FLORASHOP(E-commerce Website)

A PROJECT REPORT

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in partial fulfilment for the award of the degree of

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<u>Bonafide Certificate</u>

This is to certify that the Project Synopsis entitled "FLORASHOP" is submitted to SUPERVISOR Ms. Gurpreet Kaur(Technical Trainer) of the department of Computer Science and Engineering ,GLA University, Mathura in partial fulfilment for the award of the degree of Bachelor of Technology in Computer Science and Engineering is a record of Bonafide Certificate carried out by :

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<u>Abstract</u>

It is only recently that technology has reached a level of stability, usability and affordability which permits its use in real life day to day scenarios rather than just research projects. The main advantages of online bookings are flexibility and accessibility. The purpose of this project is to automate the existing manual system by the help of computerized equipments and full-fledged computer software, so that the customers can be offered a wide range of floral arrangements and related products that can be conveniently purchased online.The website typically provides a user-friendly interface, product descriptions, and images, allowing customers to browse and choose from a variety of options. Features like search filters, customer reviews, and ratings make it easy for customers to find the perfect arrangement for any occasion. Many flower selling websites also offer delivery services, enabling customers to send flowers directly to their intended recipient. A strong customer service team is often available to provide assistance and resolve issues. Overall, a flower selling website is an ideal platform for anyone looking to purchase floral arrangements quickly and efficiently from the comfort of their own home and have it delivered to their desired location.

Table of Contents

INTRODUCTION

Background

Flower consumption is becoming more and more prosperous in recent years. Beside the useful and benefits with tools, it can make people enjoy their eyes and beautify their homes, [1 can also develop people's more implicit and taste when they communicate with each other. It is very feasible to take account of long-term market share of the system and the rate of short-term capital return to seize the market, to meet the theme of individual consumption, and to drive other products with flowers as a pilot, and eventually to form a market with advantages of intelligent flower shop management system. Intelligent flower shop management system arise at the historic moments.

The designed intelligent flower shop management system in the e-commerce system platform. Through it, consumers can browse the series of consumer information. such a flower information, special flower can promotion activities. Consumers can easily find the flowers they need pictures and text information. For consumers, it is possible to "shop" at home, Order not be restricted by time; to get a lot of flower information, to buy flowers that are not in the local area; it is more convenient to pay for cash on the internet; from order, The Purchase of goods to the door does not to be on the scene, both time-saving and labour-saving; as the flower shop management system saves the series of expenses, such as storefront, employee and storage, the total price is cheaper than the same flower in the traditional flower shop. The intelligent flower shop management system breaks through the barriers of traditional business. It has great attraction and influence to consumers, enterprises and the market. In the new economic period, it is no doubt an ideal model to achieve the

goals.

Identification of relevant Contemporary issue

One relevant contemporary issue for an online flower shop could be sustainability and eco-friendliness in the floral industry. As more consumers become aware of the environmental impact of traditional flower farming and transportation practices, they may look for eco-friendly options when purchasing flowers online.

To address this issue, an online flower shop could consider sourcing flowers from local growers, using organic or sustainable farming practices, and minimizing packaging waste. The shop could also provide information to customers about the environmental impact of the floral industry and the steps they can take to reduce their own carbon footprint when buying and disposing of flowers.

Another relevant issue could be the impact of the COVID-19 pandemic on the floral industry. As events and gatherings have been cancelled or scaled back, traditional sources of revenue for florists may have been impacted. An online flower shop could respond by pivoting their offerings to focus on home delivery, virtual events, and other pandemic-friendly options. They could also consider partnering with other businesses to offer gift baskets or other packages that could be enjoyed at home.

Problem Statement

The purpose of this project work is to develop a website to increase sales and improve customer satisfaction by providing a user-friendly and secure platform for customers to browse and purchase flowers. The website should offer a wide variety of flowers with detailed descriptions, pricing, and high-quality images. It also needs to ensure that the website is accessible on various devices and has a fast and reliable checkout process. Additionally, the website should provide customers with easy access to customer support .To achieve these goals, Florashop may need to address issues such as website design, product selection, payment processing, shipping logistics, and customer service.

Main objectives of the project

The main objectives of an e-commerce website for selling flowers would typically include:

- Attracting and retaining customers: The website should be designed to attract potential customers and retain existing ones by showcasing the variety of flowers available, providing an easy-to-use interface, and ensuring a seamless shopping experience.

- Offering a wide selection of flowers: The website should offer a wide variety of flowers, including popular options like roses, lilies, and orchids, as well as seasonal blooms, to cater to different tastes and preferences.

- Providing detailed product information: Customers should be able to access detailed information about each flower, including its origin, care instructions, and potential uses.

- Ensuring convenience and ease of use: The website should be user-friendly and offer multiple payment and delivery options to provide a seamless shopping experience for customers.

- Providing exceptional customer service: Customer service is crucial in the e-commerce industry, and the website should offer a responsive customer support team that can help customers with any queries or concerns.

- Offering competitive pricing and promotions: The website should offer competitive pricing for its products and provide regular promotions and discounts to incentivize customers to make purchases.

- Ensuring security and privacy: The website should prioritize the security and privacy of customer data, including personal and payment information, to build trust and credibility with customers.

About the Project

An e-commerce website can be an excellent platform for selling flowers online. Here are some reasons why:

- Convenient Shopping: With an e-commerce website, customers can conveniently browse through different types of flowers, select the ones they want, and make purchases from the comfort of their homes or offices.
- Increased Reach: An e-commerce website can help you reach a wider audience beyond your local area. Customers from different parts of the country or even the world can place orders on your website.
- 24/7 Availability: An e-commerce website allows you to keep your store open 24/7, even outside of regular business hours. This way, you can cater to customers who prefer to shop at odd hours or have busy schedules.
- Customer Data Collection: With an e-commerce website, you can collect valuable customer data, such as their email addresses and order history. This data can be used to personalize marketing campaigns, offer discounts, and improve customer loyalty(on the consent of the customer).
- Cost-Effective: Setting up an e-commerce website can be cost-effective compared to setting up a physical store. You won't need to rent a storefront or hire as many staff members, which can save you money in the long run.

Overall, an e-commerce website can provide a convenient and accessible way for customers to purchase flowers while providing you with the opportunity to reach a broader audience and collect valuable customer data.

Motivation(Reasons for choosing this project)

The old manual system was suffering from a series of drawbacks. Since the whole of the system was to be maintained with hands, the process of keeping, maintaining and viewing was very tedious and lengthy. This could result in the flowers becoming soggy or dried. The main motivation behind the development of this website are as follows:

- ➢ Improved customer experience: This website can provide customers with a better experience by offering features like easy navigation, product reviews, and personalized recommendations. This can help increase customer satisfaction and loyalty.
- ➢ Meeting customer demand: People often like to buy flowers for various occasions like birthdays, weddings, anniversaries, or just to decorate their homes. This website for selling flowers can help meet this demand by providing a convenient and accessible platform for customers to purchase flowers.
- ➢ Reach a wider audience: This website can help reach a wider audience beyond the local market. With the internet, people can order flowers from anywhere and have them delivered to their loved ones. This can help increase sales and revenue for the business.
- ➢ Convenience: This website for selling flowers can provide customers with the convenience of shopping online, browsing a wide variety of options, and making payments from the comfort of their homes or offices.
- ➢ Competitive advantage: Having an e-commerce website can give a business a competitive advantage over others in the same industry that do not have an online presence. Customers are more likely to choose a business that has a website where they can browse and purchase products conveniently.

Software and Hardware Requirements

Software Requirements:

➢ **HTML**

HTML is the standard markup language for creating Web pages. The first Version ofHTML was written by Tim Berners-Lee in 1993.

- HTML stands for Hyper Text Markup Language

- HTML is the standard markup language for creating Web pages

- HTML describes the structure of a Web page

- HTML consists of a series of elements

- HTML elements tell the browser how to display the content

- HTML elements label pieces of content such as "this is a heading", "this is aparagraph", "this is a link", etc.

➢ CSS

CSS is the language we use to style a Web page. Cascading Style Sheets is used to style and layout web pages — for example, to alter the font,color, size, and spacing of your content, split it into multiple columns, or add animations and other decorative features.

- CSS stands for Cascading Style Sheets

- CSS describes how HTML elements are to be displayed on screen, paper, or inother media

- CSS saves a lot of work. It can control the layout of multiple web pages all atonce

- External stylesheets are stored in CSS files

➢ JavaScript

JavaScript was invented by Brendan Eich in 1995.

- It was developed for Netscape 2, and became the ECMA-262 standard in 1997. JavaScript is a scripting language that is one of the three core languages used todevelop websites.

Whereas HTML and CSS give a website structure and style, JavaScript lets you add functionality and behaviors to your website, allowing your website's visitors to interact with content in many imaginative ways.

- JavaScript is primarily a client-side language, meaning it runs on yourcomputer within your browser. However, more recently the introduction of Node.js has allowed JavaScript to also execute code on servers.

- Since its release, JavaScript has surpassed Java, Flash, and other languages because it is relatively easy to learn, has a free and open community, and, most importantly, is incredibly useful, allowing developers to quickly create apps withaudiences in the millions.

- ➢ M.E.R.N.
- ReactJS:

  React (also known as React.js or ReactJS) is a free and open-source front-end JavaScript library for building user interfaces based on components. It is maintained by Meta (formerly Facebook) and a community of individual developers and companies.React is used to build single-page applications. React allows us to create reusable UI components.

- NodeJs:

  Node.js is a cross-platform, open-source server environment that can run on Windows, Linux, Unix , macOS, and more. Node.js is a back-end JavaScript runtime environment, runs on the JavaScript Engine, and executes JavaScript code outside a web browser. Node.js lets developers use JavaScript to write command line tools and for server-side scripting.

  The Benefits of Node.js: Easily Scalable. Scaling your applications is actually pretty easy with Node.js Quick Learning Curve. Because JavaScript is as popular as it is,using Node.js makes sense Single Programming Language. When it comes to writing the applications on the server-side, Node.js allows you to use JavaScript.

- MongoDB:

  MongoDB, Inc. is an American software company that develops and provides commercial support for the source-available database MongoDB, a NoSQL database that stores data in JSON-like documents with flexible schemas.

  MongoDB, the most popular NoSQL database, is an open-source document-oriented database. The term 'NoSQL' means 'non-relational'. It means that MongoDB isn't based on the table-like relational database structure but provides an altogether different

mechanism for storage and retrieval of data. This format of storage is called BSON (similar to JSON format).

- ExpressJS:

Express.js is a small framework that works on top of Node.js web server functionality to simplify its APIs and add helpful new features. It makes it easier to organize your application's functionality with middleware and routing. It adds helpful utilities to Node.js HTTP objects and facilitates the rendering of dynamic HTTP objects.

- VS Code

Visual Studio Code, also commonly referred to as VS Code, is a source-code editor made by Microsoft with the Electron Framework, for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git.

Hardware Requirements:

- Windows 10 and above
- 512 mb RAM
- I3 processor and above

Future Scope of the Project

Undeniably, the Flower Industry has become a new bandwagon in the business industry around the globe. Providing absolute flexibility and comfort of buying flowers online, flower delivery apps have revolutionized the buying-selling paradigm completely.

In a nutshell, it can be summarized that the future scope of the project circles around maintaining the following information :

- Undeniably, the Flower Industry has become a new bandwagon in the business industry around the globe. Providing absolute flexibility and comfort of buying flowers online, flower delivery apps have revolutionized the buying-selling paradigm completely.
- There is a comprehensive scope for floral businesses in all countries. Flowers are predominantly becoming one of the fastest-growing commodities in society because of their emotional and religious significance.
- As per the reports, USA's retail market of flowers contributes $18billion, which is increasing at a CAGR of 6%, from the year 2017–2020.
- Some of the leading flower delivery apps such as UrbanStems, Farmgirl flowers, and Bouqs are the top-notch of flower delivery business and are generating a decent amount of revenue to scale up their online flower delivery services.
- The industrial capital of Bouqs is $43.1million, whereas UrbanStems is $27.2million in the USA alone. That's the reason people are investing significantly in the flower delivery business because it affirms more profits and is a boon for startups.
- With the increase in demand, the flower delivery service providers have upgraded their methodology and also have introduced new strategies like same-day delivery and instant delivery of fresh flowers to strengthen its position in this market.
- Big ventures like Urban Stem in USA and bliss flowers in UAE hire bicycles and scooters for instant deliveries of fresh flowers and guarantee delivery within an hour to boost the overall sales of their business.
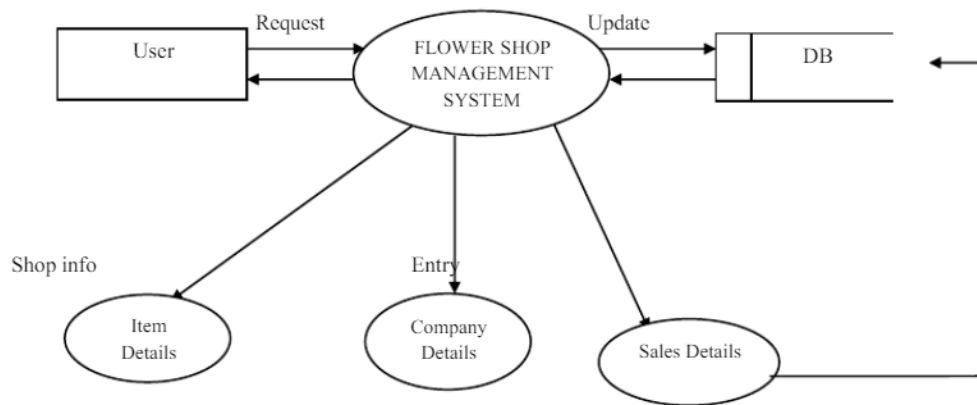
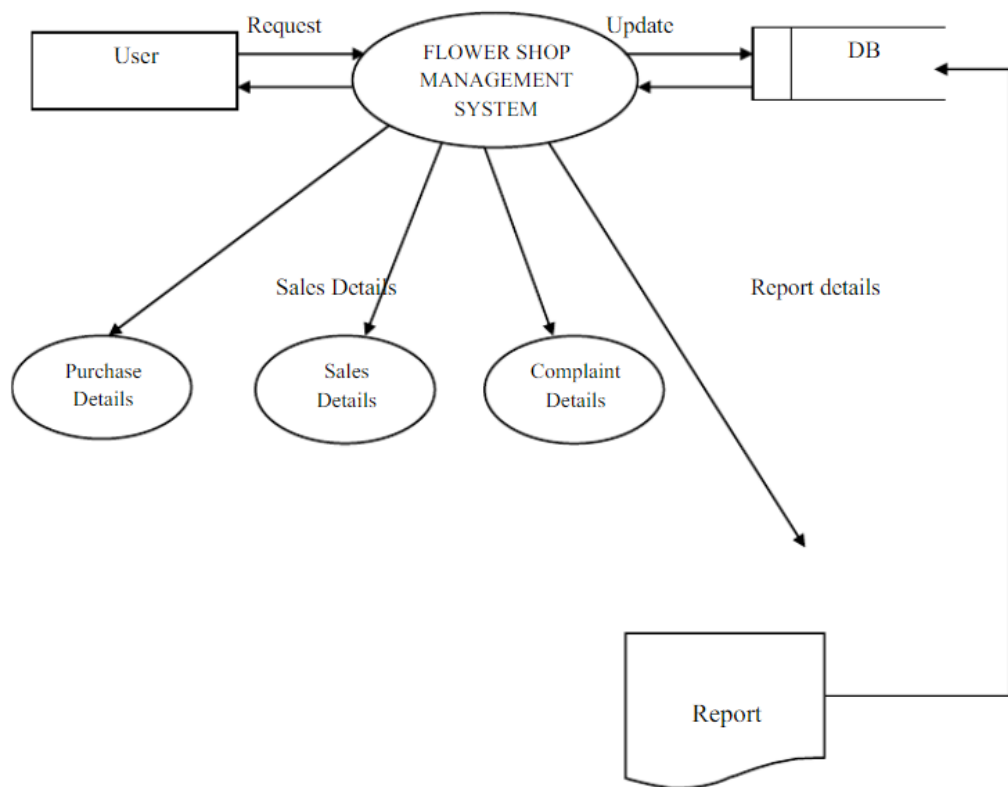# Data Flow Diagrams

Level 0

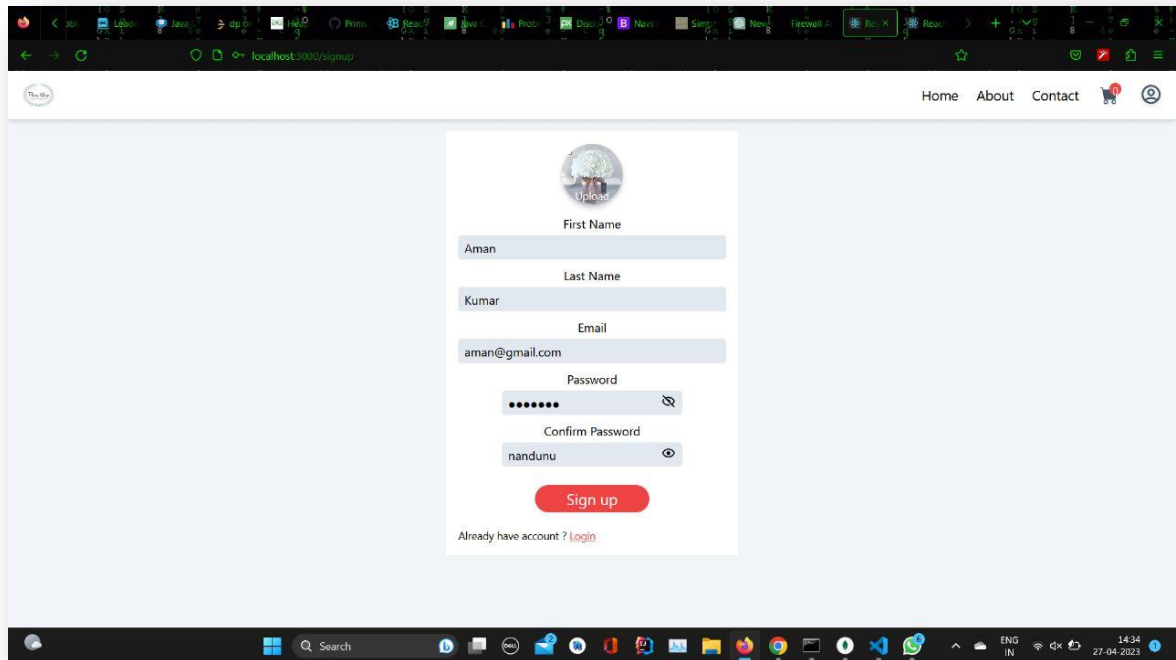## Level 0 DFD For FLoraShop

Level 1

Level 1 DFD For FLoraShop
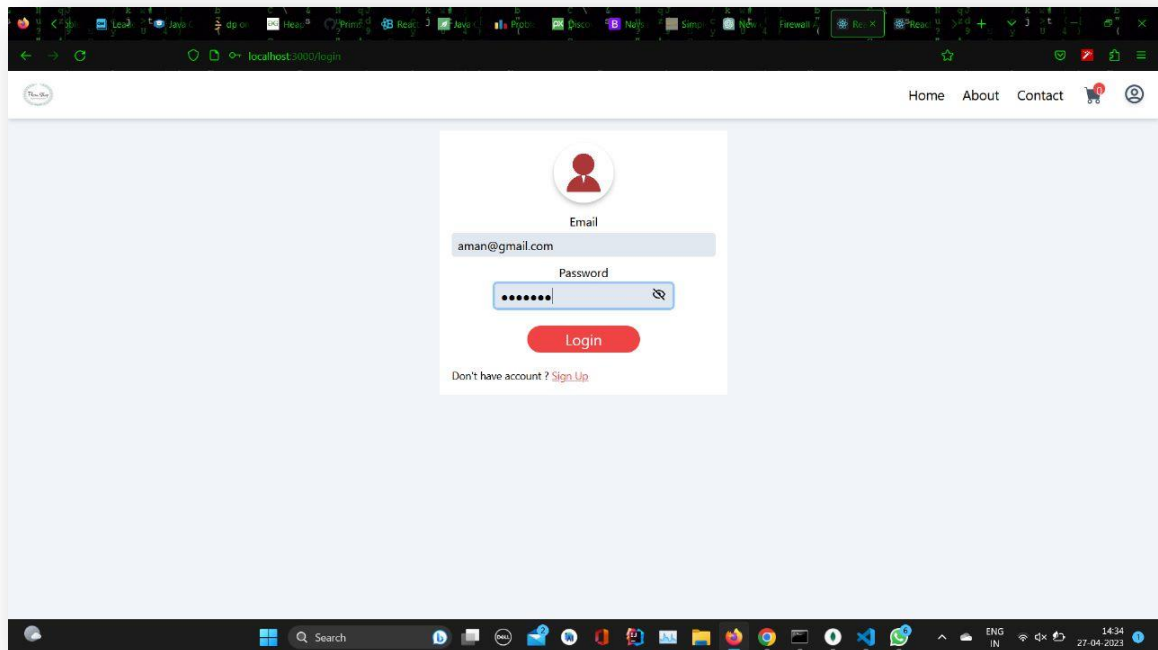
Level 2 DFD For FLoraShop

Implementation and Result

SignUp Page

SignIn Page

Home Page
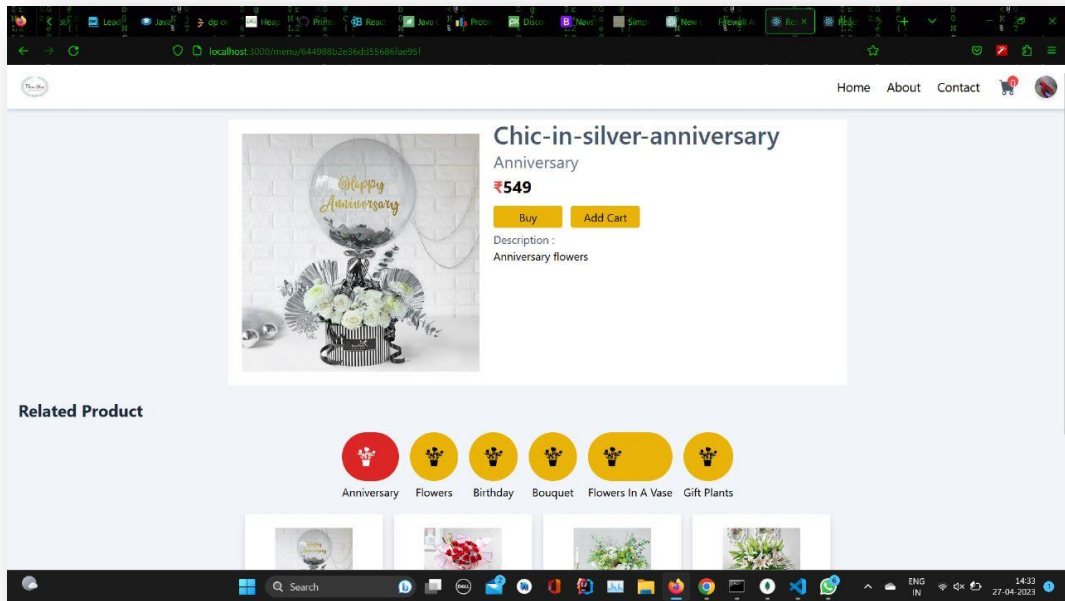

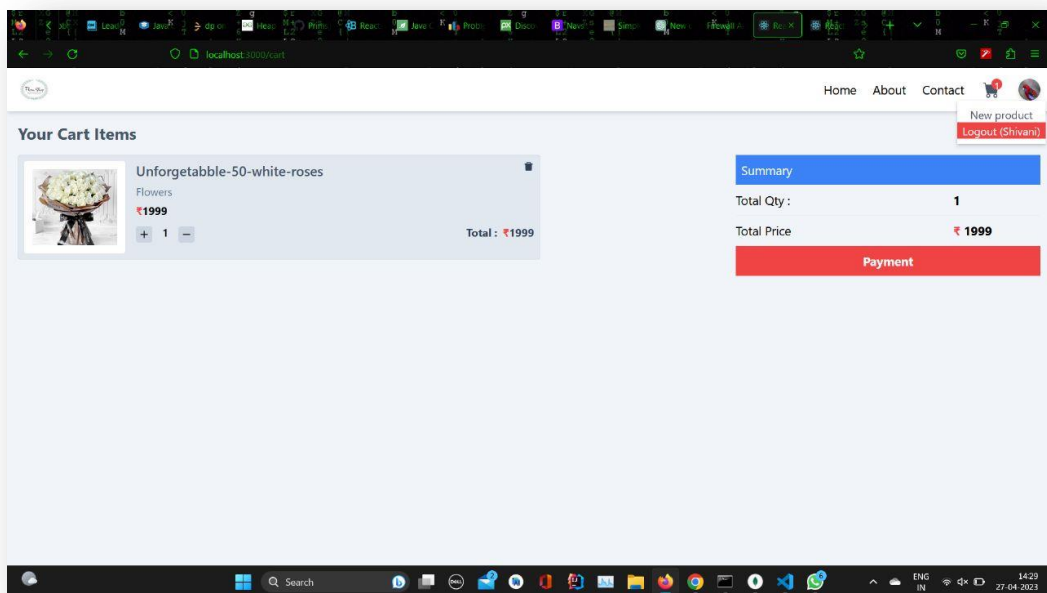**Catalogue Page**
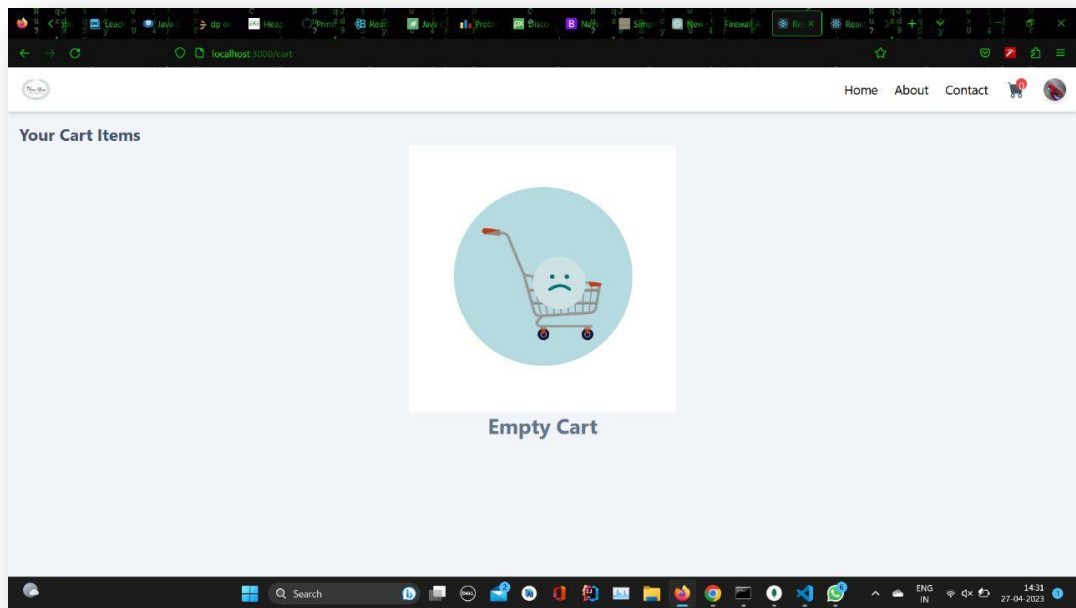
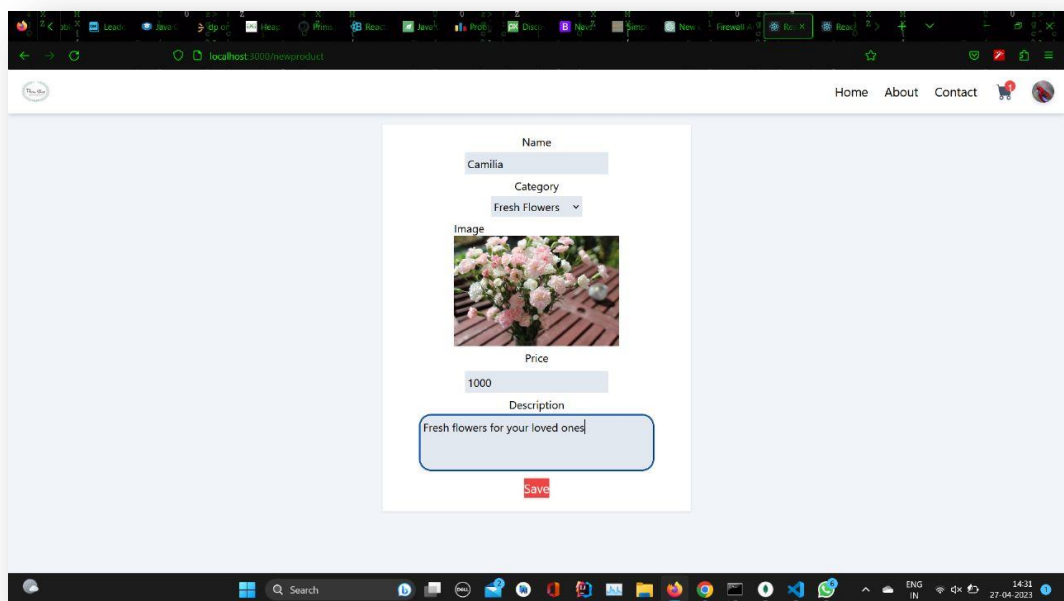<p style="text-align:center"><u>Product Description Page</u></p>

Add to Cart Page

Add new Product Page

Code Snippets

Home.js

```javascript
import React, { useEffect, useRef, useState } from "react";

import { useSelector } from "react-redux";

import CardFeature from "../component/CardFeature";

import HomeCard from "../component/HomeCard";

import { GrPrevious, GrNext } from "react-icons/gr";

import FilterProduct from "../component/FilterProduct";

import AllProduct from "../component/AllProduct";

import { Link } from "react-router-dom";




const Home = () => {

const productData = useSelector((state) => state.product.productList);

console.log(productData)

const homeProductCartList = productData.slice(1, 5);

const homeProductCartListVegetables = productData.filter(

(el) => el.category === "Flowers",

[]

);

const loadingArray = new Array(4).fill(null);

const loadingArrayFeature = new Array(10).fill(null);


const slideProductRef = useRef();

const nextProduct = () => {

slideProductRef.current.scrollLeft += 200;

};

const preveProduct = () => {

slideProductRef.current.scrollLeft -= 200;

};
```

```jsx
        return (
<div className="p-2 md:p-4">
<div className="md:flex gap-4 py-2">
<div className="md:w-1/2">
<div className="flex gap-3 bg-slate-300 w-36 px-2 items-center rounded-full">
<p className="text-sm font-medium text-slate-900">Bike Delivery</p>
<img
src="https://cdn-icons-png.flaticon.com/512/2972/2972185.png"
className="h-7"
/>
</div>
<h2 className="text-4xl md:text-7xl font-bold py--3">
The Fasted Delivery in{" "}
<span className="text-red-600 text--">Your Home</span>
</h2>
<p className="py-3 text-base ">
Can't make it to your loved one's special events in other cities?
Browse our exquisite collection of flowers, select your favorites,
and let us take care of the rest.From weddings to birthdays, our expert
florists will create the perfect arrangement to make your special moment
even more memorable.Come and explore our world of flowers - we can't wait
to brighten up your day!
</p>
<Link to='order'>
<button className="font-bold bg-red-500 text-slate-200 px-4 py-2 rounded-md">
Order Now
</button>
</Link>
</div>


<div className="md:w-1/2 flex flex-wrap gap-5 p-4 justify-center">
```

```jsx
{homeProductCartList[0]
? homeProductCartList.map((el) => {
return (
<HomeCard
key={el._id}
id={el._id}
image={el.image}
name={el.name}
price={el.price}
category={el.category}
/>
);
})
: loadingArray.map((el, index) => {
return <HomeCard key={index+"loading"} loading={"Loading..."} />;
})}


</div>
</div>


<div className="">
<div className="flex w-full items-center">
<h2 className="font-bold text-2xl text-slate-800 mb-4">
Fresh Flowers
</h2>
<div className="ml-auto flex gap-4">
<button
onClick={preveProduct}
className="bg-slate-300 hover:bg-slate-400 text-lg  p-1 rounded"
>
<GrPrevious />
</button>
```

```
<button

onClick={nextProduct}

className="bg-slate-300 hover:bg-slate-400 text-lg p-1 rounded "

>

<GrNext />

</button>

</div>

</div>

<div

className="flex gap-5 overflow-scroll scrollbar-none scroll-smooth transition-all"

ref={slideProductRef}

>

{homeProductCartListVegetables[0]

? homeProductCartListVegetables.map((el) => {

return (

<CardFeature

key={el._id+"Flowers"}

id={el._id}

name={el.name}

category={el.category}

price={el.price}

image={el.image}

/>

);

})

: loadingArrayFeature.map((el,index) => (

<CardFeature loading="Loading..." key={index+"cartLoading"} />

))}

</div>

</div>


<AllProduct heading={"Your Product"}/>
```

```
        </div>

    );

};
```

export default Home;

Package.json

```json
{
"name": "frontend",
"version": "0.1.0",
"private": true,
"dependencies": {
"@reduxjs/toolkit": "^1.9.2",
"@testing-library/jest-dom": "^5.16.5",
"@testing-library/react": "^13.4.0",
"@testing-library/user-event": "^13.5.0",
"react": "^18.2.0",
"react-dom": "^18.2.0",
"react-hot-toast": "^2.4.0",
"react-icons": "^4.7.1",
"react-redux": "^8.0.5",
"react-router-dom": "^6.8.0",
"react-scripts": "5.0.1",
"redux": "^4.2.1",
"tailwind-scrollbar": "^2.1.0",
"web-vitals": "^2.1.4"
},
"scripts": {
"start": "react-scripts start",
"build": "react-scripts build",
"test": "react-scripts test",
"eject": "react-scripts eject"
},
```

```
"eslintConfig": {
"extends": [
"react-app",
"react-app/jest"
]
},
"browserslist": {
"production": [
">0.2%",
"not dead",
"not op_mini all"
],
"development": [
"last 1 chrome version",
"last 1 firefox version",
"last 1 safari version"
]
},
"devDependencies": {
"tailwindcss": "^3.2.4"
},
"description": "This project was bootstrapped with [Create React
App](https://github.com/facebook/create-react-app).",
"main": "tailwind.config.js",
"keywords": [],
"author": "",
"license": "ISC"
}
```

App.js

```
import Header from "./component/Header";
import { Outlet } from "react-router-dom";
```

```jsx
import { Toaster } from "react-hot-toast";
import { useEffect } from "react";
import { setDataProduct } from "./redux/productSlide";
import { useDispatch, useSelector } from "react-redux";


function App() {
  const dispatch = useDispatch()
  const productData = useSelector((state)=>state.product)
  console.log(productData);


  useEffect(()=>{
    (async()=>{
      const res = await fetch(`${process.env.REACT_APP_SERVER_DOMIN}/product`)
      const resData = await res.json()
      console.log(resData)
      dispatch(setDataProduct(resData))
    })()
  },[])


  return (
    <>
      <Toaster />
      <div>
        <Header />
        <main className="pt-16 bg-slate-100 min-h-[calc(100vh)]">
          <Outlet />
        </main>
      </div>
    </>
  );
}
```

Conclusion

Our project is a very humble venture to satisfy the needs to manage the flower ordering system more efficiently and easily for both the customers and the florists. This platform can prove to be a powerful platform in handling the requirements of various types of users who wish on cutting time in buying flowers. This website will provide a hassle free experience to all users provided that it is managed and updated from time to time according to the needs of the users.At the end, it is concluded that,we understand the problem domain and are able to create a model of the system which fulfils the operations required by the system.We included features and operations in detail and designed the user interfaces and solved security issues related to the system efficiently.Finally,the system is implemented and tested according to test cases.

Reference Websites:

1. https://code.visualstudio.com
2. https://nodejs.org/en/
3. https://developers.google.com
4. https://github.com
5. https://reactjs.org/

GitHub Repository link:

https://github.com/shivani-singh28/FloraShop.git