

# Lolli & Pops Candy Shop User Manual

## Introduction

**Course Title:** Enterprise Application Development

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**Roll Number:** BCSF21M017

## Project Overview

**Lolli&Pops** is a full-stack candy shop application developed using Blazor web app template. It is designed to provide a seamless platform for users to browse, purchase, and enjoy a wide variety of candies. The application allows users to explore product categories, manage their cart, and complete secure checkouts.

The admin panel enables store managers to efficiently handle inventory, update product information, track sales, and view statistics, ensuring smooth operations and customer satisfaction.

**GitHub Url:** <https://github.com/pupucit/cs21-blazor-project-Malaika-Farid>

## Core Functionalities and Technologies

### User Authentication:

Implements secure user registration and login using ASP.NET Core Identity.

Supports role-based authorization for users and administrators.

### Product Management:

Users can browse a variety of candies with detailed descriptions, images, and prices.

Admins can add, edit, and delete candy products through the admin panel.

### Shopping Cart:

Enables users to add, update, or remove items from their cart.

Displays a dynamic summary, including subtotal, taxes, and total cost.

### Checkout Process:

Provides a smooth and secure checkout flow for completing purchases.

Supports order summary and confirmation after checkout.

### Search and Filters:

Includes a search functionality to find products using keywords.

Supports filtering products by category or price range.

### Responsive UI:

Developed with Blazor Server, ensuring a responsive and interactive user experience on all devices.

### User Profile:

Personalized profiles for users to view and manage their orders and account settings.

### Admin Panel:

Allows administrators to manage inventory, update stock levels, and view sales statistics.

Includes options to monitor user activity and manage product categories.

### Dynamic Updates:

Real-time cart and inventory updates using JavaScript interop with Blazor.

### Secure Data Storage:

Utilizes Dapper to securely store user and product data in the database.

## Web Security Measures

### Model Validation:

Server-side validation ensures data integrity and prevents the processing of invalid data during user actions such as registration or checkout.

### CSRF Prevention:

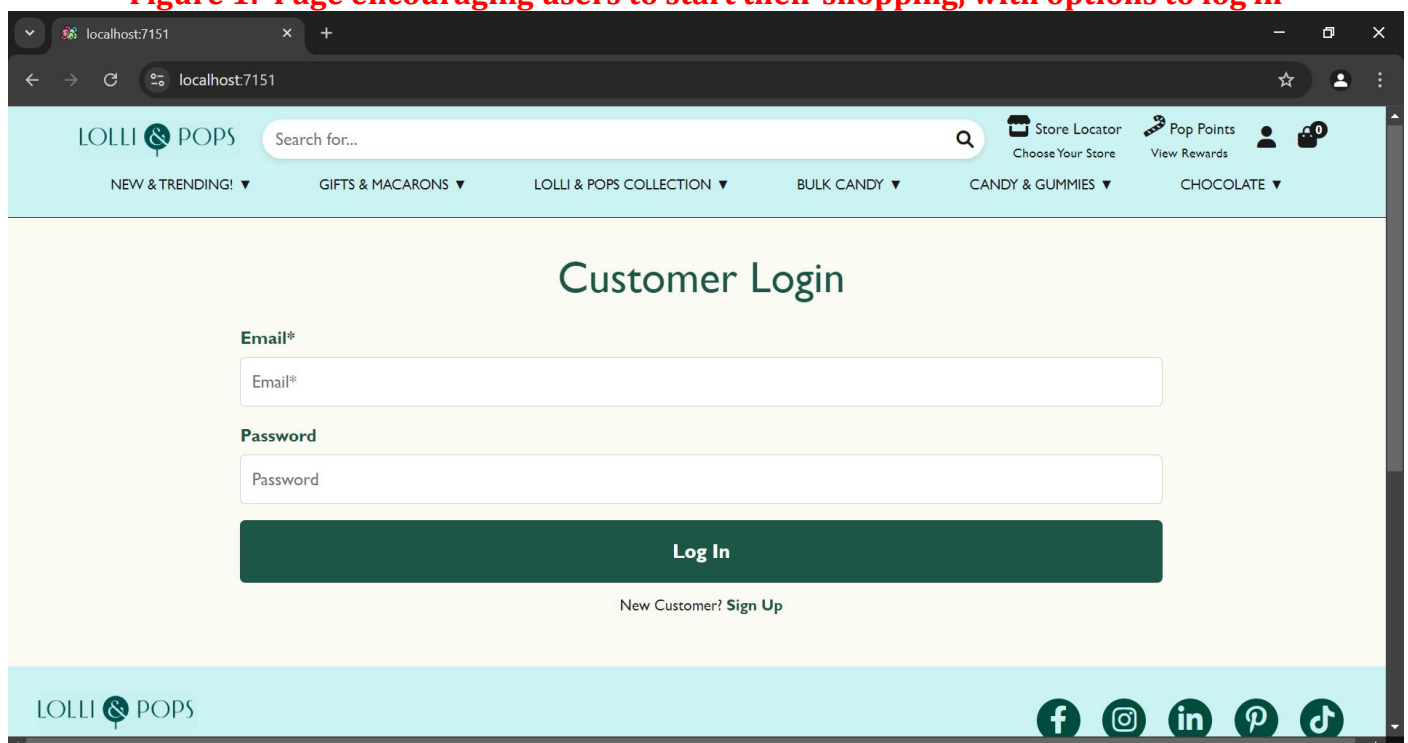
Enabled Cross-Site Request Forgery (CSRF) protection to safeguard user sessions and prevent unauthorized actions.

## Technologies Used

- **Frontend:** HTML, CSS, JavaScript, Bootstrap for responsive design.
- **Backend:** Blazor Server
- **Database:** Microsoft SQL Server with Dapper as the ORM.
- **Auth:** ASP.NET Core Identity

## Screen Shots

**Figure 1: Page encouraging users to start their shopping, with options to log in**



**Figure 2: Page encouraging users to start their shopping, with options to create a new account**

localhost:7151/Account/Register

## Create an account

**Email\***  **First Name\***

**Last Name\***  **Phone Number**

**Password**  **Confirm Password**

**Zip Code\***  ☒ I am Over 13 Years of Age\* ☒ Allow Marketing Emails and SMS\*

**Create**

Already have an account? [Login](#)

Figure 3: Page to confirm their emails on creating a new account

Register confirmation

localhost:7151/Account/RegisterConfirmation?email=malaika123@gmail.com

NEW & TRENDING! ▾ GIFTS & MACARONS ▾ LOLLI & POPS COLLECTION ▾ BULK CANDY ▾ CANDY & GUMMIES ▾ CHOCOLATE ▾

This app does not currently have a real email sender registered, see [these docs](#) for how to configure a real email sender. Normally this would be emailed: [Click here to confirm your account](#)

LOLLI & POPS

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Figure 4: Kind of welcome Landing Page after logging in showing trending products with some ads

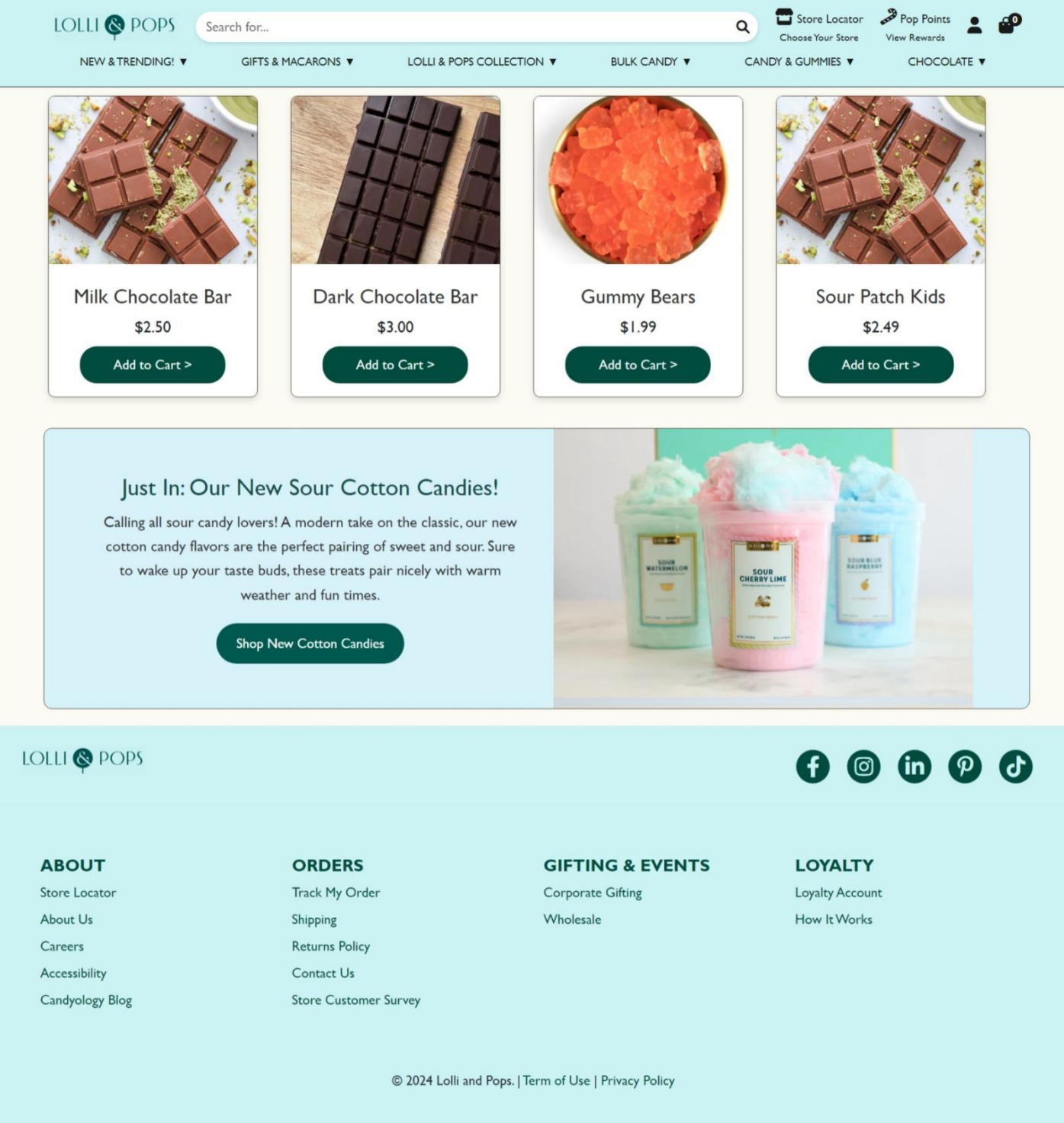


Figure 5: Page showing products with category “Gifts & Macarons”

LOLLI & POPS

Search for...

Q

Store Locator  
Choose Your Store

Pop Points  
View Rewards

0

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LOLLI & POPS COLLECTION ▾

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CANDY & GUMMIES ▾


CHOCOLATE ▾



Golden Truffle Delight

\$15.99


Add to Cart >



Heavenly Chocolate Praline

\$12.99


Add to Cart >



Caramel Dream Bites

\$10.99


Add to Cart >



Rose Pistachio Crumble

\$11.99


Add to Cart >



Hazelnut Crunch Bonbon

\$14.35


Add to Cart >



Classic Honey Macaron

\$3.49


Add to Cart >



Lavender Honey Macaron

\$3.99

Add to Cart >



Salted Caramel Macaron

\$3.29

Add to Cart >

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Figure 6: Page showing products with category “Lolli Pops”

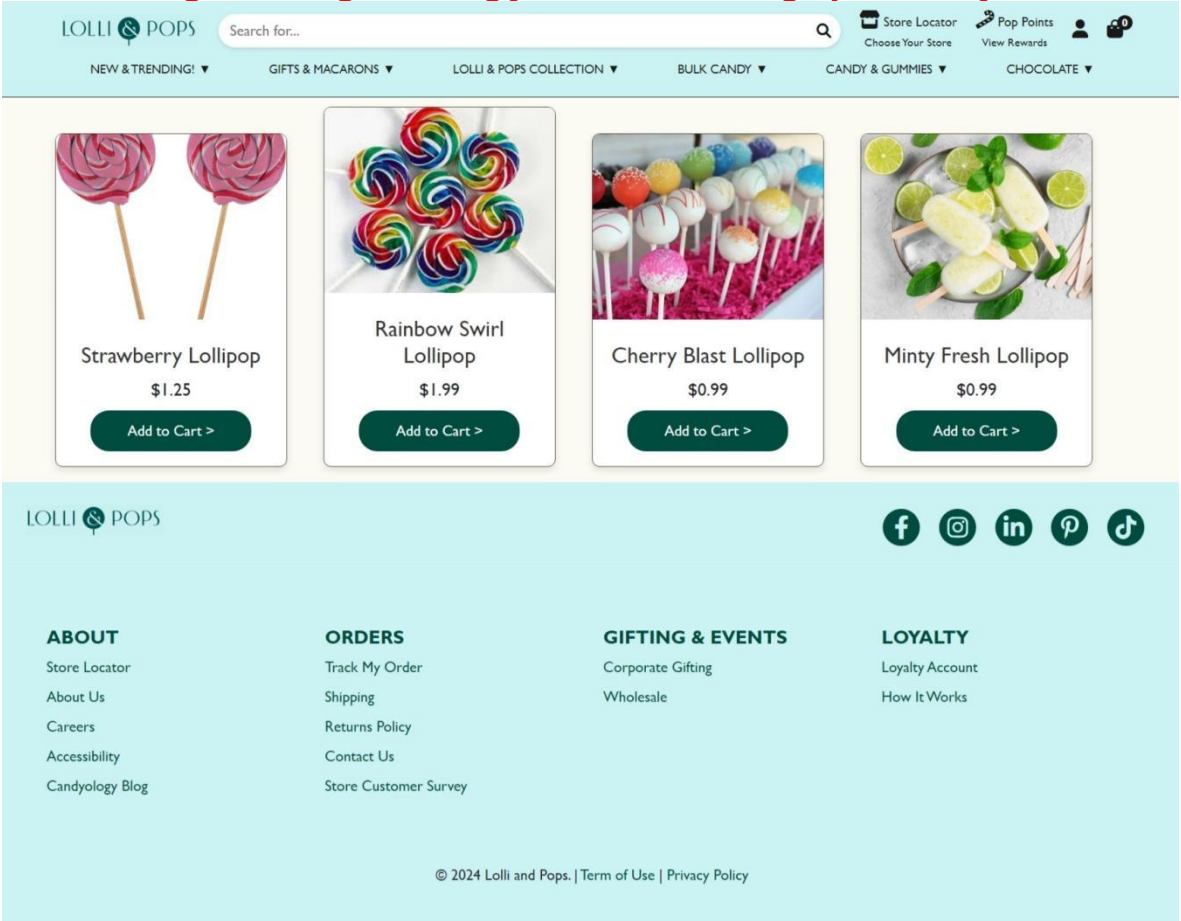


Figure 7: Page showing products with category “Bulk & Gummies”

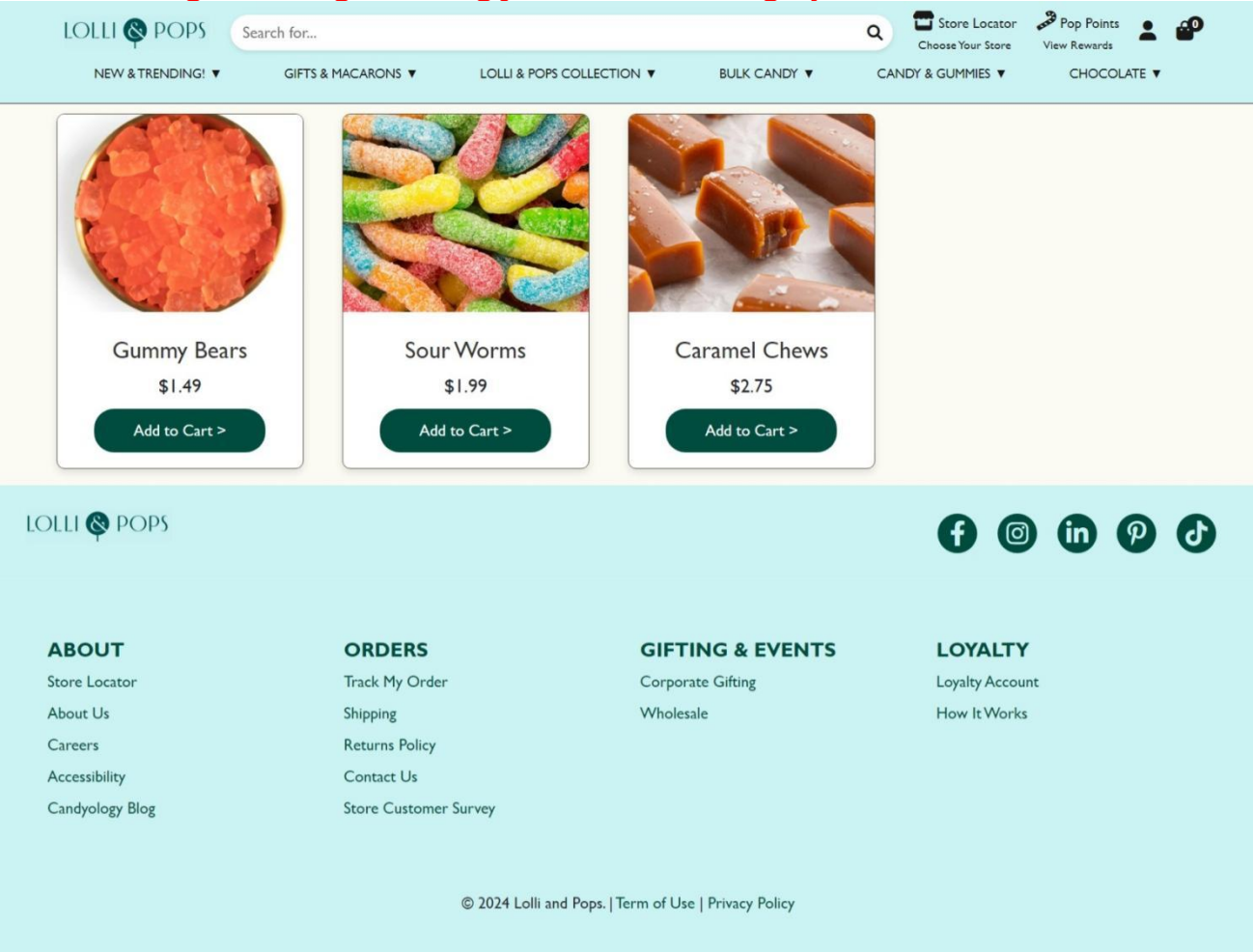


Figure 8: Page showing products with category “Chocolate”

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Search for...

Q

Store Locator  
Choose Your Store

Pop Points  
View Rewards

0

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LOLLI & POPS COLLECTION ▾


BULK CANDY ▾

CANDY & GUMMIES ▾

CHOCOLATE ▾



Milk Chocolate  
\$2.99  
Add to Cart >



Dark Chocolate  
\$3.50  
Add to Cart >

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**Figure 9: Page showing our all products with a search feature**

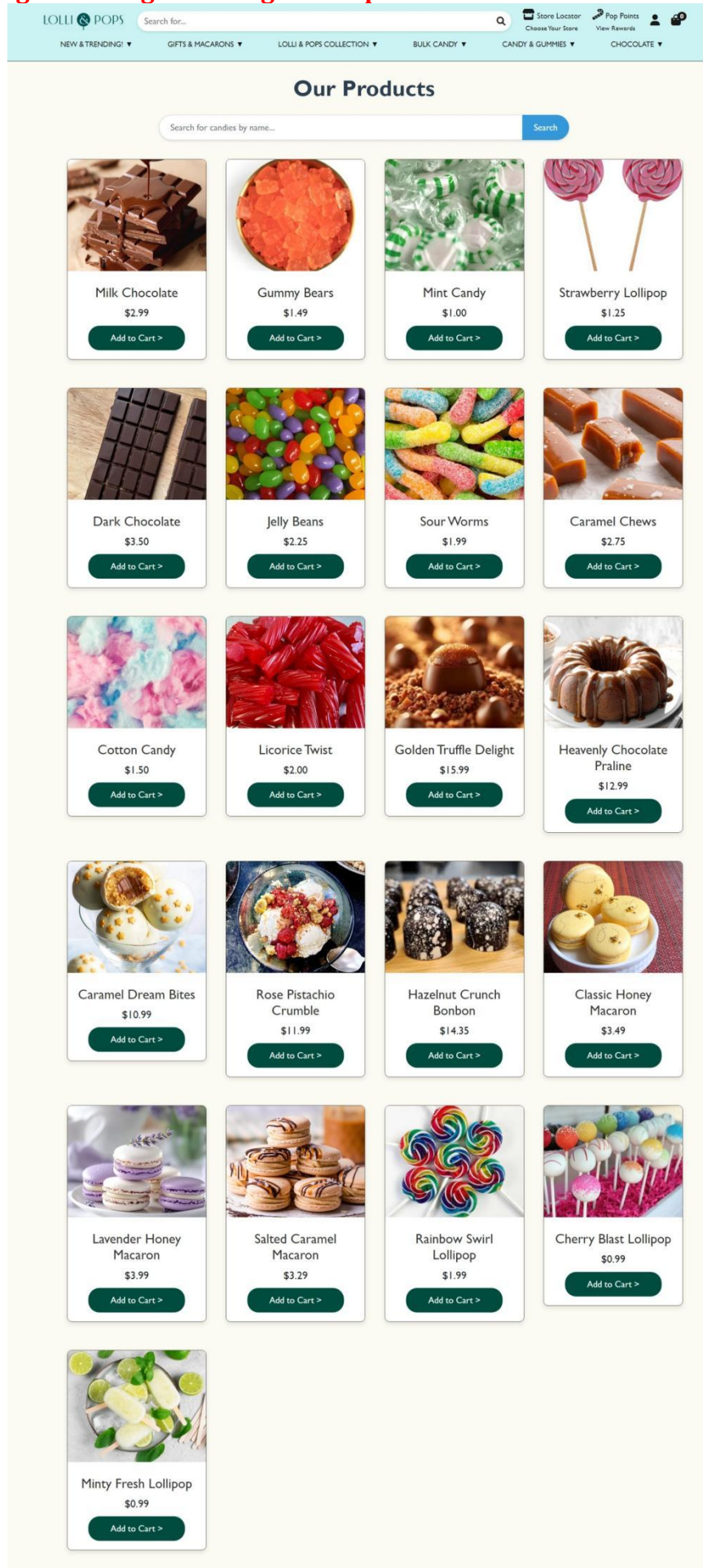




Figure 10: Page showing filtered products on user given keyword

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Search for...

Q

Store Locator

Choose Your Store

Pop Points

View Rewards

0

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BULK CANDY ▼


CANDY & GUMMIES ▼

CHOCOLATE ▼

Our Products

Lollipop


Search



Strawberry Lollipop

\$1.25


Add to Cart >



Rainbow Swirl Lollipop

\$1.99


Add to Cart >



Cherry Blast Lollipop

\$0.99

Add to Cart >



Minty Fresh Lollipop

\$0.99

Add to Cart >

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Figure 11: Page showing our all stores with their locations on map

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LOLLI & POPS COLLECTION ▾

BULK CANDY ▾

CANDY & GUMMIES ▾

CHOCOLATE ▾

Store Locator

Choose Your Store

Pop Points

View Rewards

Alderwood Mall

3000 184th St SW, Lynnwood, WA, 98037

(425) 409-2170

View On Map

Arden Fair

1689 Arden Way #1136, Sacramento, CA, 95815

(916) 922-2250

View On Map

Battlefield Mall

2825 S Glenstone Ave, #T06, Springfield, MO, 65804

(417) 888-2401

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**Figure 12: Page showing our new offers or rewards for our customers**

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Search for...

Q

Store Locator  
Choose Your Store

Pop Points  
View Rewards

0

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CANDY & GUMMIES ▾

CHOCOLATE ▾

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POP Points

EARN FREE REWARDS

Start Stacking POP Points & Earn Bits of Sweet Rewards on Every Purchase

Sign Up

OR

Sign In

🏆

Receive 1 POP Point for Each  
\$1 Spent In-Store & Online\*

🎂

Happy Birthday Reward Every  
Year\*

🌟

Exclusive Promotions, Offers,  
& VIP Benefits\*

\*SEE POP POINTS REWARDS POLICY FOR COMPLETE BENEFITS, REWARDS, & REDEMPTION RULES.

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Figure 13: Page showing the cart products added by a user

Product	Price	Quantity	Total
 Caramel Dream Bites	\$10.99	<div>-1+</div>	\$10.99
 Rose Pistachio Crumble	\$11.99	<div>-1+</div>	\$11.99
 Caramel Chews	\$2.75	<div>-1+</div>	\$2.75
 Golden Truffle Delight	\$15.99	<div>-1+</div>	\$15.99
 Gummy Bears	\$1.99	<div>-1+</div>	\$1.99
 Strawberry Lollipop	\$1.25	<div>-1+</div>	\$1.25

Back to Products

Summary

Subtotal

\$44.96

Taxes

\$4.50

Shipping

\$5.00

Total\$54.46

Checkout

Figure 14: Page to show the payment is successful on order

localhost:7151/payment

localhost:7151/payment

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Search for...

Store Locator  
Choose Your Store

Pop Points  
View Rewards

0

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✓

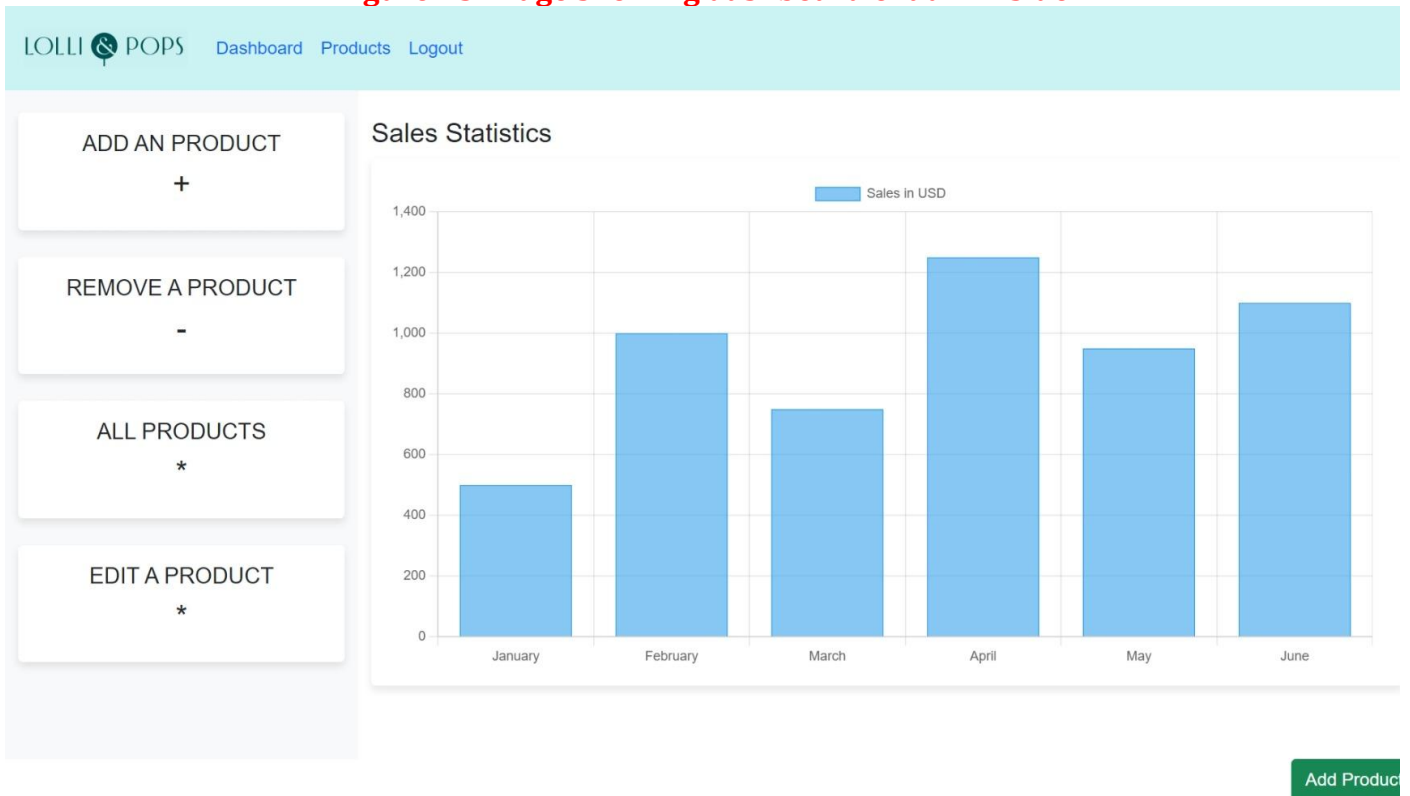
Payment Successful

Thanks a bunch for purchasing our shoes. It means a lot to us, just like you do! Thanks for being you.

Windows taskbar with various application icons and system tray showing 7:19 PM on 1/26/2025.



**Figure 15: Page showing dashboard of admin side**



**Figure 16: Page to add a new product on admin side**

The 'New Product' form is set against a light yellow background. It includes input fields for 'Name', 'Category' (with 'Gift Category' selected), 'Price' (0), 'Weight (g)' (0), and 'Flavor'. To the right, there is a checkbox for 'Is Vegan?', a date picker for 'Expiry Date' (01/01/0001), an 'Upload Image' section with a 'Choose File' button and 'No file chosen' text, and a 'Stock' field (0). A placeholder image of colorful lollipops is shown. A green 'Add Product' button is at the bottom center.