

# **Scent and Perfume Sales Management System**

**A Project Report**

Submitted in partial fulfilment of the  
Requirements for the award of the Degree of the  
**BACHELOR OF SCIENCE (COMPUTER SCIENCE)**

**By**

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**THANE(W), 400601**

**MAHARASHTRA**

**YEAR : 2023**

## **CERTIFICATE OF SCENT AND PERFUME SALES MANAGEMENT SYSTEM**

Respected Sir,

I hereby certify that the following namely one “ **MR. PRATHAM CHAPKE**” has been surveying me regarding various information about cosmetics products regularly for past 2 months to understand the customer and market requirements which would help in making the “**SCENT AND PERFUME SALES MANAGEMENT SYSTEM**”.

The decisions related to the software design and other data contained in this report was made after multiple meetings done by him.

My guidance has been primarily present since the first day which helped him in preparing the project report.

Regards,

**(Client Signature)**

## ABSTRACT

In an era where having a computer performing our operations is a matter of prestige for some and necessity for others. Management of these of these projects is still an area which is ignored or done in traditional manner. I, in a system called **SCENT AND PERFUME SALES MANAGEMENT SYSTEM** is integrated and easy-to-use software for people who want to purchase scent and perfume products.

This system provides most of the features required to buy desired products and helps customers to conveniently select and pay for the product of their choice. To help the admin to keep track of all the records regarding the purchase products and details of the customers , there is a dashboard facility provided to the admin which will keep the admin updated regarding all the changes. And various problems are tackled at the different levels to convince the user as well as admin.

I hope that this software would prove to be an excellent and easy-to-use environment for end-user.

## ACKNOWLEDGMENT

I am glad to present my project **Scent and Perfume Sales Management System**. For everything I have achieved, the credit goes to all those who offered me invaluable assistance and guidance to make the project.

I take this opportunity to express my soulful gratitude management of **B. N. BANDODKAR COLLEGE OF SCIENCE** for giving this opportunity to accomplish this project work.

I am thankful to our project guide **Ms. Ankita Shinde** for most sincere , useful & encouraging contribution throughout the project span. Without their support we couldn't complete the project on time.

I am highly obliged to the teaching members of the Computer Science who took efforts to make the project a successful endeavour. I would also like to thank non-teaching staff members.

Last, I extend my sincere thanks and appreciation to my family for supporting me a lot in finalizing this project within the limited time frame.

## DECLARATION

I hereby declare that the project entitled, "**SCENT AND PERFUME SALES MANAGEMENT SYSTEM**" done at **B. N. BANDODKAR COLLEGE OF SCIENCE (AUTONOMOUS)**, has not been in any case duplicate to submit to any other university for the award of any degree. To best of my knowledge other than me, no one has submitted to any other university.

The project is done in partial fulfillment of the requirement for the award of degree of **BACHELOR OF SCIENCE (COMPUTER SCIENCE)** to be submitted as Sixth semester project as part of our curriculum.

**Name and Signature of the Student**

## **SYNOPSIS**

### **• Introduction**

This project is entitled Scent and Perfume Sales Management System. It is a web based application that serves as an Online Platform for the Scent and Perfume Products Business. This application is used for keeping the information of admin, customer and stock. These records are stored in database with security. Your data will be secure and only authorized person can take the copy of data. It is a platform where people can search, explore and order Scent, Deodorant and Perfume online and service provider delivers the products at customer's place. The platform sells all type of Perfume products as well as deodorant . It has user-friendly features and functionalities.

### **• Existing System**

All these management processes are done manually in the form of paperwork and records are kept in registry. In such cases, there is frequent possibility of data redundancy and data loss is easy. All invoice structures are handwritten and sometimes you make mistakes. This system is helps in consuming time and its labour intensive.

### **• Proposed system**

The objective is to overcome the main limitation of the current effective management of customer details, thus improving performance. The system will store all the basic data required for store management. This will take much less time than the current system. With the advanced computerisation involved in maintaining customer details can be kept. It will help us to save our time.

Validation of data will be ensure only accurate valid and complex data stored in database .

### **• Objective and scope of proposed system**

The system will store all the basic data processing needs the system .The main objective of the project is to increase the online business .whatever the data is stored in database will be seen by the admin so that the admin will analyse the profit is increased or decreased.

### **• Software Requirement**

Operating system : Microsoft window 10 or higher

Front-end : React js

Back-end : Nodejs , Express js

Database : MongoDB

- **Hardware Requirement**

Ram(Memory) :minimum 4gb

Hard-disk :Minimum 256 GB

Processor :Minimum 64 - bit Processor Ryzen 5 5500 U

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## INTRODUCTION

### **1.1 Feasibility study:**

A feasibility study is undertaken to determine the possibility or probability of either improving the existing system or developing a completely new system. It helps to obtain the overview of the problem and to get a rough assessment of whether other feasible solution exists.

There are various measures of feasibility that help to decide whether a particular project is feasible or not. These measures include:

#### **1. Technical feasibility:**

In the Technical feasibility study, the first step is that the organization or company has to decide what technologies are suitable to develop the project. The organization needs to decide that which software is required to develop the project and that can be compatible on all the device. The proposed system can be compatible on every version of windows operating system. And the proposed system can be able to adapt all the future modifications as well as updates in the system. Here the technologies used are Languages: React js in frontend, nodejs and Expressjs in backend. Database: MongoDB.

These are the free software that would be downloaded from web.

#### **2. Economical feasibility:**

Economic analysis is most frequently used for evaluation of the effectiveness of the system. It looks at start-up costs, profitability, operating costs, overhead costs, fixed and variable costs and potential liabilities. The system being developed is economic with the shopping point of view. It is cost effective in the sense that it eliminates the paper work completely. The new system is economically feasible only when the financial benefits are more than the investments and expenditure. This project is made with minimum capital investment. Hence this project can be considered as economically feasible because the expenditure is not greater than the benefits.

#### **3. Operational Feasibility:**

The need of Operational Feasibility is to determine that what are the impacts of operations in both the current system as well as the operations of the new system. To operate the proposed system the user does not need to require any technical knowledge, the Scent and perfume sales management system web application is easy to use. And the interface is user-friendly. In this web app, the client will be able to check out all the data, orders and change the stocklist as per their requirement and can check payment is received or not and also track the orders. It helps clients to manage their online orders made by the customers. Scent and perfume system web application helps the client to easily handle his business by processing orders

with ease, accept payments and provides better customer service. Web application saves the time of the client so that the client can manage all the orders as soon as possible.

### **1.2 Objective And Scope:**

The system will store all the basic data processing needs the system. The main objective of the project is to increase the online business. Whatever the data is stored in database will be seen by the admin so that the admin will analyse the profit is increased or decreased.

### **1.3 Purpose:**

The objective is to overcome the main limitation of the current effective management of customer details, thus improving performance. The system will store all the basic data required for store management. This will take much less time than the current system. With the advanced computerisation involved in maintaining customer details can be kept. It will help us to save our time.

Validation of data will ensure only accurate valid and complex data stored in database.

### **1.4 Advantages:**

A client needs a web application, which can facilitate store operations and make their day-to-day lives much easier. Scent and perfume sales system is application designed to take advantage of today's technology and reduce or avoid the burden of storing data on paper and in files.

Some advantages are –

- The proposed system would easily overcome most of the difficulties coming from the current system.
- Not much manual work is involved.
- The client is able to store the records of users, products, orders, payment.
- The system will help to keep the track of the available and required stock.
- The system will provide the security that is only the authorised persons can access the system.
- The system will save time and money of the client.
- The system will provide the user friendly interface for the operations.

## SURVEY OF TECHNOLOGY

### ❖ TOOLS :-

The tools that we are using for this software are as follows:

- Visual Studio Code

#### ➤ Visual Studio Code

Visual Studio Code is a code editor in layman's terms. Visual Studio Code is "a free-editor that helps the programmer write code, helps in debugging and corrects the code using the intelli-sense method ". In normal terms, it facilitates users to write the code in an easy manner. Many people say that it is half of an IDE and an editor, but the decision is up to the coders. Any program/software that we see or use works on the code that runs in the background. Traditionally coding was used to do in the traditional editors or even in the basic editors like notepad! These editors used to provide basic support to the coders.

Some of them were so basic that it was very difficult in writing basic English level programs in them. As time went by, some programming languages needed a specific framework and support for further coding and development it, which was not possible using these editors. VI Editor, Sublime Text Editor, is one of the many kinds of editors that came into existence. The most prominent and which supports almost every coding language is VISUAL STUDIO CODE. Its features let the user modify the editor as per the usage, which means the user is able to download the libraries from the internet and integrate it with the code as per his requirements.

### ❖ TECHNOLOGY:

Technologies that we have used in our project are as follows:

- React js
- Node js
- Express js
- MongoDB

➤ **React js :**

React (also known as React.js or ReactJS) is a free and open source frontend javascript library for build user interfaces based on UI components It is maintained by Meta (formerly Facebook) and a community of individual developers and companies. React can be used as a base in the development of single-page, mobile, or server-rendered applications with frameworks like Nextjs. 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.

➤ **Node js :**

Node.js is an open source, cross-platform runtime environment for developing server-side and networking applications. Node.js applications are written in JavaScript, and can be run within the Node.js runtime on OS X, Microsoft Windows, and Linux.

Node.js also provides a rich library of various JavaScript modules which simplifies the development of web applications using Node.js to a great extent.

➤ **Express js :**

ExpressJS is one of the most used JavaScript frameworks for web applications and RESTful APIs. It's a lightweight framework, but it provides you the most useful parts such as routing, middleware integration, and template engines. Even if it's very easy to use and has the core built-in components, some parts, as an ORM, are missing. Because of that, loads of express-compatible modules and packages have been developed in the last few years. That means ExpressJS is a very extensible framework.

➤ **MongoDB :**

MongoDB is one of the most popular open-source NoSQL database written in C++. MongoDB is a document-oriented database which stores data in JSON-like documents with dynamic schema. It means you can store your records without worrying about the data structure such as the number of fields or types of fields to store values. MongoDB documents are similar to JSON objects. The word Mongo is basically derived from Humongous. MongoDB was first developed by a New York-based organization named 10gen in the year of 2007. Later 10gen changed the name and known as MongoDB Inc as of today. At the beginning, MongoDB is basically developed as a PAAS (Platform as a Service) database. But, in the year 2009, it was introduced as an open source database as named MongoDB 1.0.

### 3. REQUIREMENT AND ANALYSIS

#### **3.1 Problem Definition :**

All these management processes are done manually in the form of paperwork and records are kept in registry. If there will be same customer comes then he has to search in multiple register book which is time taking process and it becomes messy. In such cases, there is frequent possibility of data redundancy and data loss is easy. All invoice structures are handwritten and sometimes you make mistakes. This system is helps in consuming time and its labour intensive.

#### **3.2 Requirement Specification :**

Admin login into the system after validating admin email and password .It alerts valid or Invalid Email and password notification. Admin can Add, Update and Delete products and orders(received from customers).He can also view dashboard and registered users of the system and he can make users as a admin or vice versa.

User login into the system after validating user email and password. User can view , add to cart, review and buy products. User can also view orders and view profile and user can update profile. User can apply filters such as price, category and ratings as per his choice.

For making this system we are using following software and tools :-

- Vs code
- React js, node js, express js, mongoDB

#### **3.3 Planning and Scheduling :**

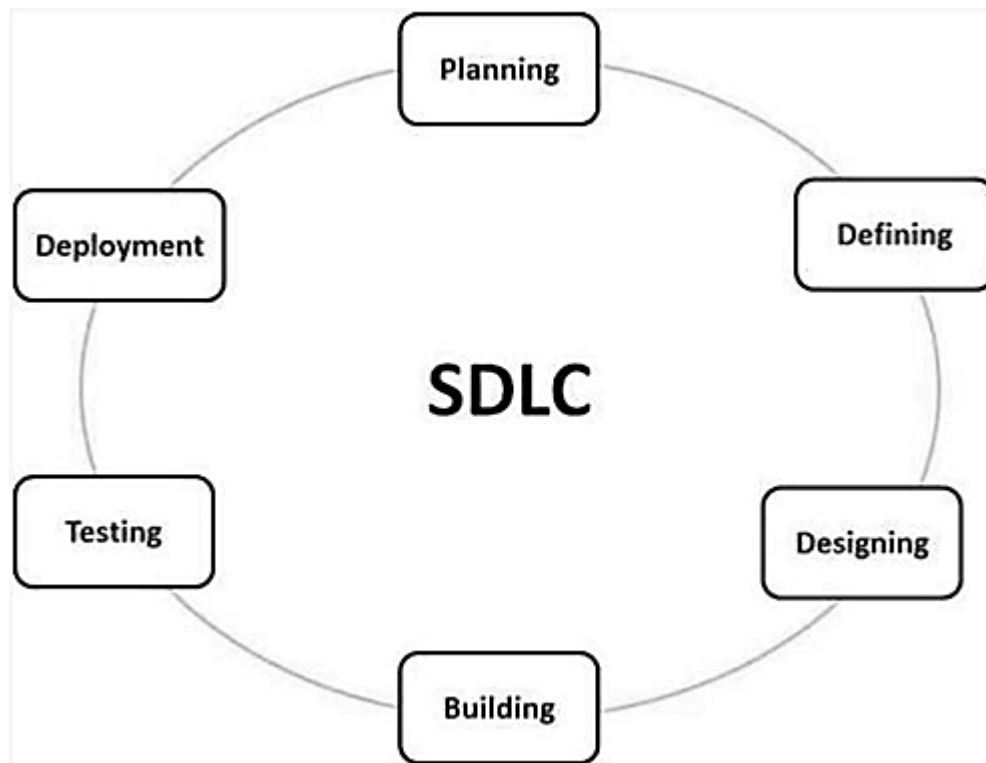
##### **3.3.1 Life cycle of Project :**

Software Development Life Cycle (SDLC) is a process used by the software industry to design, develop and test high quality softwares. The SDLC aims to produce a high-quality software that meets or exceeds customer expectations, reaches completion within times and cost estimates.

- SDLC is the acronym of Software Development Life Cycle
- It is also called as Software Development Process.
- SDLC is a framework defining tasks performed at each step in the software development process.

SDLC is a process followed for a software project, within a software organization. It consists of a detailed plan describing how to develop, maintain, replace and alter or enhance specific software. The life cycle defines a methodology for improving the quality of software and the overall development process.

The following figure is a graphical representation of the various stages of a typical SDLC :



For development of the Proposed system the model using is the WATERFALL MODEL.

- **Waterfall Model :**

The waterfall model is a project management methodology based on a sequential design process in which progress is seen as flowing steadily downwards (like a waterfall) through the different phases.

This model is simple and easy to understand and use. It is easy to manage due to the rigidity of the model. Each phase has specific deliverables and a review process. In this model phases are processed and completed one at a time.

**The Phases of Waterfall model :**

**1) Requirement Analysis :**

For the development of the proposed system the requirements of the client are:

- 1) Client wants to store the data of products in a system to keep track of all the products.
- 2) Clients need to know how many users are there in their website.
- 3) Clients need to know the stock of the product which is in stock and which is out of stock.
- 4) Clients want to know all the orders that received from customers and all the data will be stored in website.
- 5) Clients want the graph to see his overall growth.

## **2) System and Software Design :**

The System and software design phase allocates the requirement to either hardware or software system by establishing an overall system architecture.

For designing the system we required Html, CSS, Javascript and ReactJs for developing the front-end and Express JS, NodeJS and MongoDB as a back-end of our system.

And as a part of software design there will be Modules in the system like

1. Registration Module
2. Login Module
3. Admin Module
4. User Module

## **3) Implementation and Unit Testing :-**

During the implementation and unit testing phase, the software design is considered as a set of programs or a program unit.

Unit testing involves verifying that each unit meets its specifications.

## **4) Integration and system testing :-**

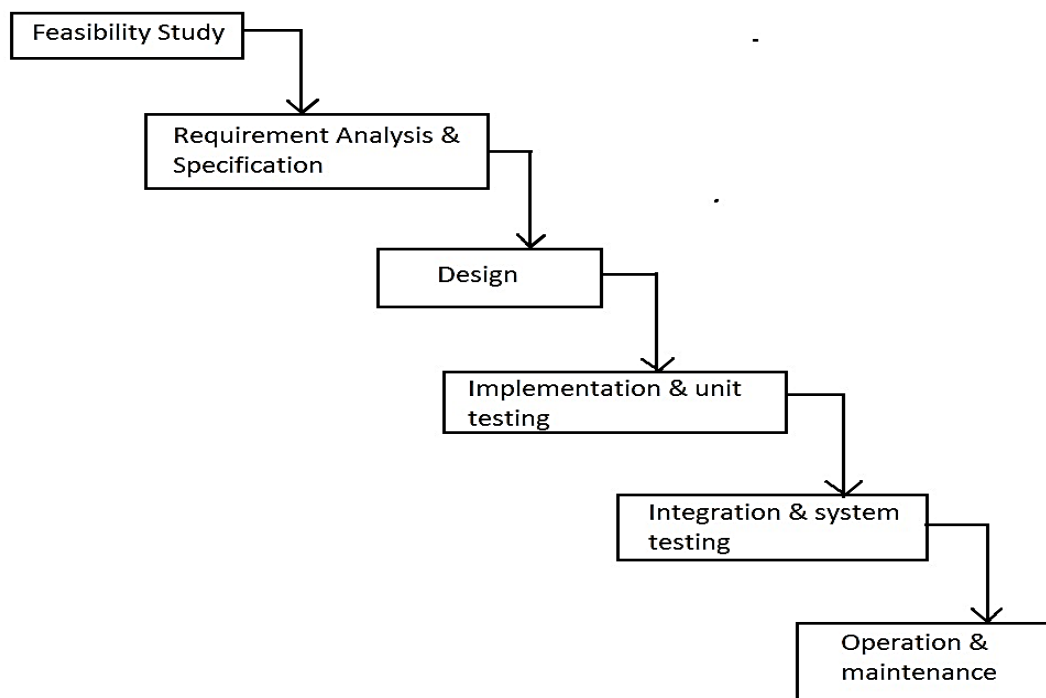
In Integration and system testing phase, the individual program units are integrated and tested as a complete whole system to ensure that the system requirements meet to its specifications.

After this phase, the system is delivered to the client.

## **5) Operation and Maintenance :**

This is the longest phase of SDLC.

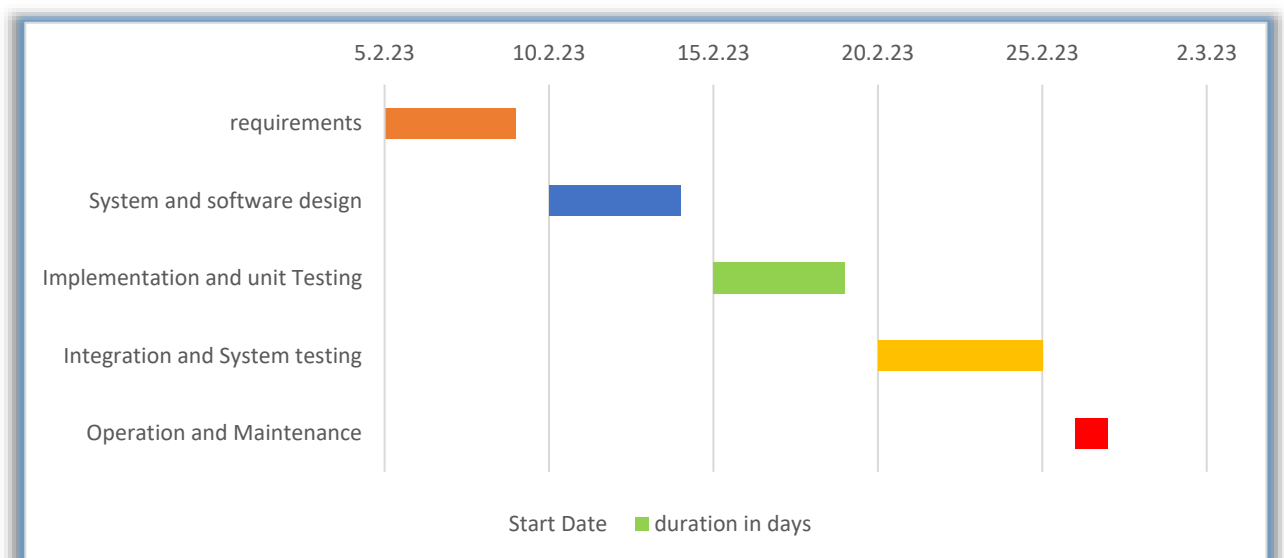
The system is installed on client machine and put into the practical use. Maintenance involves correcting the errors and providing the better software to the client.



**Waterfall Model**

### **Gantt Chart:**

A Gantt chart is a horizontal bar chart developed as a production control tool. Gantt charts are useful for planning and scheduling projects. They help you assess how long a project should take, determine the resources needed, and plan the order in which you'll complete tasks. They are also helpful for managing the dependencies between tasks. A Gantt chart is constructed with a horizontal axis representing the total time span of the project, broken down into increments (for example, days, weeks, or months) and a vertical axis representing the tasks that make up the project .





**3.4 Event Table:**

Sr. No.	Event	Trigger	Source	Activity	Response	Destination
1	Login	Login	Admin	Check valid username and password	Opens account if successful	Admin
2	User registration	register	User	Check Valid Name, email And Password	Opens account if Successful	User
3	Login	Login	User	Check valid username and password	Opens account if successful	User
4	Add Product	Add	Admin	Adding new Product	Product Created Successfully	Admin
5	Edit Product	Update	Admin	Updating Product details	Product Updated Successfully	Admin
6	Delete Product	Delete	Admin	Deleting the product	Product Deleted Successfully	Admin
7	Edit Orders	Update	Admin	Updating Orders details	Orders Updated Successfully	Admin
8	Delete Orders	Delete	Admin	Deleting Orders	Order deleted Successfully	Admin
9	Edit Users	Update	Admin	Updating user as a admin or vice versa	User updated Successfully	Admin
10	Edit Profile	Update	User	Updating Profile details	Profile Updated Successfully	User
11	Add filters	Add	User	Adding filters to products	Navigate to filtered Products	User

## Scent and Perfume Sales Management System

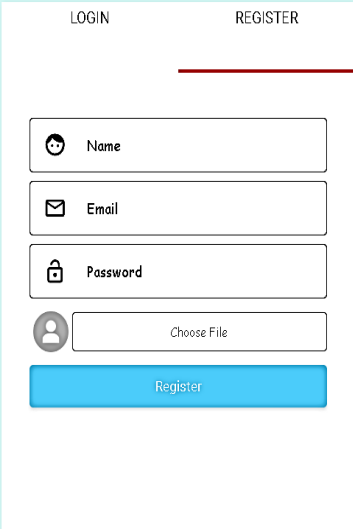
12	Add to Cart	Add	User	Adding product to cart	Item added to cart	User
13	Delete from cart	Delete	User	Deleting Product from cart	Remove	User
14	Accept Payment	Accept	User	Accepting payment	Your order has been placed successfully	User
15	View orders	view	User	Viewing the orders	Navigate to orders	User
16	Add Review	Add	User	Adding reviews	Review Submitted successfully	User
17	Change password	Update	User	Changing password	Profile updated successfully	User
18	Forgot password	Forgot	User	Getting new password	Sent to email successfully	User
19	User Logout	Logout	User	Logging out	Navigate to home	User
20	Admin Logout	Logout	Admin	Logging out	Navigate to home	Admin

## SYSTEM DESIGN

### 4.1 Basic Module:

#### 1. Registration module-

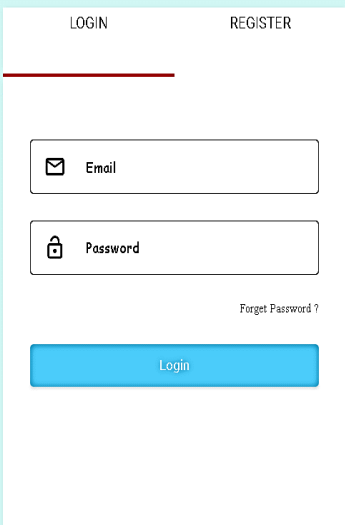
Registration Module allows user to enter his name, email, password and profile picture to get registered as a user .



The registration form is displayed on a light blue background. It features a white container with two tabs at the top: 'LOGIN' and 'REGISTER'. The 'REGISTER' tab is selected, indicated by a red underline. Below the tabs, there are four input fields: 'Name' (with a person icon), 'Email' (with an envelope icon), 'Password' (with a lock icon), and a 'Choose File' button (with a person icon). A blue 'Register' button is positioned at the bottom of the form.

#### 2. Login Module :-

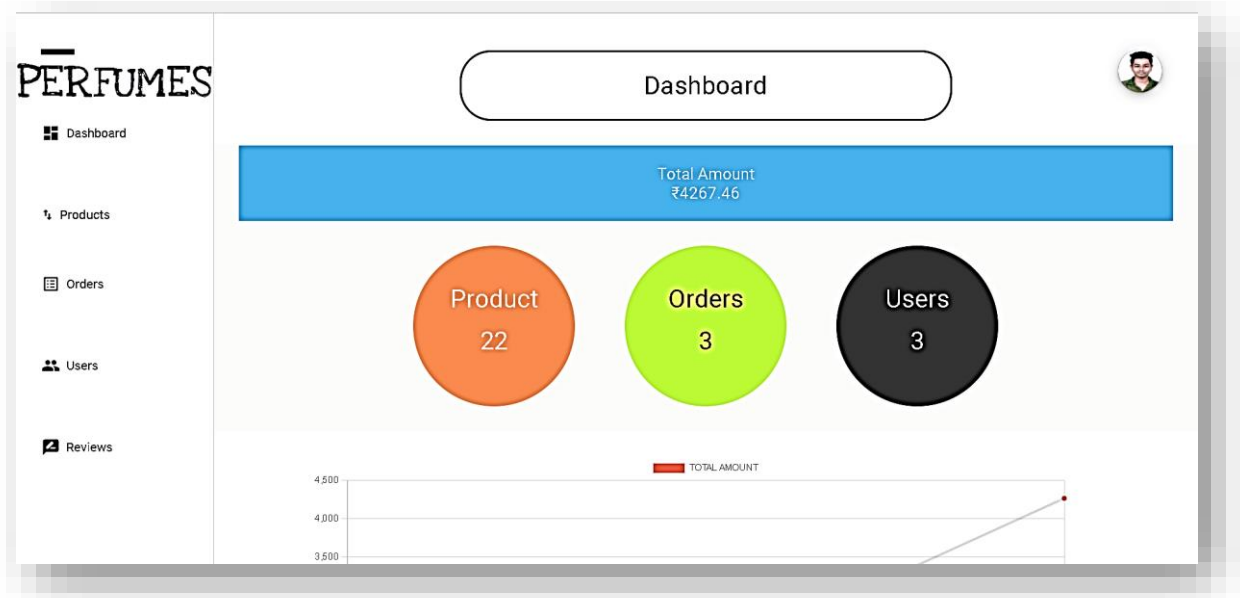
Login module allows user as well as admin to log into the system using their own registered account's email and password. It is basically used to check that only the authorized person is using the system just to avoid unauthorized access. It alert the user as well as admin when invalid email and password is entered.



The login form is displayed on a light blue background. It features a white container with two tabs at the top: 'LOGIN' and 'REGISTER'. The 'LOGIN' tab is selected, indicated by a red underline. Below the tabs, there are two input fields: 'Email' (with an envelope icon) and 'Password' (with a lock icon). A blue 'Login' button is positioned at the bottom of the form. A link labeled 'Forget Password ?' is located above the 'Login' button.

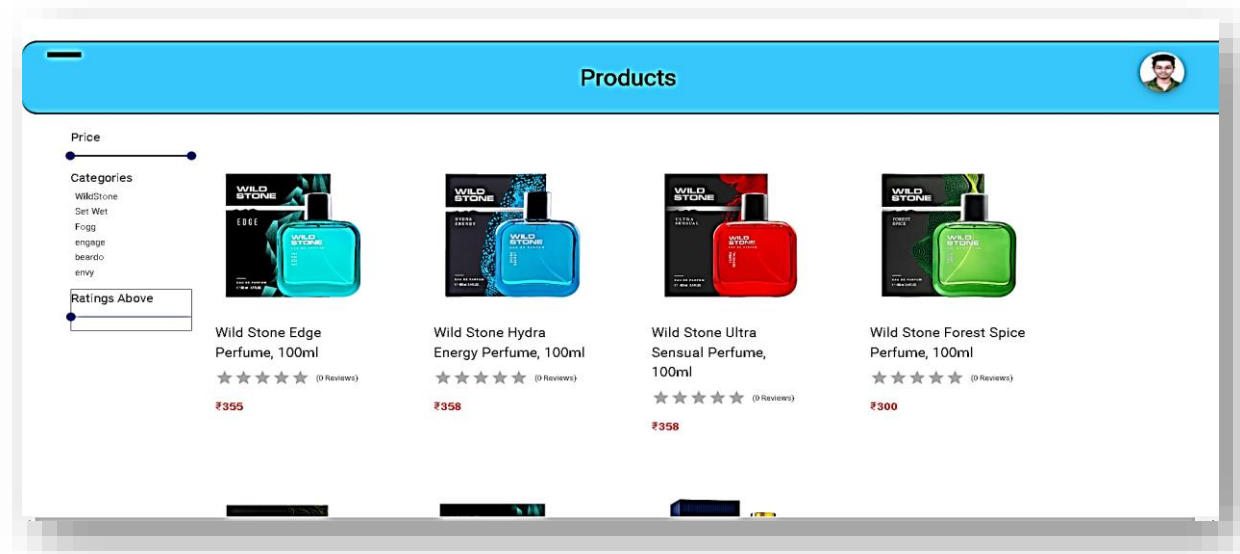
### 3. Admin Module:-

Admin login into the system after validating admin email and password .It alerts valid or Invalid Email and password notification. Admin can Add, Update and Delete products and orders(received from customers).He can also view dashboard and registered users of the system and he can make users as a admin or vice versa.



### 4.User Module:

User login into the system after validating user email and password. User can view , add to cart, review and buy products. User can also view orders and view profile and user can update profile. User can apply filters such as price, category and ratings as per his choice.



## 4.2 Data Design :

By using the data design designer determines what data must be stored and how the data elements interrelate. With this information, they can begin to fit the data to the database model. Database design involves classifying data and identifying interrelationships between the data.

Software contains mainly three tables Namely user table, product table, order table.

- User Table:-

Sr.no.	Field Name	Datatype	Size	Description
1	name	varchar	30	Not Null
2	email	varchar	30	Primary key
3	password	varchar	15	Not Null
4	profile_picture	image	-	Not Null
5	role	string	-	Default
6	Created_At	datetime	-	Default

- Product Table:-

Sr.no.	Field Name	Datatype	Size	Description
1	_id	varchar	24	Default
2	name	varchar	30	Not Null
3	description	varchar	200	Not Null
4	price	float	7	Default
5	ratings	Int	5	Default
6	product_image	Image	-	Not Null
7	category	varchar	-	Not Null
8	stock	int	-	Default
9	Num_of_reviews	int	-	Default

- Order Table:-

Sr.no.	Field Name	Datatype	Size	Description
1	_id	Varchar	30	Default
2	Address	Varchar	250	Not Null
3	city	String	30	Not Null
4	state	String	30	Not Null
5	country	string	30	Not Null
6	pincode	Int	8	Not Null
7	Phone_no.	Int	12	Not Null
8	payment_id	Varchar	30	Default
9	payment_status	String	30	Default
10	paid_At	datetime	-	Default
11	order_status	string	-	Default
12	created_At	datetime	-	Default
13	delivered_At	datetime	-	Default

### 4.3 Logic Diagrams :

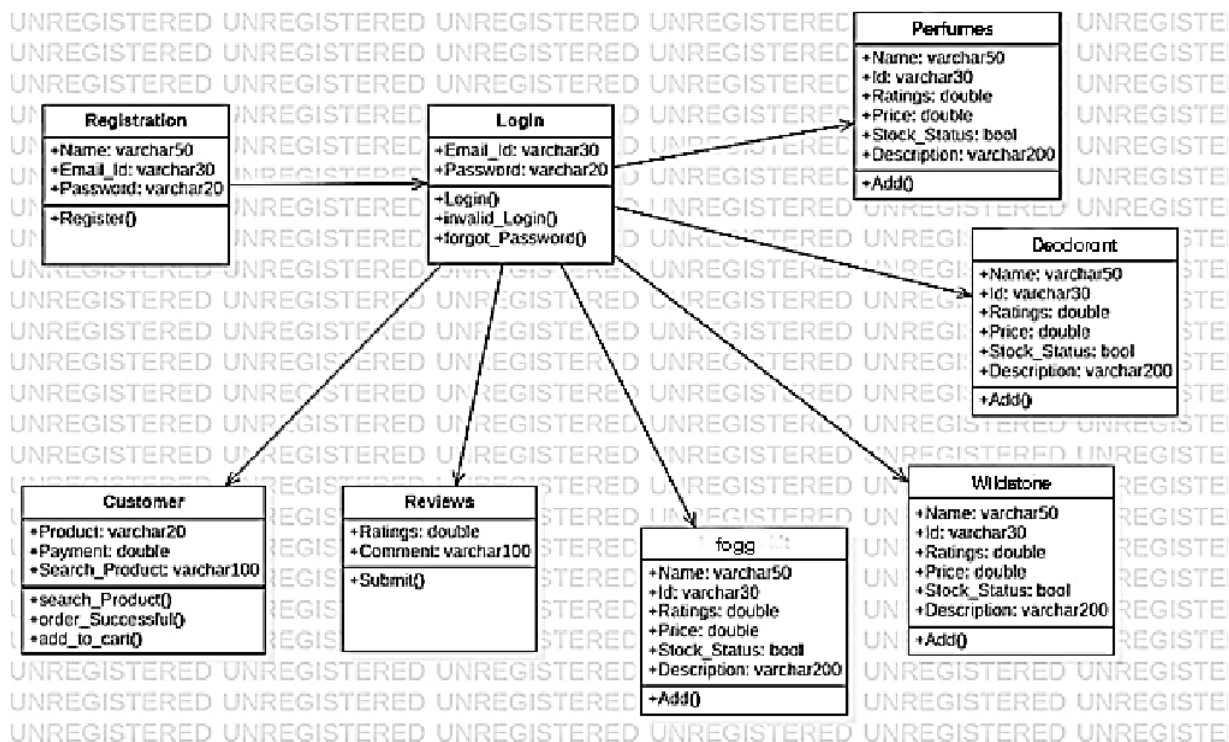
A logical diagram provides a graphical view of the structure of an information system, and helps you analyse the structure of your data system through entities and relationships, in which primary identifiers migrate along one-to-many relationships to become foreign identifiers, and many-to-many relationships can be replaced by intermediate entities. Logical diagram is used to ensure the client understands the proposed system.

#### 4.3.1 Class diagram :-

A Class diagram is the Unified Modeling Language (UML) is type of static structure diagram that describes the attributes and the constraints imposed on system. It shows the collection of classes, interface, association, collaboration and constraints. They are used to show the different objects in a system, their attributes, their operations and the relationships among them.

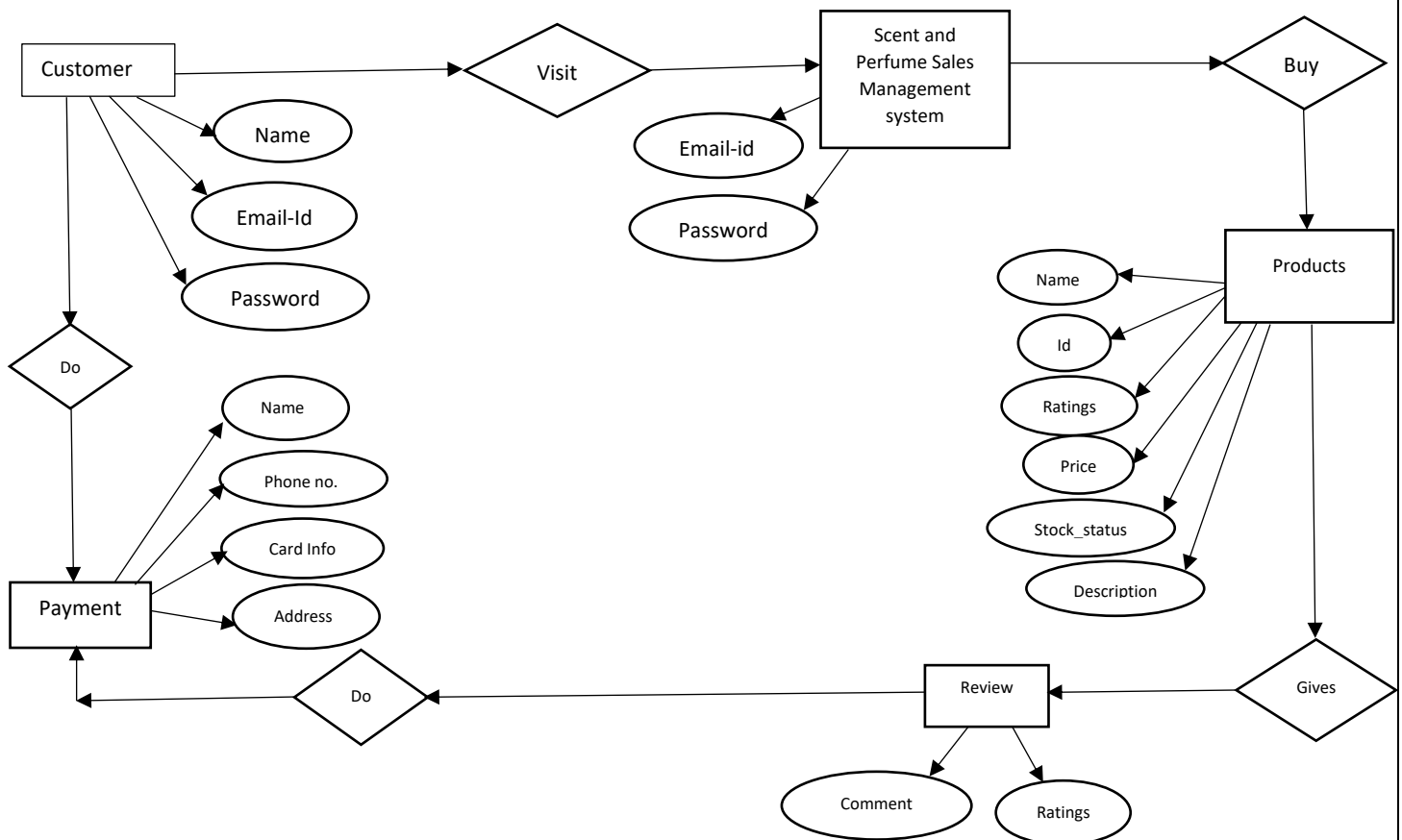
The following diagram represent the Cosmetics and beauty online store with different operations and attributes, including the parent class login. The login class has the six child classes Home ,products ,search,about,cart and Profile. All class have identical attributes and operations & Profile class is dependent on them.

The below diagram consists of classes. The User Login class is consist of three variables namely name, email-id and password. User Login class have six child classes namely Home ,products ,search,about,cart and Profile. Home and product contains edit, add, and update ,filter operations which can be performed by the user whereas Profile class contains view orders, user details and user can change password , profile photo and user can know their joining date .



### 4.3.2 ER Diagram :

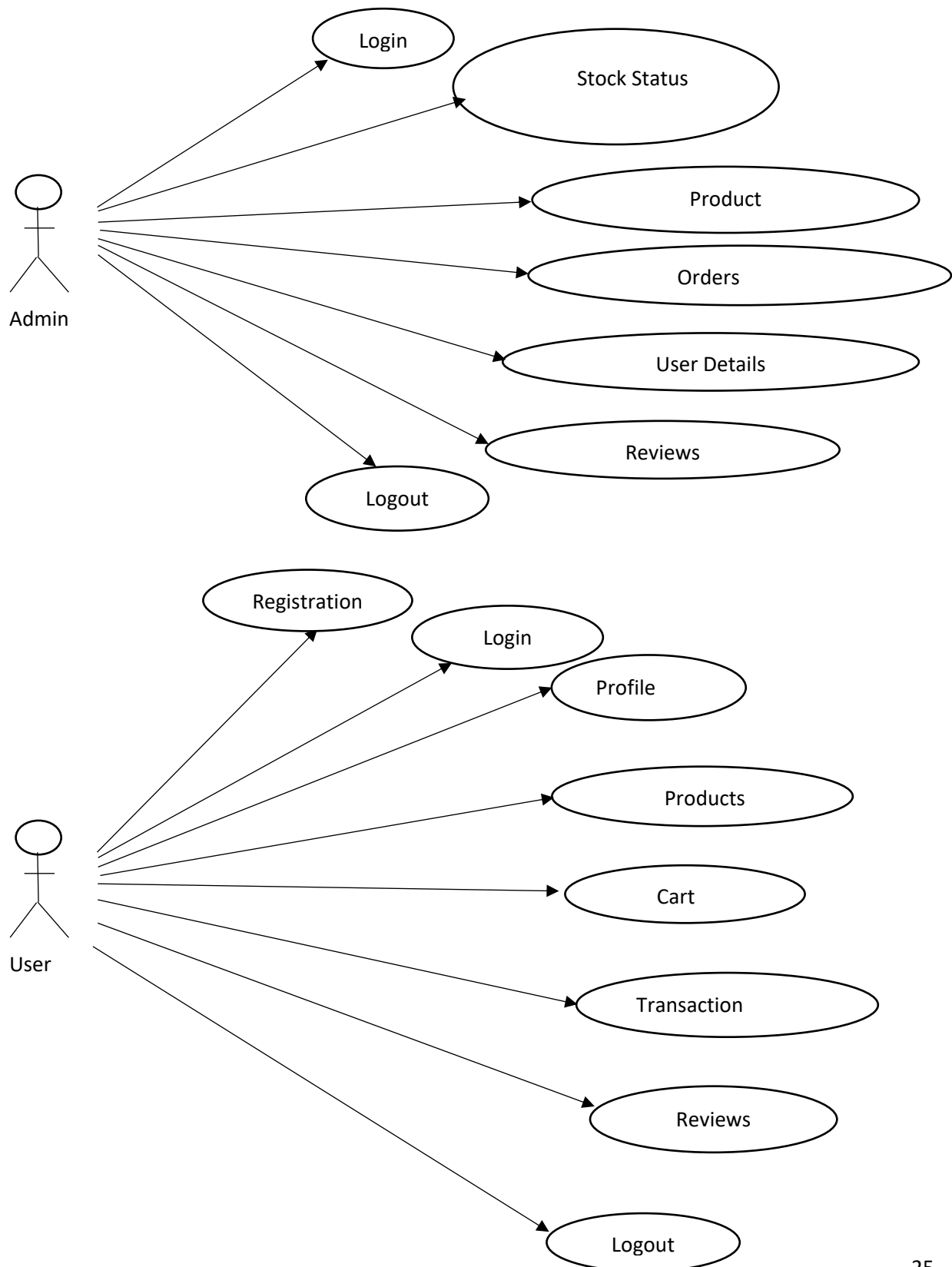
The ER or (Entity Relational Model) is a high-level conceptual data model diagram. Entity-Relation model is based on the notion of real-world entities and the relationship between them.



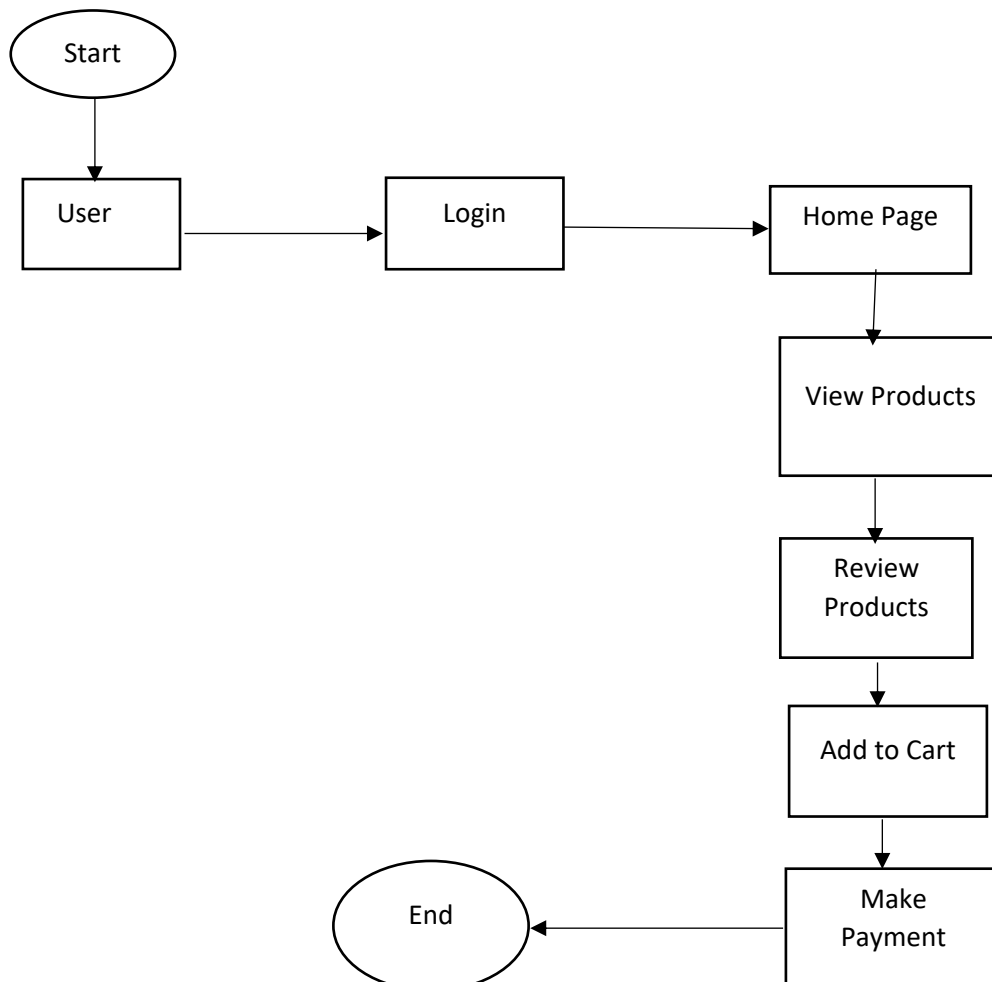
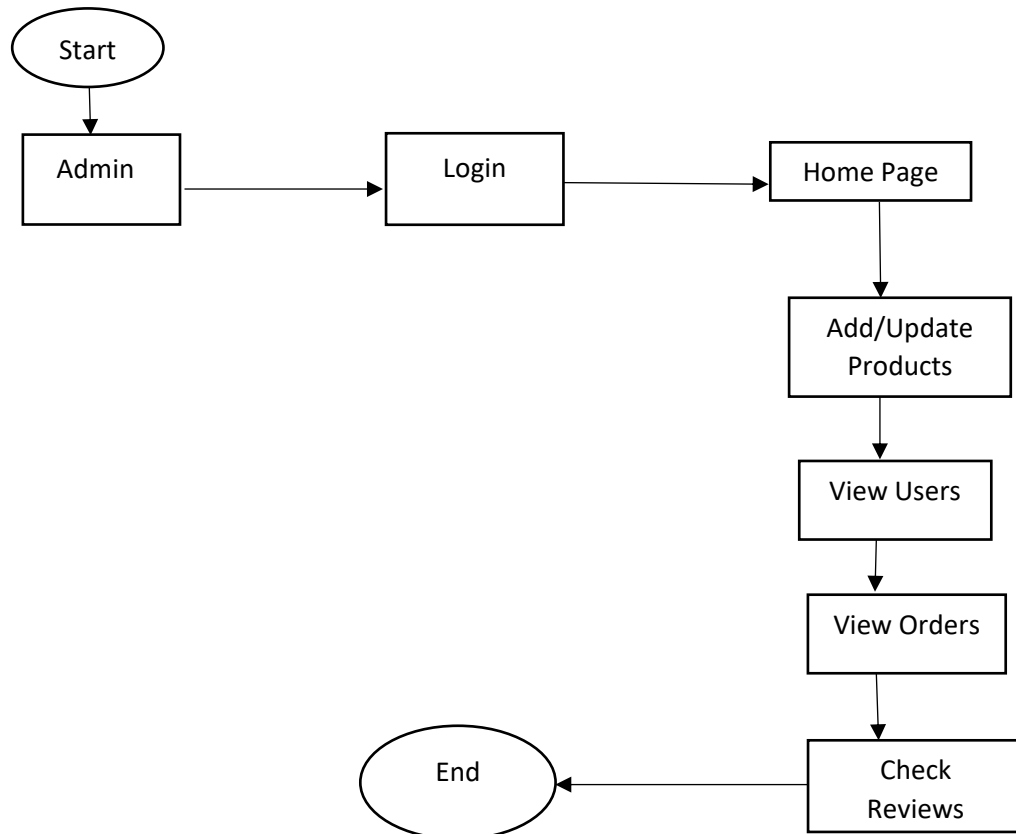


### 4.3.3 Use Case Diagram :

A use case diagram at its simplest is a representation of user's interaction with the system that shows the relationship between the user and the different use cases in which the user is involved. A use case diagram can identify the different types of users of a system and the different use cases and will often be accompanied by the other types of diagrams as well.



#### 4.3.4 Data-flow Diagram :



**4.4 Test Case Design :**

Sr. no.	Action	Input	Expected output	Actual Output	Test result	Test comment
1.	Launch website	Click on website	Registration page	Registration page	Pass	Successful
2.	Enter name, email, password, image	Name: abc Email:xyz@gmail.com Password:****	Profile page	Profile page	Pass	Profile Page Will display
3.	Enter correct email and password	Email: xyz@gmail.com Password:****	Home page	Home page	Pass	Homepage will display
4.	If email and password are incorrect	Email:a@gmail.com Password: ****	"login failed"	"Login Failed"	Pass	Invalid email and password
5.	If email is not in correct format	Enter Email id	"Please include @ in Email address"	"Please include @ in Email address"	Pass	Unsuccessful
6.	If email is in correct format	Enter Email id	No error message	No error message	Pass	Successful
7.	If entered Mobile No. does not have 10 digit	Enter Mobile No	"Phone number should be 10 digit long"	"Phone number should be 10 digit long"	Pass	Unsuccessful
8.	If entered Mobile No. is having 10 digits	Enter Mobile no.	"no error message"	"no error message"	Pass	Successful

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9.	If entered Card number is incorrect	Enter card date	"card date colour changes to red"	"card date colour changes to red"	Pass	Unsuccessful
10.	If entered Card date is correct	Enter card date	No error Message	No error Message	Pass	Successful
11.	If entered Card number is in incorrect format	Enter card number	"card number colour changes to red"	"card number colour changes to red"	Pass	Unsuccessful
12.	If entered card number is in correct format	Enter card number	No error Message	No error Message	Pass	Successful

## IMPLEMENTATION AND TESTING

### 5.1 Testing Approach :

Software Testing is a method to check whether the actual software product matches expected requirements and to ensure that software product is Defect free. It involves execution of software/system components using manual or automated tools to evaluate one or more properties of interest. The purpose of software testing is to identify errors, gaps or missing requirements in contrast to actual requirements.

### The Box Approach :-

Software testing methods are traditionally divided into white-box and black-box testing. These two approaches are used to elaborate the point of view that a testing engineer takes when designing various test cases.

### White-box Testing :-

White Box Testing is a testing technique in which software's internal structure, design, and coding are tested to verify input-output flow and improve design, usability, and security. In white box testing, code is visible to testers, so it is also called Clear box testing, Open box testing, Transparent box testing, Codebased testing, and Glass box testing. The testers choose inputs to exercise paths through the code and determine the appropriate outputs. While white-box testing can be applied at the unit, integration and system levels of the software testing process, it usually done at the unit level.

### Black-box Testing :-

Black Box Testing is a software testing method in which the functionalities of software applications are tested without having knowledge of internal code structure, implementation details and internal paths. Black Box Testing mainly focuses on input and output of software applications and it is entirely based on software requirements and specifications. It is also known as Behavioral Testing. Black box Testing methods include : equivalence portioning, boundary value analysis, all-pairs testing state transition tables, decision table testing, fuzz testing , model –based testing, use-case testing, exploratory testing and specification-based testing.

### Levels of Testing :-

The levels of testing are as follows :

- 1) Unit Testing
- 2) Integration Testing
- 3) System Testing

### **Unit Testing :-**

Unit testing focuses verification efforts on the smallest unit of the software design, the module. This is also known as “Module Design”. This testing carried out during programming stage itself. In this testing each module is found to be working satisfactorily as regard to the expected output from the module. All textboxes are having validation by which they will not remain empty and all work properly as expected. Here, when the entered email-id does not contain “@” and “.” symbol then the email-id does not gets registered.

### **Integration Testing :-**

Integration testing is systematic testing for construction the program structure while at the same time conducting tests to uncover errors associated with in the interface. The objective is to take unit tested modules and build a program structure. All the modules are combined and tested as a whole. Here correction is difficult because the isolation of cause is complicated by the vast expense of the entire program. In Integration testing I tested the system by combining all modules. All the user data, admin data and product info are altogether. The product is added to cart and the reviews for the product are created smoothly.

### **System Testing :-**

It is the stage of implementation that is aimed at ensuring that the system works accurately and efficiently for live operation commences. Testing is vital to the success of the system. System testing makes a logical assumption that if all the parts of the system are correct, then goal will be successfully achieved.

## **5.2 Coding Detail and Code Efficiency :**

- All the fields such as Phone no, Email ID etc. are validated and does not take invalid values.
- Each form for User registration, login cannot accept blank value fields.
- Avoiding errors in data.
- Preparation of the test cases.
- Preparation of the possible test data with all the validation checks.
- Actual testing done manually.
- Functionality of the entire module/forms.

- Validations for user input.
- Checking of the Coding standards to be maintained during coding.
- Testing the module with all the possible test data.
- Testing of the functionality involving all type of calculations etc.

### **Code for Home page:-**

```
import React, { Fragment, useEffect } from "react";
```

```
import { CgMouse } from "react-icons/all";
```

```
import "./Home.css";
```

```
import 'bootstrap/dist/css/bootstrap.min.css';
```

```
import Slider from '../inc/Slider';
```

```
import photo1 from '../images/photo1belowslider.webp'
```

```
import photo2 from '../images/photo3belowslider.jfif'
```

```
import ProductCard from "./ProductCard.js";
```

```
import MetaData from "../layout/MetaData";
```

```
import { clearErrors, getProduct } from "../actions/productAction";
```

```
import { useSelector, useDispatch } from "react-redux";
```

```
import Loader from "../layout/Loader/Loader";
```

```
import { useAlert } from "react-alert";
```

```
const Home = () => {
```

```
  const alert = useAlert();
```

```
  const dispatch = useDispatch();
```

```
  const { loading, error, products } = useSelector((state) => state.products);
```

```
  useEffect(() => {
```

```
    if (error) {
```

```
    alert.error(error);  
    dispatch(clearErrors());  
  }  
  dispatch(getProduct());  
}, [dispatch, error, alert]);
```

```
return (  
  <Fragment>  
    {loading ? (  
      <Loader />  
    ) : (  
      <Fragment>  
        <MetaData title="ECOMMERCE" />  
  
        <div className="banner">  
          <p>Welcome to Pratham Cosmetics</p>  
          <h1>FIND AMAZING PRODUCTS BELOW</h1>  
  
          <a href="#container">  
            <button>  
              Scroll <CgMouse />  
            </button>  
          </a>  
  
        </div>  
        <br>  
  
        </br>  
        <div>
```



```
<h2 className="homeHeading1">Offer Wall</h2>

<div className="slider">

<Slider />

</div>


<br></br>

<br></br>

<br></br>

<div >

  <a style={{textDecoration:"none"}}href="http://localhost:3000/products">

    <img style={{float:"left", width:"540px", height:"359px"}}src={photo1}
    alt="cosmetics" /><h1 className= "heading0"><h1 className="heading00">Click Here to
    Buy Trending Products</h1></h1>

    </a>

  </div>


<div>

  <a style={{textDecoration:"none"}} href="http://localhost:3000/products/tya"
  alt="">

    <img style={{float:"right",width:"550px", height:"409px"}}src={photo2}
    alt="cosmetics" />

    <h1 className= "heading2"><h1 className="heading22">Buy Awesome products
    at <del style={{backgroundColor:"yellow",color:"black",textShadow:"none"}}>best</del>
    cheaper price</h1> </h1>

    </a>

  </div>


<h3 className="homeHeading">Featured Products</h3>
```

```
<div className="container" id="container">
  {products &&
    products.map((product) => (
      <ProductCard key={product._id} product={product} />
    ))
  }
</div>
</div>

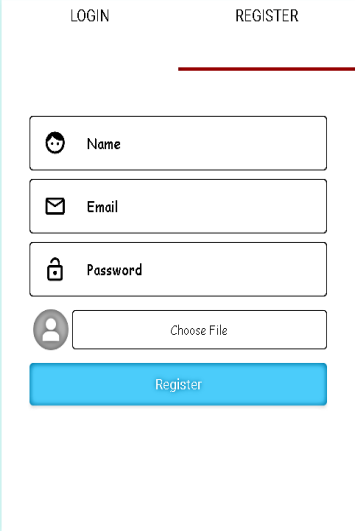
</Fragment>
)}
</Fragment>
);
};

export default Home;
```

## RESULTS

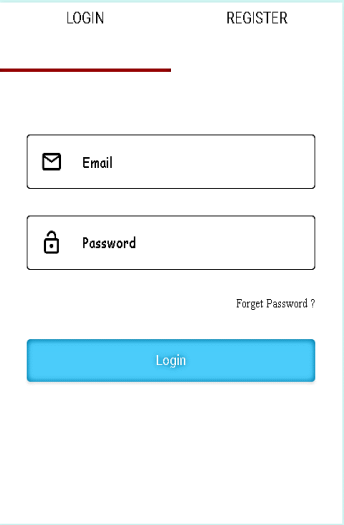
### 6.1 FORMS :

Registration page:




The registration page features a light blue background. At the top, there are two tabs: 'LOGIN' and 'REGISTER', with 'REGISTER' being the active tab. Below the tabs, there is a vertical stack of four input fields: 'Name' (with a person icon), 'Email' (with an envelope icon), 'Password' (with a lock icon), and a file upload field labeled 'Choose File' (with a person icon). A blue 'Register' button is positioned at the bottom of the form.

Login page



The login page features a light blue background. At the top, there are two tabs: 'LOGIN' and 'REGISTER', with 'LOGIN' being the active tab. Below the tabs, there is a vertical stack of two input fields: 'Email' (with an envelope icon) and 'Password' (with a lock icon). A link labeled 'Forgot Password ?' is located below the password field. A blue 'Login' button is positioned at the bottom of the form.

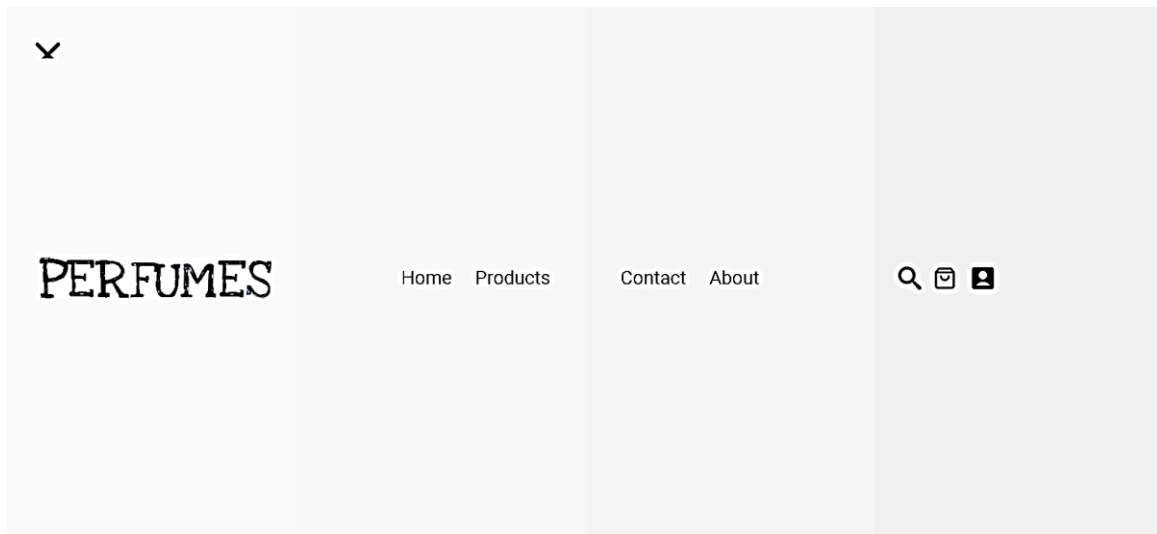
Forgot Password page



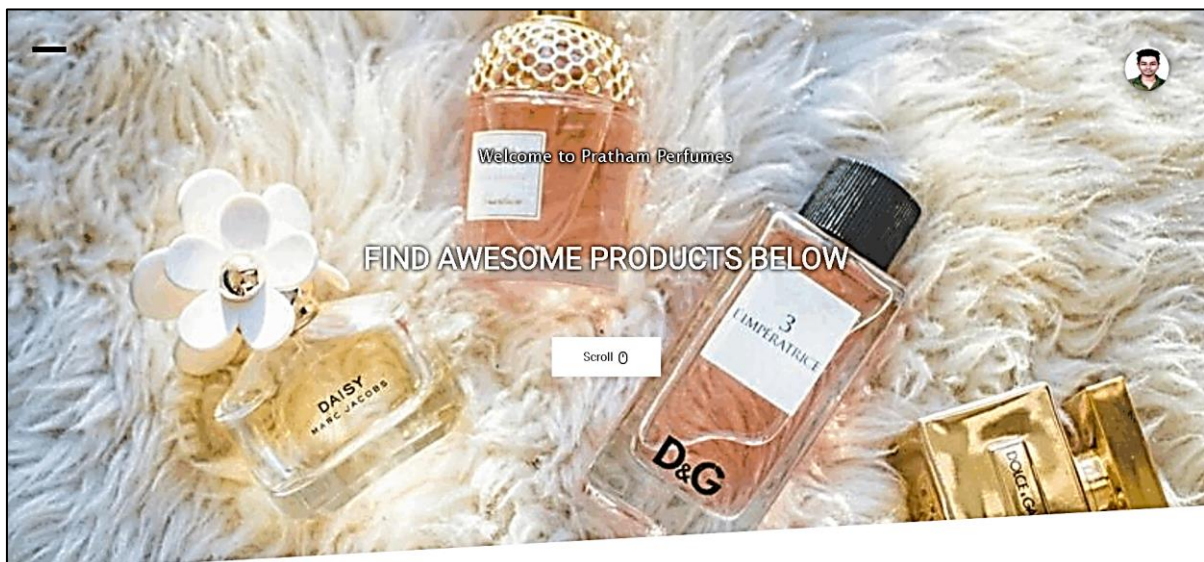
The forgot password page features a light gray background. At the top, there is a horizontal line. Below it, there is a white box with the title 'Forgot Password'. Inside the box, there is an input field for 'Email' (with an envelope icon) and a red 'Send' button.

## Scent and Perfume Sales Management System

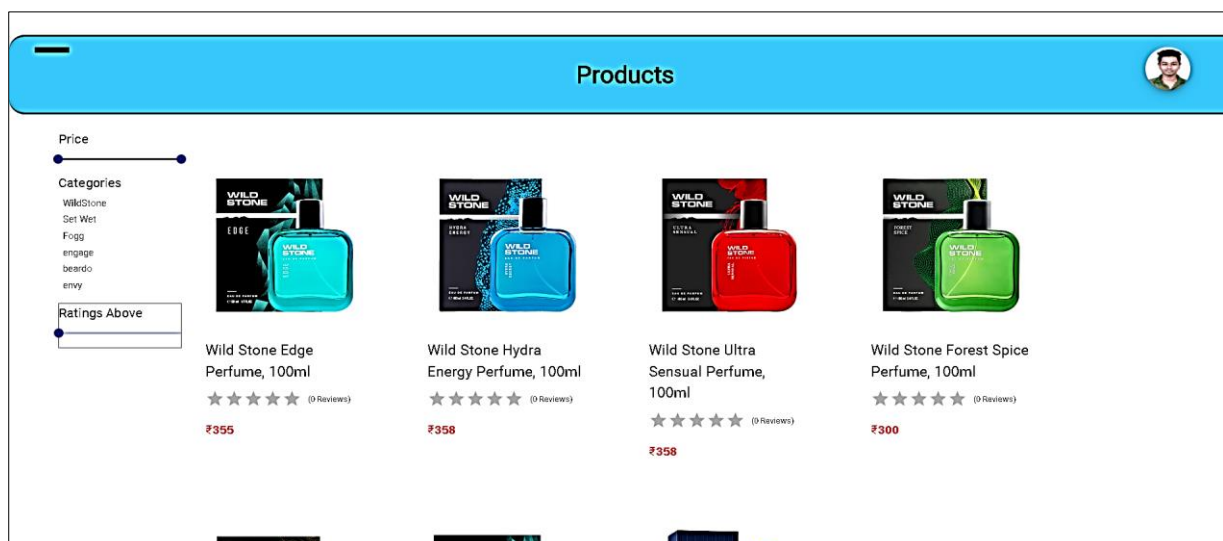
### Header page



### Home page :



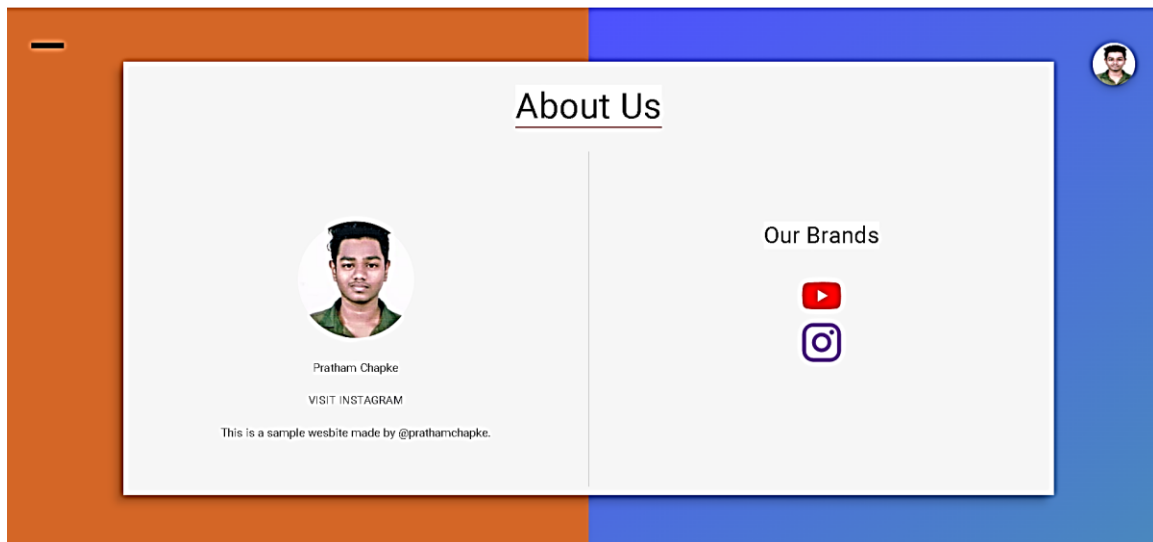
### Products page :



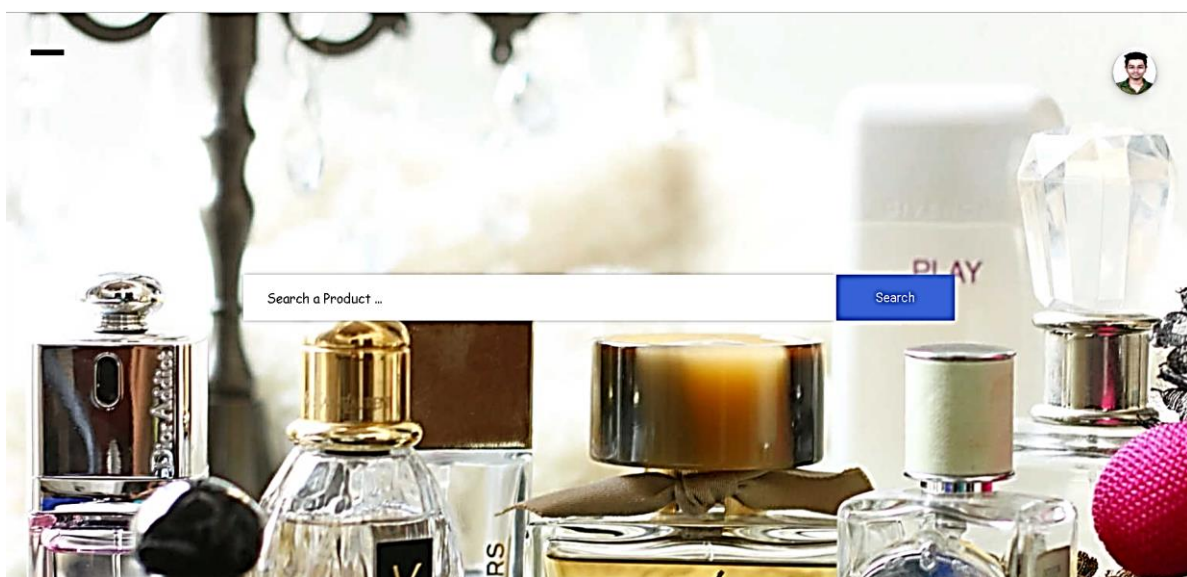
## Contact page



## About page



## Search page



# Scent and Perfume Sales Management System

## Cart page

Product

Quantity

Subtotal



Wild Stone Hydra Energy Perfume, 100ml  
Price: ₹358  
Remove

2

₹716



Wild Stone Ultra Sensual Perfume, 100ml  
Price: ₹358  
Remove

1

₹358

Gross Total

₹1074

Check Out



## CheckOut page

Shipping Details

Confirm Order

Payment

Shipping Details

Address


City

Pin Code

Phone Number

Country

Continue



## Confirm order page


Shipping Info

Name: pratham

Phone: 9845678909


Address: PRAVIN SHANKAR CHAPKE, DEEPMALA PRAVIN CHAPKE, mumbai, MH, 400078, IN

Your Cart Items:



Wild Stone Hydra Energy Perfume, 100ml

2 X ₹358 = ₹716



Wild Stone Ultra Sensual Perfume, 100ml

1 X ₹358 = ₹358

Order Summery


Subtotal: ₹1074

Shipping Charges: ₹0

GST: ₹193.32

Total: ₹1267.32


Proceed To Payment





## Scent and Perfume Sales Management System

### Payment page


Card Info

 1234 1234 1234 1234




 MM / YY

 CVC

Pay - ₹1267.32




### Orders page

Order ID ↑	Status	Items ...	Amount	Actions
63f8eb48dc136e18a84f0787	Shipped	1	1,044.88	
63f8eb80dc136e18a84f079d	Processing	4	1,955.26	
63f8ebdfdc136e18a84f07a7	Processing	2	1,267.32	

1-3 of 3

### Profile page

My Profile



Edit Profile


Full Name  
pratham

Email  
chapkepratham@gmail.com

Joined On  
2023-01-27

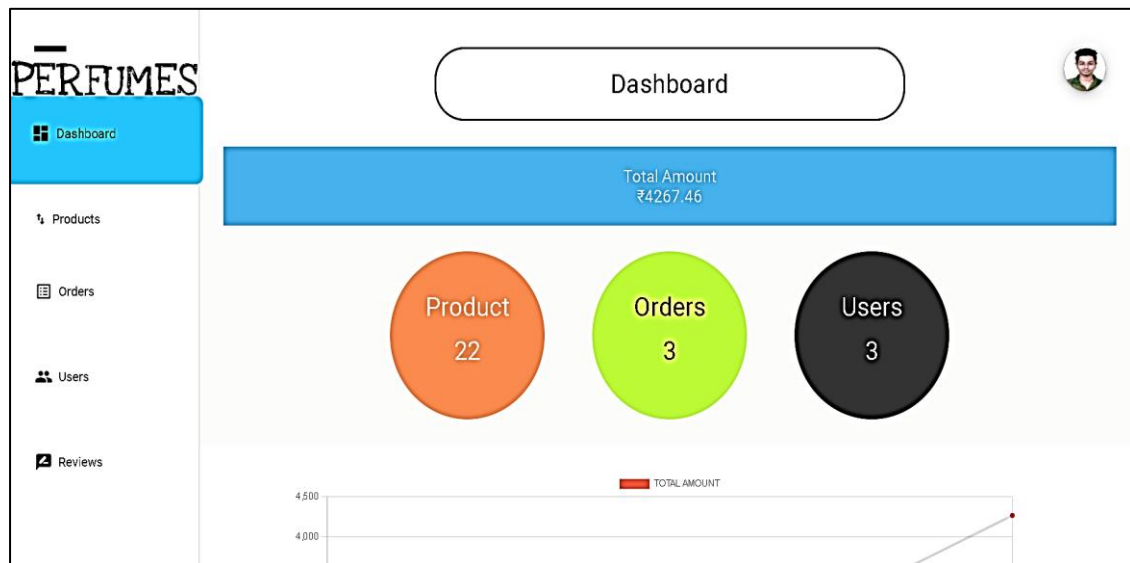
My Orders

Change Password























## Scent and Perfume Sales Management System





















### Admin Dashboard page



### Admin products page

PERFUMES	ALL PRODUCTS				
	Product ID	Name	Stock	Price	Action
Dashboard	63f8d607b5e22010f4e0a837	Wild Stone Edge Perfume, 100ml	20	355	 
Products	63f8df061ff7bf41b8d723f1	Wild Stone Hydra Energy Perfume, 100ml	21	358	 
Orders	63f8df421ff7bf41b8d723fd	Wild Stone Ultra Sensual Perfume, 100ml	32	358	 
Users	63f8df7a1ff7bf41b8d72407	Wild Stone Forest Spice Perfume, 100ml	23	300	 
Reviews	63f8dfa81ff7bf41b8d72411	Wild Stone Night Rider Perfume, 100ml	23	358	 
	63f8dfd21ff7bf41b8d7241b	Wild Stone Edge Perfume, 50ml	12	200	 
	63f8e52e1ff7bf41b8d72442	Fogg Long-Lasting Fresh & Soothing Fragrance , 100ml	21	383	 
	63f8e55a1ff7bf41b8d7244c	Fogg Long-Lasting Fresh & Soothing Fragrance Xtremo Scent	33	456	 
	63f8e5801ff7bf41b8d72456	Fogg Long-Lasting Fresh, Exotic & Soothing Fragrance Intensio Sc...	23	345	 
	63f8e5c51ff7bf41b8d72460	ogg Women's Long-Lasting Fresh & Floral Fragrance I Am Queen S...	22	345	 

### Admin orders page

PERFUMES	ALL PRODUCTS				
	Product ID	Name	Stock	Price	Action
Dashboard	63f8d607b5e22010f4e0a837	Wild Stone Edge Perfume, 100ml	20	355	 
Products	63f8df061ff7bf41b8d723f1	Wild Stone Hydra Energy Perfume, 100ml	21	358	 
Orders	63f8df421ff7bf41b8d723fd	Wild Stone Ultra Sensual Perfume, 100ml	32	358	 
Users	63f8df7a1ff7bf41b8d72407	Wild Stone Forest Spice Perfume, 100ml	23	300	 
Reviews	63f8dfa81ff7bf41b8d72411	Wild Stone Night Rider Perfume, 100ml	23	358	 
	63f8dfd21ff7bf41b8d7241b	Wild Stone Edge Perfume, 50ml	12	200	 
	63f8e52e1ff7bf41b8d72442	Fogg Long-Lasting Fresh & Soothing Fragrance , 100ml	21	383	 
	63f8e55a1ff7bf41b8d7244c	Fogg Long-Lasting Fresh & Soothing Fragrance Xtremo Scent	33	456	 
	63f8e5801ff7bf41b8d72456	Fogg Long-Lasting Fresh, Exotic & Soothing Fragrance Intensio Sc...	23	345	 
	63f8e5c51ff7bf41b8d72460	ogg Women's Long-Lasting Fresh & Floral Fragrance I Am Queen S...	22	345	 



## Scent and Perfume Sales Management System

### Admin users page

PERFUMES

Dashboard


Products







Orders

Users

Reviews

ALL USERS



User ID	Email	Name	Role	Action
63d3dddec2004c6cd38cef5b2	chapkepratham@gmail.com	pratham	admin	 
63f90122dc136e18a84f07d9	chapke789@gmail.com	Pratham	user	 
63f90175dc136e18a84f07db	chapke123@gmail.com	pratham	user	 

1-3 of 3

### Admin reviews page

PERFUMES

Dashboard


Products

Orders

Users

Reviews

ALL REVIEWS



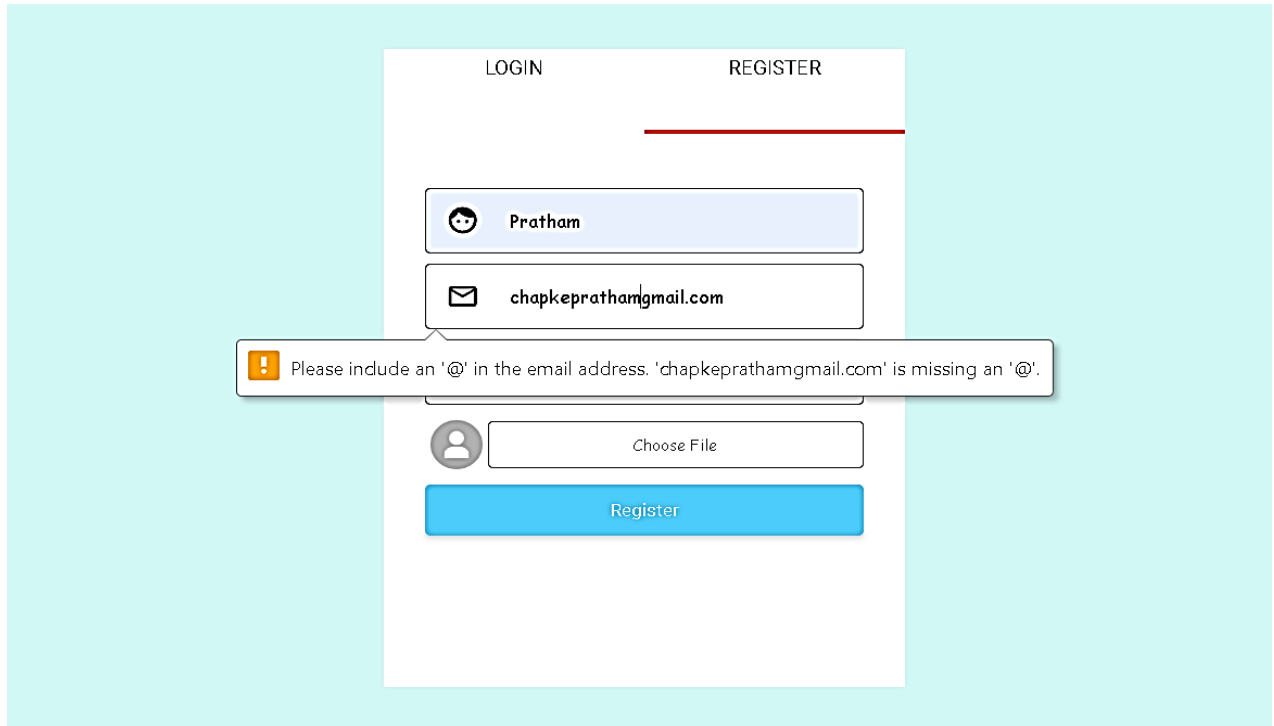
★ Product Id

SEARCH

No Reviews Found

## 6.2 FORM VALIDATION :

1. If user enters an email id without “@” characters then the following message will appear

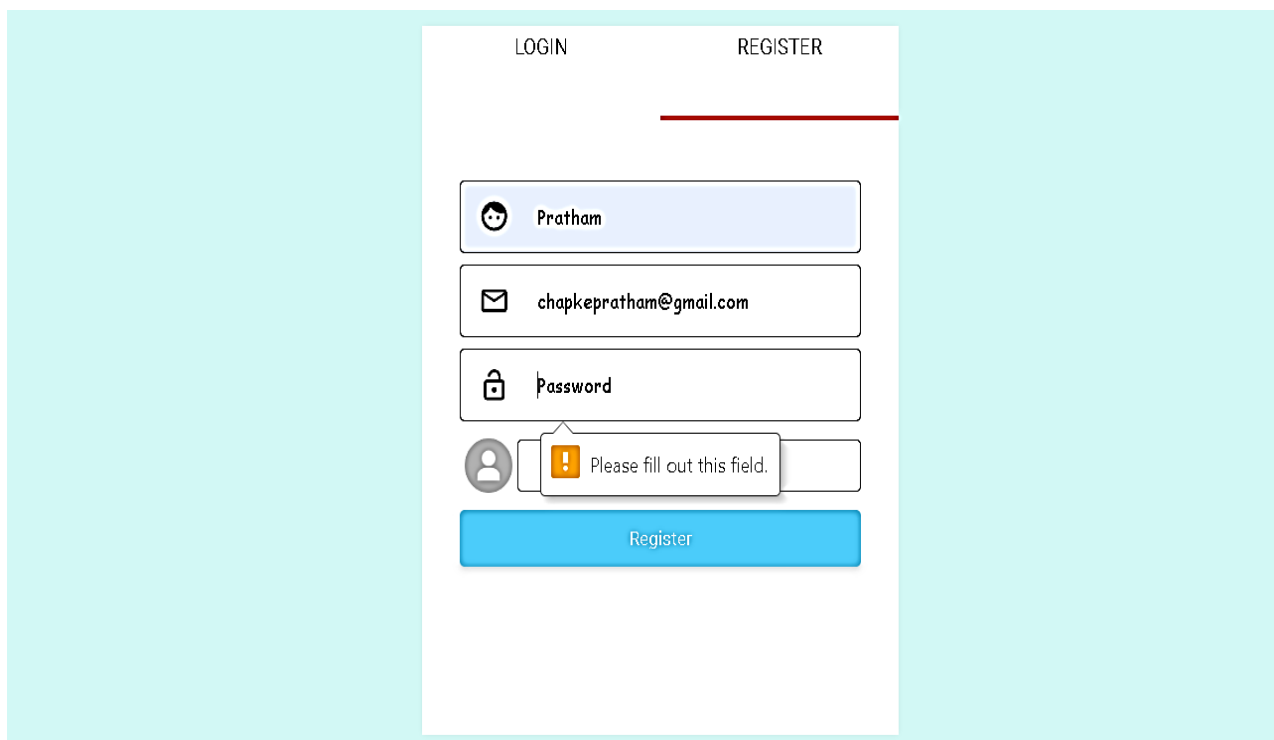


The screenshot displays a web form with two tabs: "LOGIN" and "REGISTER". The "REGISTER" tab is selected, indicated by a red underline. The form contains the following fields and elements:

- A name field with a person icon and the text "Pratham".
- An email field with an envelope icon and the text "chapkeprathamgmail.com".
- A password field with a lock icon and the text "Password".
- A file upload field with a person icon and the text "Choose File".
- A blue "Register" button.

A validation error message is displayed in a white box with an orange exclamation mark icon, pointing to the email field. The message reads: "Please include an '@' in the email address. 'chapkeprathamgmail.com' is missing an '@'."

2. If user keeps password field empty



The screenshot displays the same "REGISTER" form as above. In this instance, the password field is empty. A validation error message is shown in a white box with an orange exclamation mark icon, pointing to the password field. The message reads: "Please fill out this field."

### 3. When user and admin enters wrong email and password


The screenshot shows a login form with two tabs: 'LOGIN' and 'REGISTER'. The 'LOGIN' tab is active. The form contains two input fields: an email field with the value 'chapkepratham@gmail.com' and a password field with masked characters '.....'. Below the password field is a link that says 'Forget Password?'. A blue 'Login' button is positioned below the form. At the bottom of the form, a black error message box is displayed with a red exclamation mark icon, the text 'INVALID EMAIL OR PASSWORD', and a close button (X).


### 4. While entering shipping details for the product, when user does not enter 10 digit phone number


The screenshot shows a 'Shipping Details' form. It contains several input fields: a name field with the value 'PRAVIN SHANKAR CHAPKE, DEEPA', a city field with the value 'mumbai', a pin code field with the value '400078', a phone number field with the value '984567890', a country dropdown menu with 'India' selected, and a state dropdown menu with 'Maharashtra' selected. Below the form is a red 'Continue' button. At the bottom of the form, a black error message box is displayed with a red exclamation mark icon, the text 'PHONE NUMBER SHOULD BE 10 DIGITS LONG', and a close button (X).

5. When user keeps cards details incomplete while making payment



### Card Info

 1125 5151 5166 163

 12 / 35


 121


Pay - ₹1267.32


 YOUR CARD NUMBER IS INCOMPLETE. 

6. If user enters invalid card details



### Card Info

 1212 2122 1212 1212

 12 / 25

 231

Pay - ₹1267.32

 YOUR CARD NUMBER IS INVALID. 

## 7. CONCLUSION AND FUTURE WORK

### 7.1 Maintenance and evaluation :

Software maintenance is the process of changing, modifying, and updating software to keep up with customer needs. Software maintenance is done after the product has launched for several reasons including improving the software overall, correcting issues or bugs, to boost performance, and more.

The Scent and Perfume sales management system web app software will definitely undergo various changes after getting delivered to the client for use. Changes may occur because of some unexpected input values into the system. The main purpose of software maintenance is to modify and update software applications after delivery to correct faults and to improve performance. Software Maintenance must be performed in order to: Correct faults. Improve the design In software maintenance, we will be doing the following things :

1. Fix bugs in the software if something does not work according to the expectations.
2. Checking the working of software at regular intervals from time to time.
3. Minor changes in the system which are desired by the client in the future.
4. Making use of existing and new technologies and tools to make the system better.

### 7.2 Future Enhancement :

As we all know that nothing in this world is permanent or constant. Change is the only constant. In the same way, Scent and perfume sales web app system also has some future enhancements which will be made to make it better.

Future Enhancements of the software are as follows:

1. Multiple payment options will be added so that it becomes secure and convenient for the customers to pay for their desired product.
2. Detailed explanation of the use of the product along with the demo video will be provided.
3. A complaint forum - where dissatisfied customers can comment their complaints
4. Alerts the clients when new offers will be available via SMS and email. Also will be having reminder alerts.

### 7.3 CONCLUSION:

- An attempt is made in all its earnest towards the successful completion of the project the system is verified with valid as well as invalid data.
- The system is user friendly since it has been developed in visual studio code . since the connections can be extended to any database The control will be more powerful.
- Upgrading the system if may can be done without affecting the current proper functioning of the system.

Although I have put my best efforts to make the software flexible, easy to operate.

## REFERENCES

We express our sincere gratitude to all those people who helped us in gathering the information while preparing this project. To prepare this project we required information regarding how to develop efficient & proper web app on Scent and Perfume Sales Management System.

### Reference Website:

1. <https://www.google.com>

2. <https://www.youtube.com>

3. <https://www.youtube.com/watch?v=AN3t-OmdyKA&t=30457s>

4. <https://stackoverflow.com>