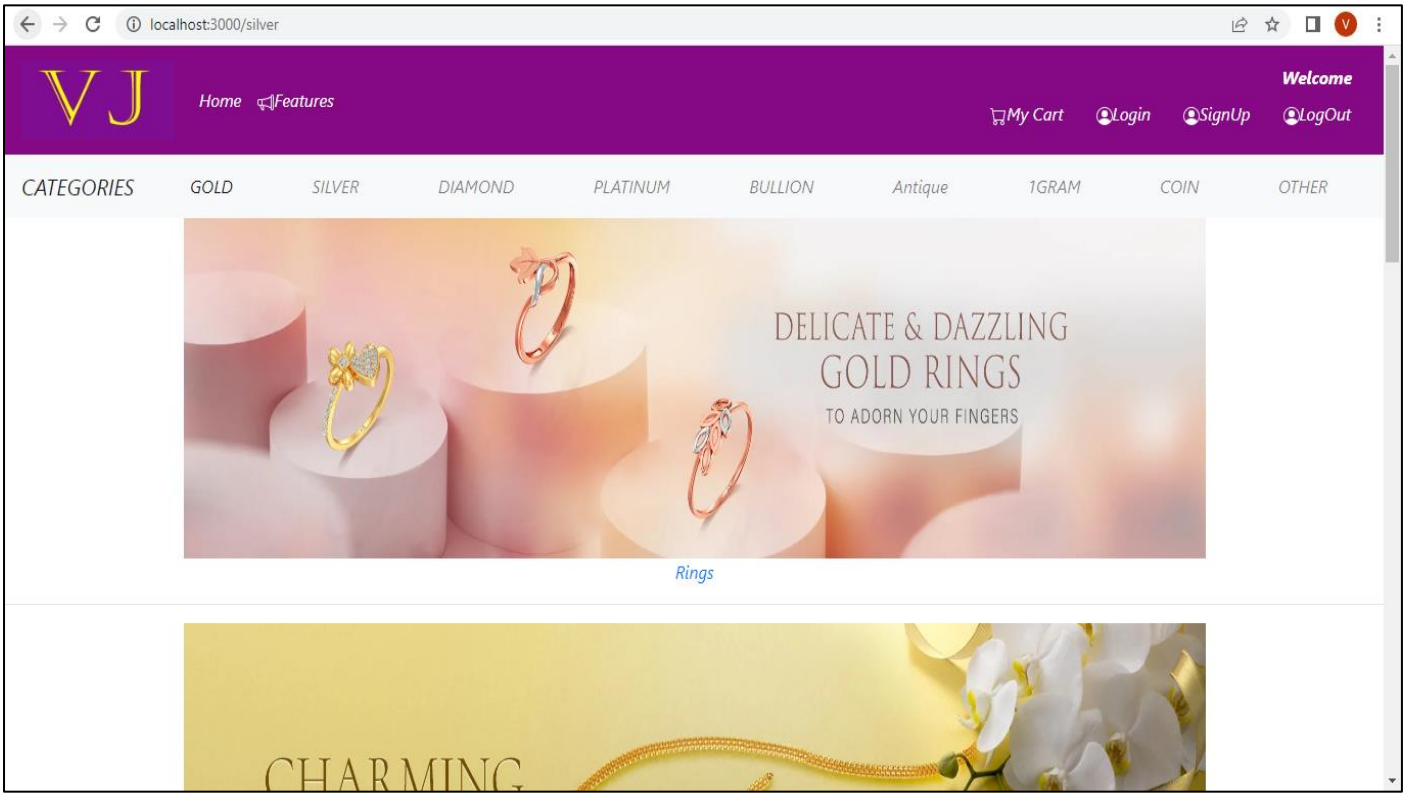
	Field	Type	Null	Key	Default	Extra
▶	id	bigint	NO	PRI	NULL	auto_increment
	city	varchar(255)	YES		NULL	
	state	varchar(255)	YES		NULL	
	zip	int	NO		NULL	
	contact_no	int	YES		NULL	
	staff_name	varchar(20)	YES		NULL	
	authentication	bigint	YES	MUL	NULL	
	sub_category_id	bigint	YES	MUL	NULL	
	manager_id	bigint	YES	MUL	NULL	

Sub_category

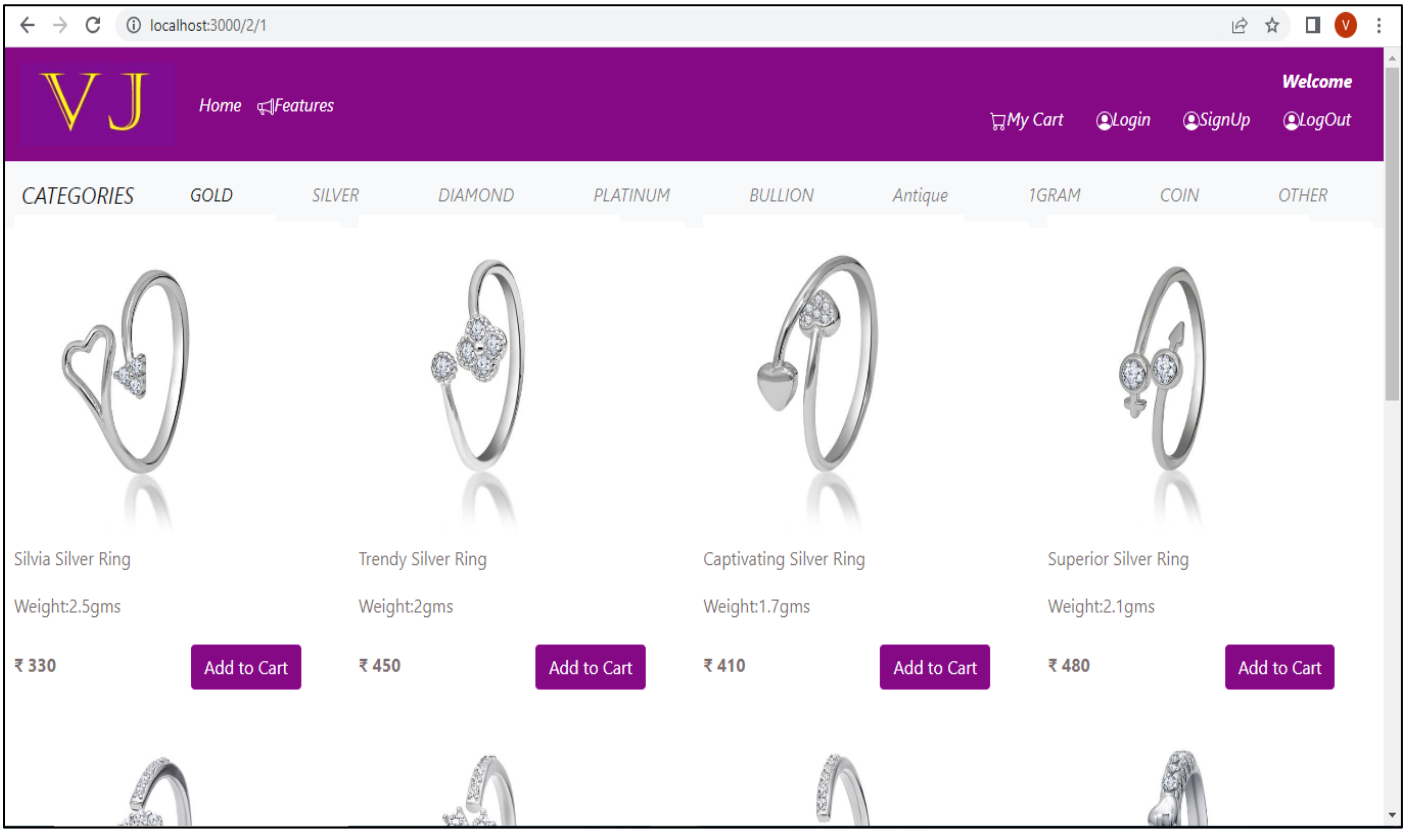
	Field	Type	Null	Key	Default	Extra
▶	id	bigint	NO	PRI	NULL	auto_increment
	subcategory_name	varchar(255)	YES		NULL	
	category_id	bigint	YES	MUL	NULL	

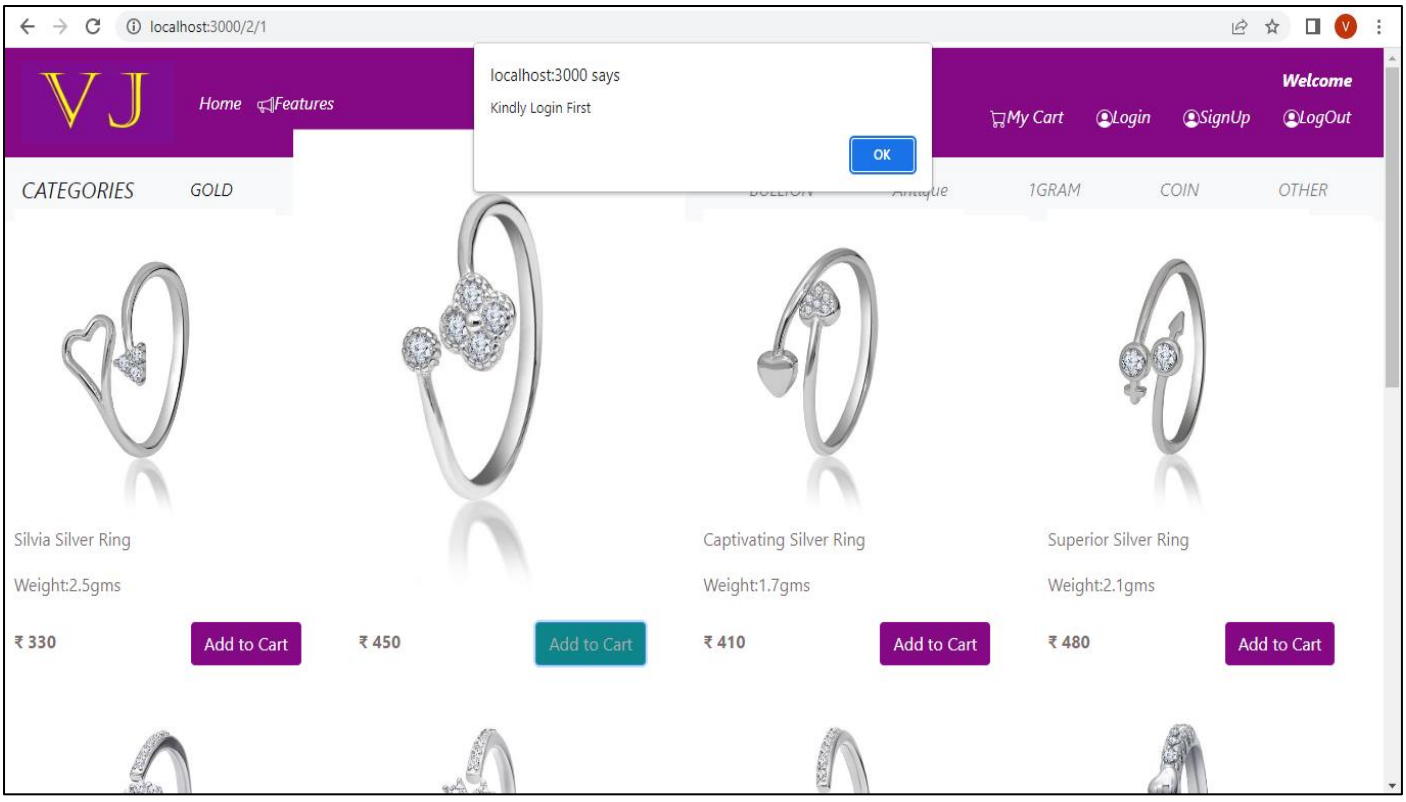
PROJECT DIAGRAMS



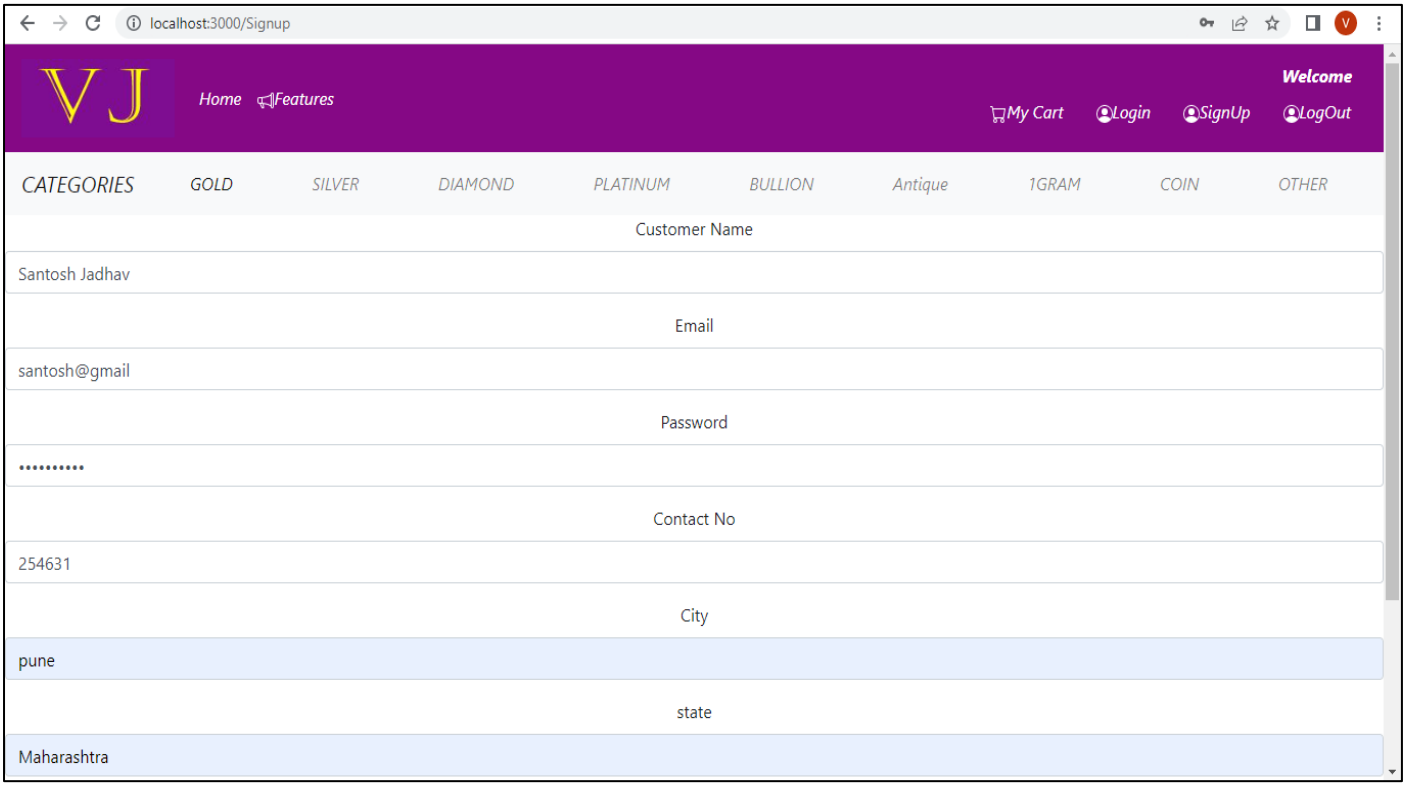


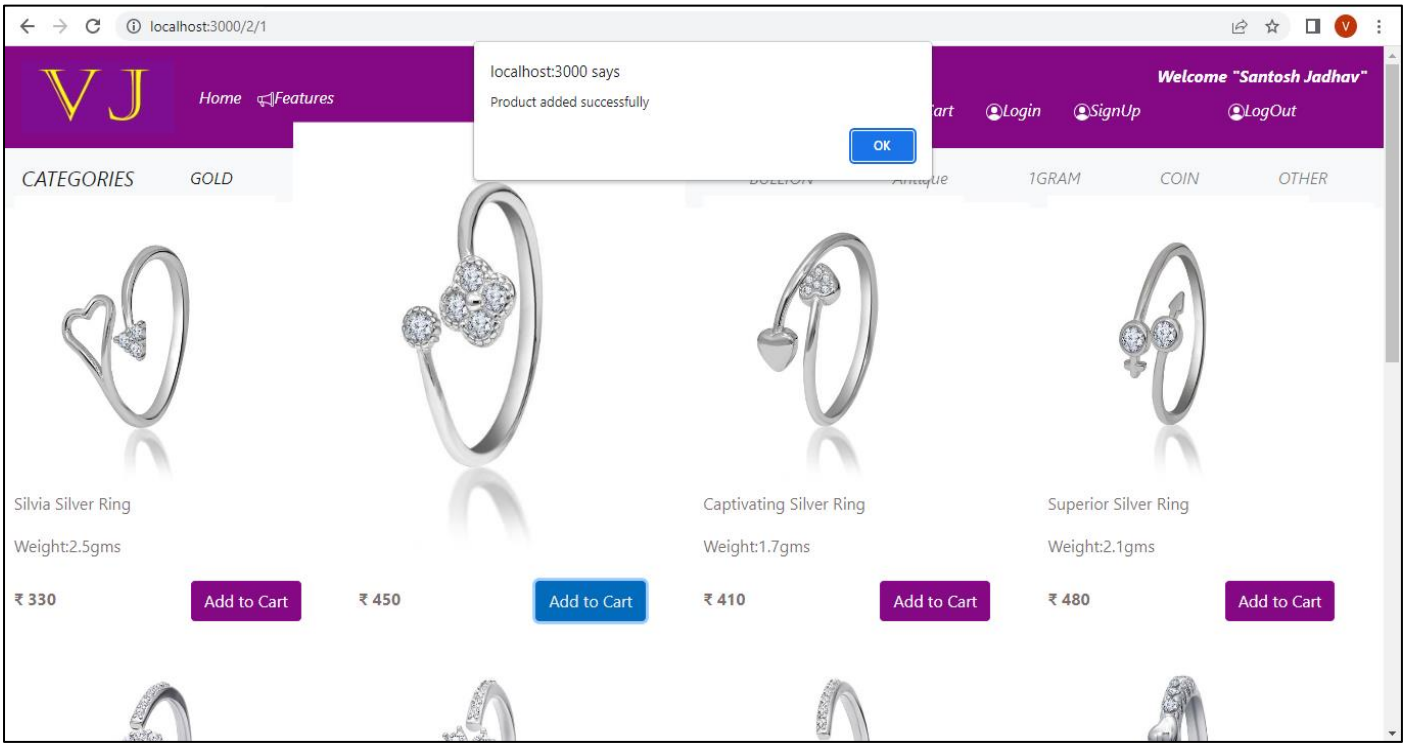
IACSD


localhost:3000/2/1
VJ
Home
Features
Welcome
My Cart
Login
SignUp
LogOut
CATEGORIES
GOLD
SILVER
DIAMOND
PLATINUM
BULLION
Antique
1GRAM
COIN
OTHER
Silvia Silver Ring
Weight:2.5gms
₹ 330
Add to Cart
Trendy Silver Ring
Weight:2gms
₹ 450
Add to Cart
Captivating Silver Ring
Weight:1.7gms
₹ 410
Add to Cart
Superior Silver Ring
Weight:2.1gms
₹ 480
Add to Cart

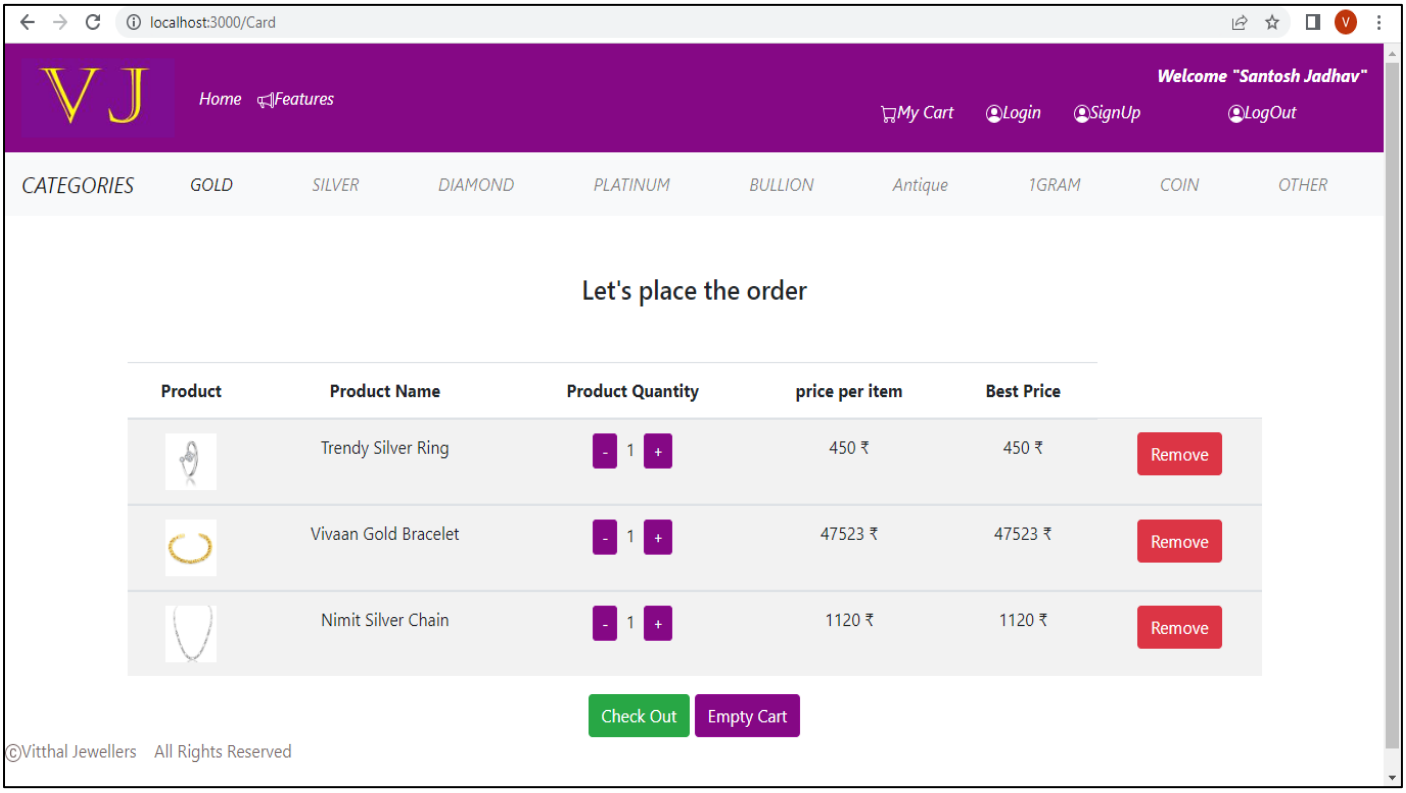

localhost:3000/2/1
localhost:3000 says
Kindly Login First
OK
VJ
Home
Features
Welcome
My Cart
Login
SignUp
LogOut
CATEGORIES
GOLD
1GRAM
COIN
OTHER
Silvia Silver Ring
Weight:2.5gms
₹ 330
Add to Cart
₹ 450
Add to Cart
Captivating Silver Ring
Weight:1.7gms
₹ 410
Add to Cart
Superior Silver Ring
Weight:2.1gms
₹ 480
Add to Cart

IACSD

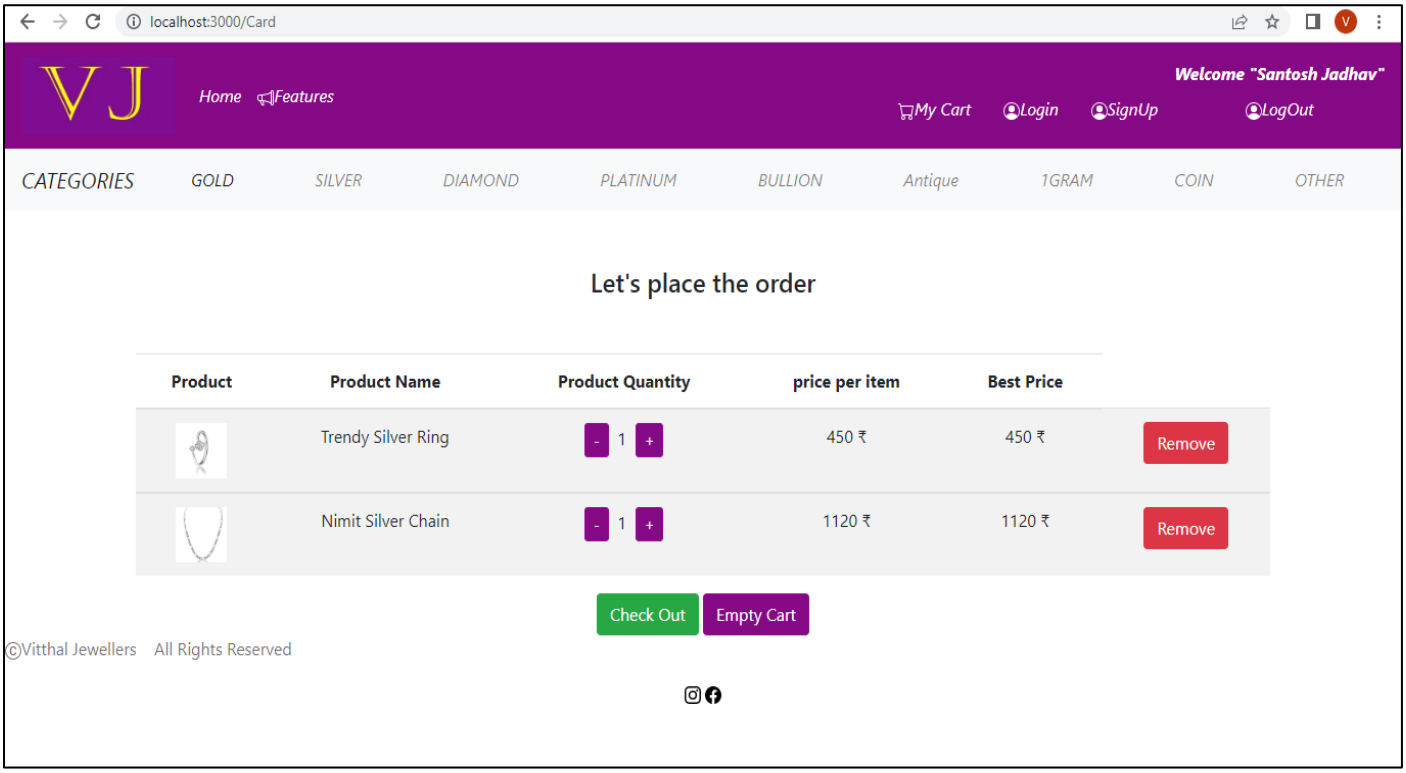

localhost:3000/Signup
VJ
Home
Features
Welcome
My Cart
Login
SignUp
LogOut
CATEGORIES
GOLD
SILVER
DIAMOND
PLATINUM
BULLION
Antique
1GRAM
COIN
OTHER
Customer Name
Santosh Jadhav
Email
santosh@gmail
Password
Contact No
254631
City
pune
state
Maharashtra


localhost:3000/2/1
localhost:3000 says
Product added successfully
OK
VJ
Home
Features
Welcome "Santosh Jadhav"
Login
SignUp
LogOut
CATEGORIES
GOLD
1GRAM
COIN
OTHER
Silvia Silver Ring
Weight:2.5gms
₹ 330
Add to Cart
₹ 450
Add to Cart
Captivating Silver Ring
Weight:1.7gms
₹ 410
Add to Cart
Superior Silver Ring
Weight:2.1gms
₹ 480
Add to Cart

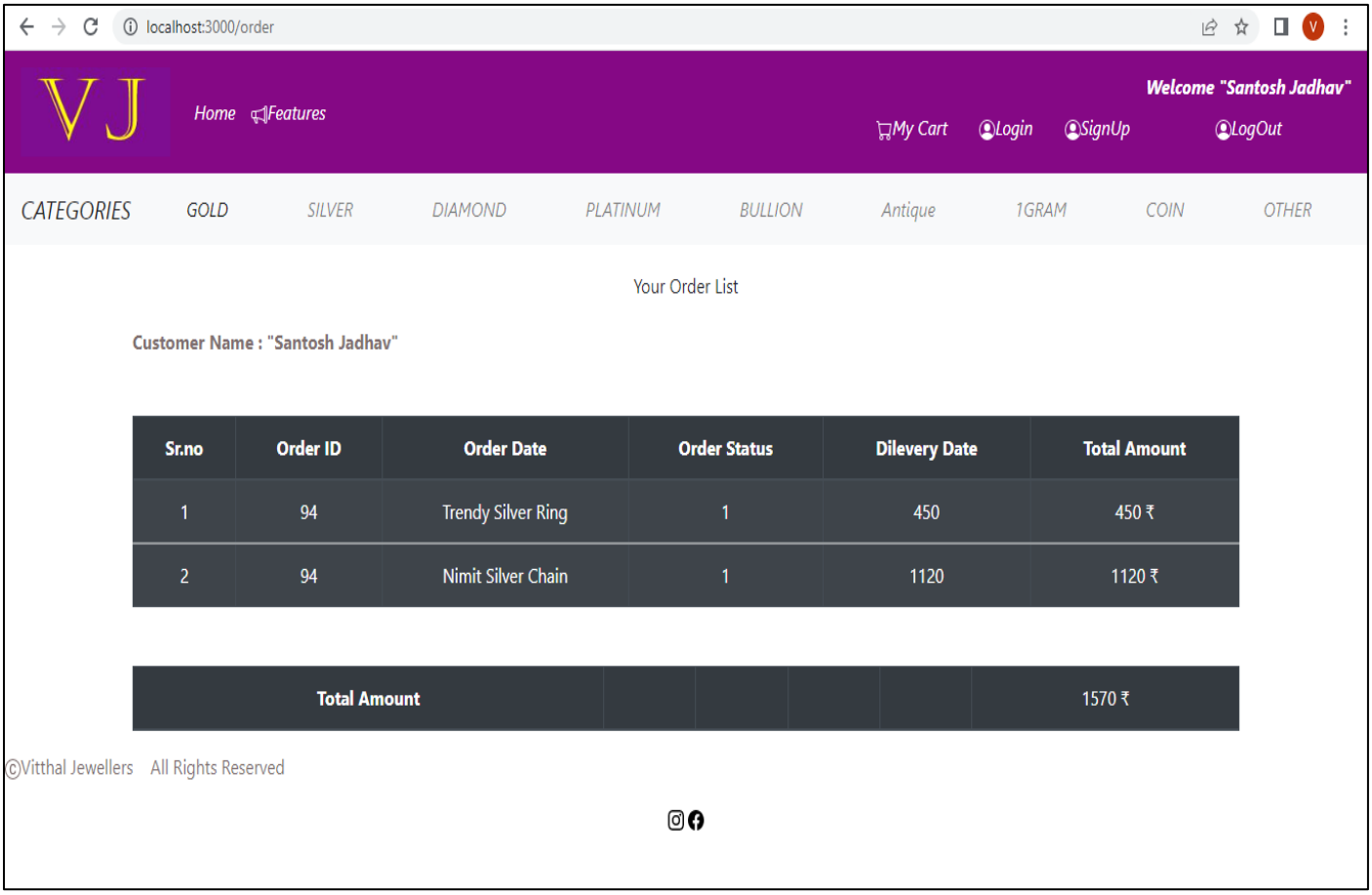
IACSD

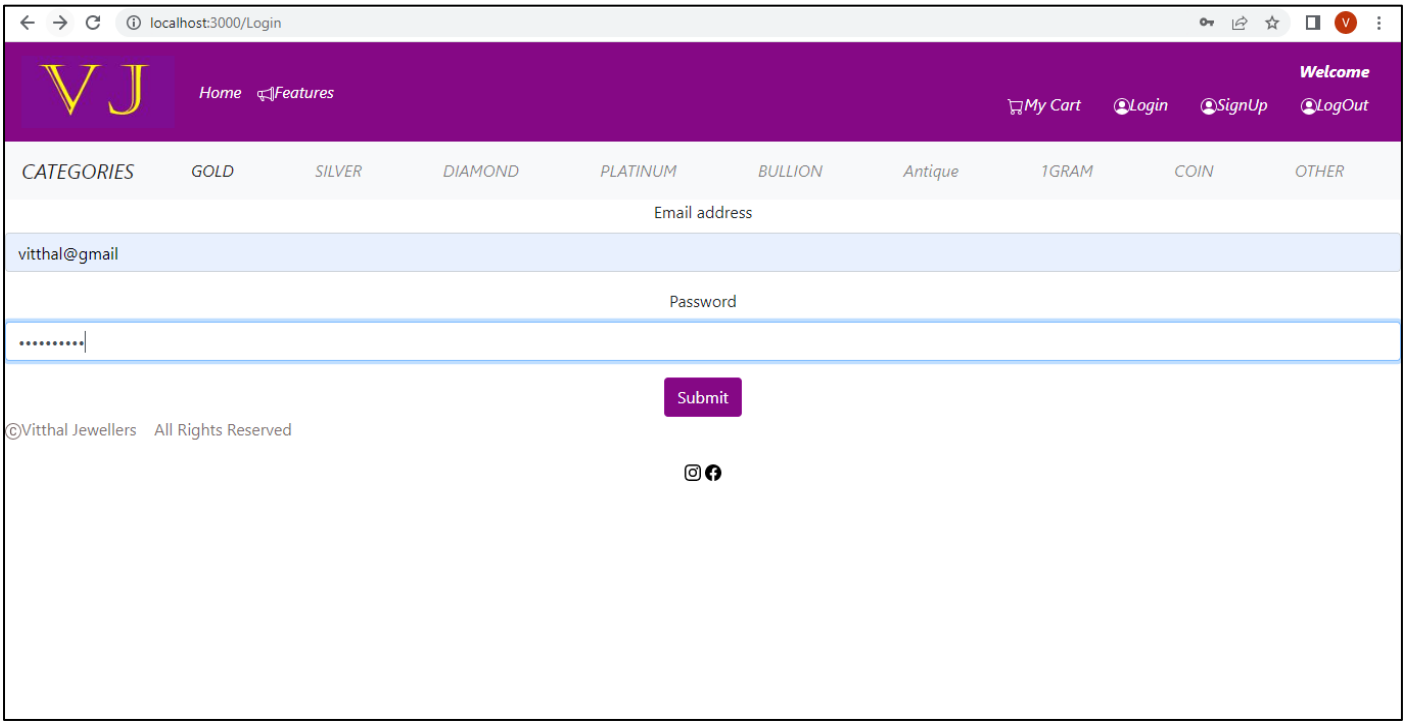


REMOVED

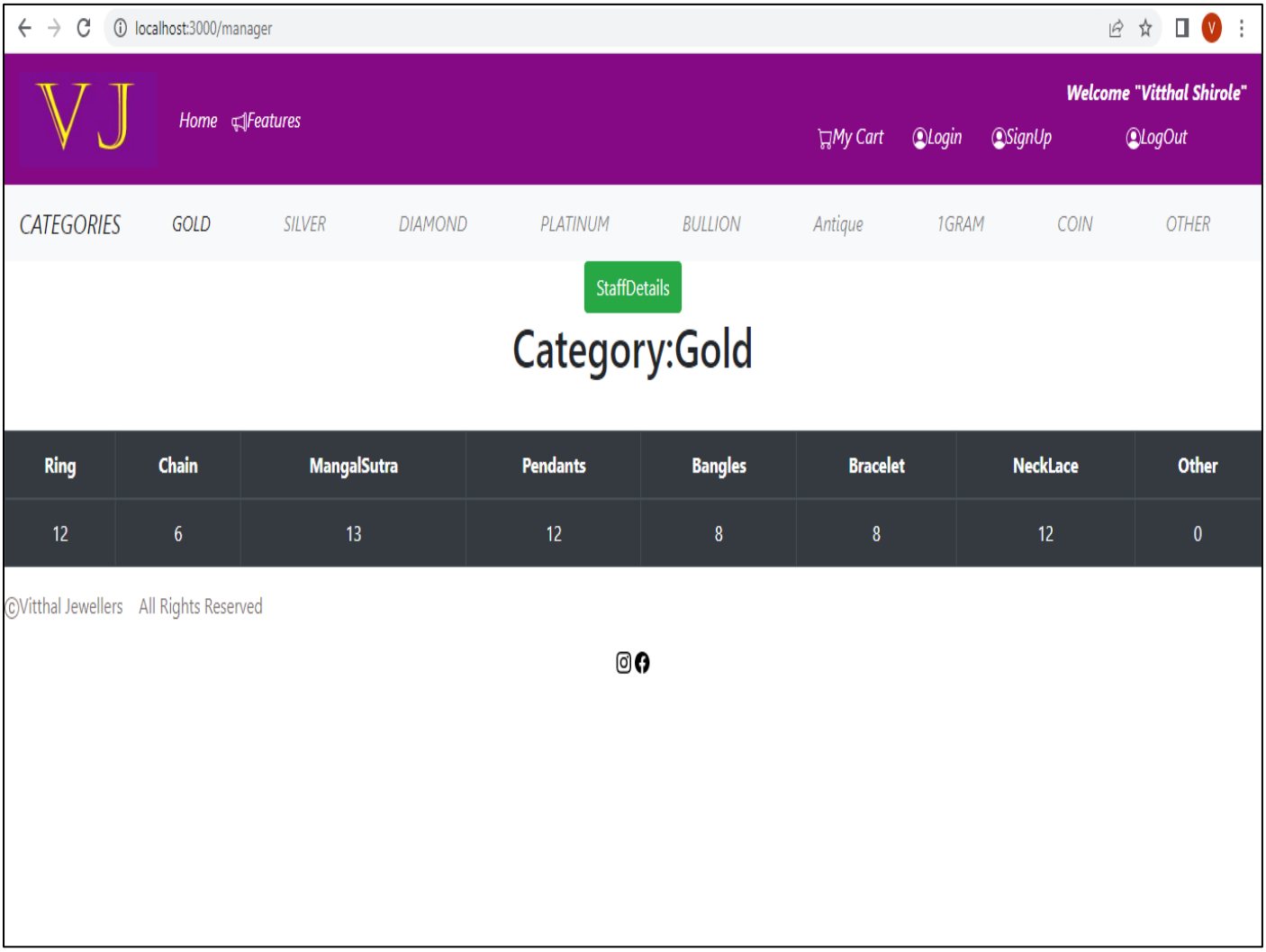


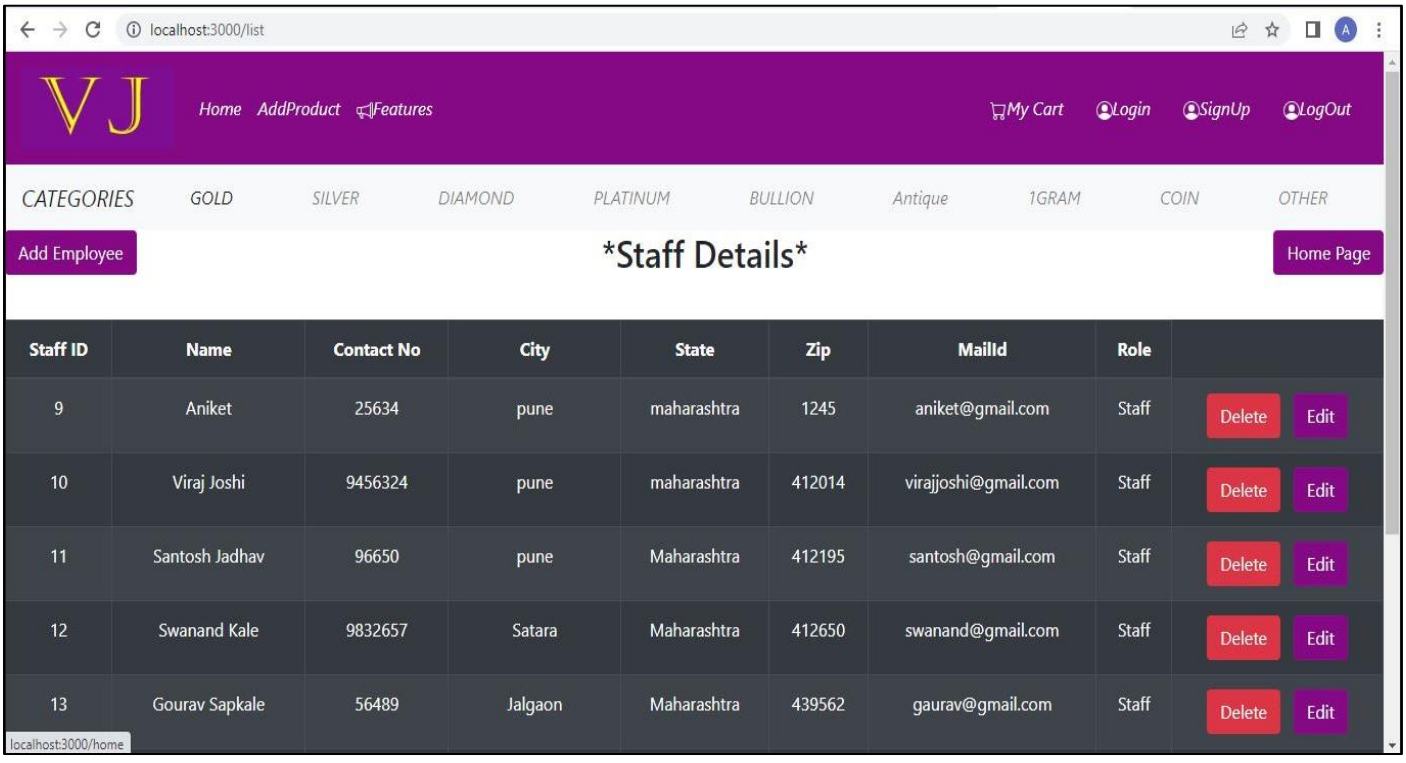
IACSD


localhost:3000/order
VJ
Home
Features
Welcome "Santosh Jadhav"
My Cart
Login
SignUp
LogOut
CATEGORIES
GOLD
SILVER
DIAMOND
PLATINUM
BULLION
Antique
1GRAM
COIN
OTHER
Your Order List
Customer Name : "Santosh Jadhav"
Sr.no
Order ID
Order Date
Order Status
Dilevery Date
Total Amount
1
94
Trendy Silver Ring
1
450
450 ₹
2
94
Nimit Silver Chain
1
1120
1120 ₹
Total Amount
1570 ₹
©Vitthal Jewellers All Rights Reserved

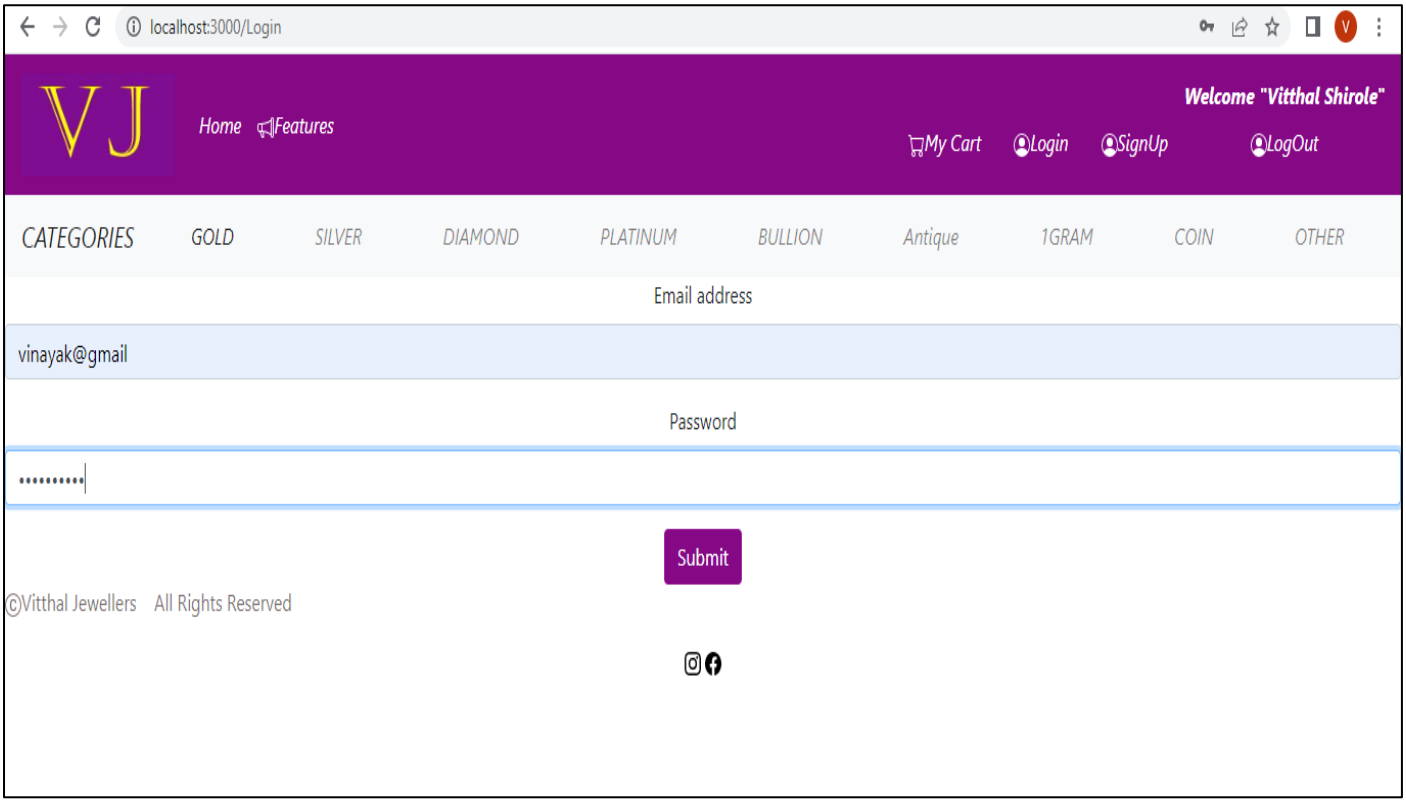

localhost:3000/Login
VJ
Home
Features
Welcome
My Cart
Login
SignUp
LogOut
CATEGORIES
GOLD
SILVER
DIAMOND
PLATINUM
BULLION
Antique
1GRAM
COIN
OTHER
Email address
vitthal@gmail
Password
Submit
©Vitthal Jewellers All Rights Reserved

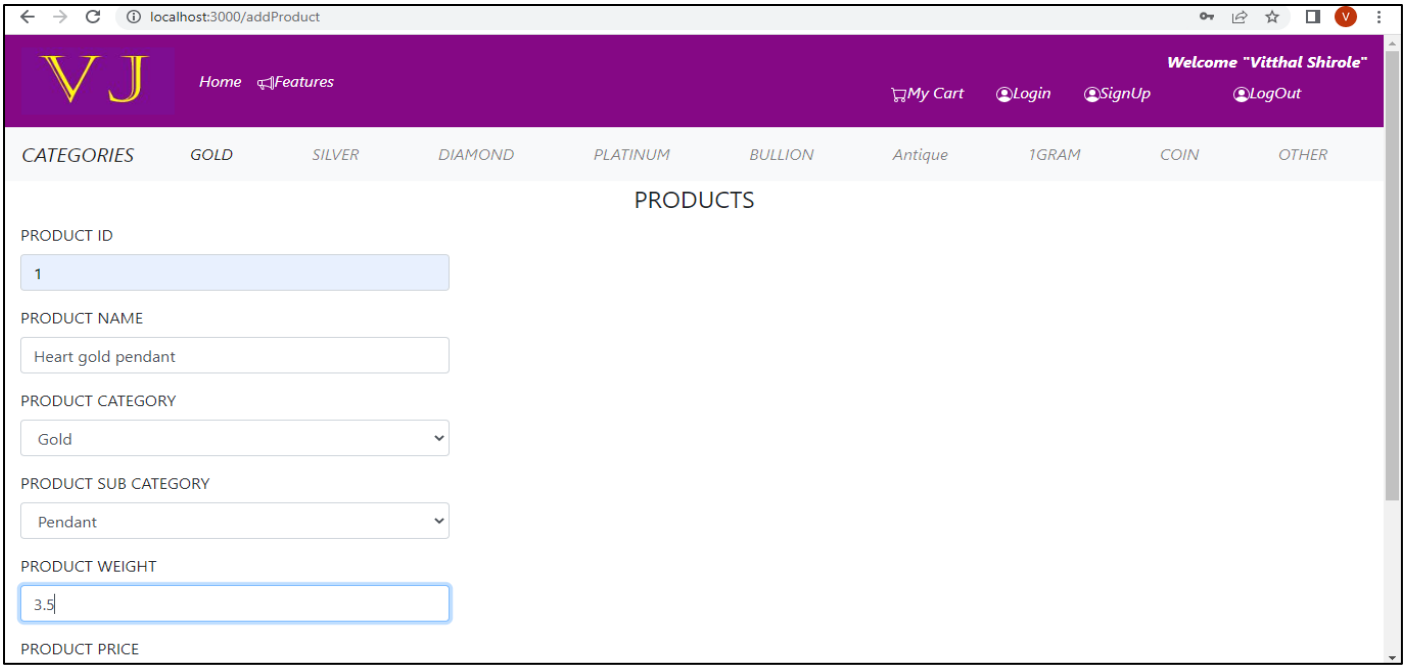
IACSD


localhost:3000/manager
VJ
Home
Features
Welcome "Vitthal Shirole"
My Cart
Login
SignUp
LogOut
CATEGORIES
GOLD
SILVER
DIAMOND
PLATINUM
BULLION
Antique
1GRAM
COIN
OTHER
StaffDetails
Category:Gold
Ring
Chain
MangalSutra
Pendants
Bangles
Bracelet
NeckLace
Other
12
6
13
12
8
8
12
0
©Vitthal Jewellers All Rights Reserved


localhost:3000/list
VJ
Home
AddProduct
Features
My Cart
Login
SignUp
LogOut
CATEGORIES
GOLD
SILVER
DIAMOND
PLATINUM
BULLION
Antique
1GRAM
COIN
OTHER
Add Employee
Staff Details
Home Page
Staff ID
Name
Contact No
City
State
Zip
MailId
Role
9
Aniket
25634
pune
maharashtra
1245
aniket@gmail.com
Staff
Delete
Edit
10
Viraj Joshi
9456324
pune
maharashtra
412014
virajjoshi@gmail.com
Staff
Delete
Edit
11
Santosh Jadhav
96650
pune
Maharashtra
412195
santosh@gmail.com
Staff
Delete
Edit
12
Swanand Kale
9832657
Satara
Maharashtra
412650
swanand@gmail.com
Staff
Delete
Edit
13
Gourav Sapkale
56489
Jalgaon
Maharashtra
439562
gaurav@gmail.com
Staff
Delete
Edit
localhost:3000/home

IACSD


localhost:3000/Login
VJ
Home
Features
Welcome "Vitthal Shirole"
My Cart
Login
SignUp
LogOut
CATEGORIES
GOLD
SILVER
DIAMOND
PLATINUM
BULLION
Antique
1GRAM
COIN
OTHER
Email address
vinayak@gmail
Password
Submit
©Vitthal Jewellers All Rights Reserved


localhost:3000/addProduct
VJ
Home
Features
Welcome "Vitthal Shirole"
My Cart
Login
SignUp
LogOut
CATEGORIES
GOLD
SILVER
DIAMOND
PLATINUM
BULLION
Antique
1GRAM
COIN
OTHER
PRODUCTS
PRODUCT ID
1
PRODUCT NAME
Heart gold pendant
PRODUCT CATEGORY
Gold
PRODUCT SUB CATEGORY
Pendant
PRODUCT WEIGHT
3.5
PRODUCT PRICE

CONCLUSION

The project entitled “Vitthal Jewellers” was completed successfully.

The system has been developed with much care and free of errors and at the same time it is efficient and less time consuming. The purpose of this project was to develop a web application and an android application for purchasing items from a shop.

This project helped us in gaining valuable information and practical knowledge on several topics like designing web pages using React.js, usage of responsive templates, designing of android applications, and management of database using MySQL. The entire system is secured. Also, the project helped us understanding about the development phases of a project and software development life cycle. We learned how to test different features of a project.

This project has given us great satisfaction in having designed an application which can be implemented to any nearby shops or branded shops selling various kinds of products by simple modifications.

There is a scope for further development in our project to a great extent. A number of features can be added to this system in future like providing moderator more control over products so that each moderator can maintain their own products. Another feature we wished to implement was providing classes for customers so that different offers can be given to each class. System may keep track of history of purchases of each customer and provide suggestions based on their history. These features could have implemented unless the time did not limit us.

REFERENCES

[1] JavaScript Enlightenment, Cody Lindley-First Edition, based on JavaScript 1.5, ECMA-262, Edition
[2] Mc Graw Hill's, Java: The complete reference 7thEdition, Herbert Scheldt
[3] Complete CSS Guide, Maxine Sherrin and John Allsopp-O'ReillyMedia; September 2012 [1]

ONLINE REFERENCE

[1]www.Google.com
[2] www.w3school.com
[3] www.javatpoint.com