🍬 SweetsNSweets

SweetsNSweets is a full-stack sweet shop management system built using the MERN stack. It allows users to browse and purchase sweets, while administrators can manage inventory through a secure, role-based dashboard.

The project demonstrates real-world full-stack development practices including authentication, authorization, REST APIs, and a modern responsive frontend.

🚀 Features

👤 User Features

- User registration and login with JWT authentication\
- Browse all available sweets\
- Search sweets by name\
- Purchase sweets (disabled automatically when stock is zero)\
- Real-time stock updates after purchase

🛠️ Admin Features

- Admin-only access control\
- Add new sweets to inventory\
- Update existing sweet details\
- Delete sweets from inventory\
- Secure protected routes and APIs

🧱 Tech Stack

Frontend

- React (Vite)\
- Tailwind CSS\
- React Router\
- Axios\
- Lazy loading with React.lazy & Suspense

Backend

- Node.js\
- Express.js\
- MongoDB & Mongoose\
- JWT Authentication\

- bcryptjs for password hashing

📁 Project Structure

Backend

```
backend/
├── src/
│   ├── controllers/
│   ├── models/
│   ├── routes/
│   ├── middlewares/
│   └── utils/
├── server.js
└── package.json
```

Frontend

```
frontend/
├── src/
│   ├── api/
│   ├── components/
│   ├── pages/
│   ├── App.jsx
│   └── main.jsx
└── package.json
```

🔐 Authentication & Authorization

- JWT-based authentication\
- Tokens stored securely in localStorage\
- Role-based access (user, admin)\
- Admin routes and actions protected on both frontend and backend

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🧪 API Endpoints

Auth

- POST /api/v1/auth/register\
- POST /api/v1/auth/login

Sweets (Protected)

- GET /api/v1/sweets\
- GET /api/v1/sweets/search\
- POST /api/v1/sweets (Admin)\
- PUT /api/v1/sweets/:id (Admin)\
- DELETE /api/v1/sweets/:id (Admin)

Inventory

- POST /api/v1/sweets/:id/purchase\
- POST /api/v1/sweets/:id/restock (Admin)

⚙️ Environment Variables

Create a `.env` file in the backend directory:

```
PORT=5000
MONGO_URI=your_mongodb_connection_string
JWT_SECRET=your_jwt_secret
```

▶ Running the Project Locally

1️⃣ Clone the repository

```
git clone https://github.com/your-username/SweetsNSweets.git
cd SweetsNSweets
```

2️⃣ Backend Setup

```
cd backend
npm install
npm run dev
```

3️⃣ Frontend Setup

```
cd frontend
npm install
npm run dev
```

Frontend runs at:

```
http://localhost:5173
```

Backend runs at:

```
http://localhost:5000
```

📸 UI Highlights

- Clean and modern dashboard\
- Responsive design using Tailwind CSS\
- Admin edit modal for updating sweets\
- Lazy-loaded pages with loading indicators

🧠 Learning Outcomes

- Full-stack MERN architecture\
- Secure authentication & authorization\
- RESTful API design\
- Role-based UI rendering\
- State management and API integration\
- Professional project structure

🔮 Future Enhancements

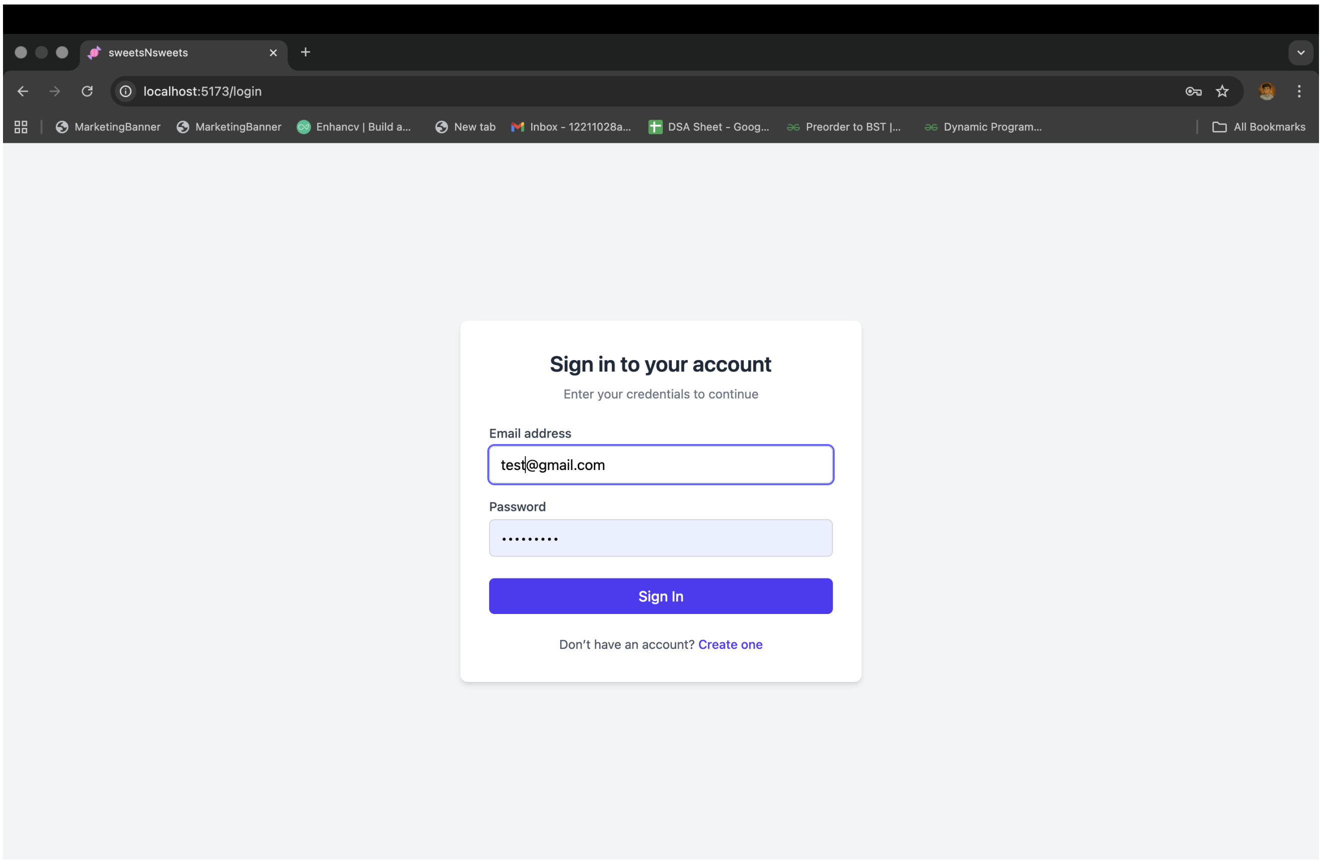
- Pagination and filtering\
- Order history for users\
- Admin analytics dashboard\
- Image upload for sweets\
- Payment gateway integration

👨‍💻 Author

Ayush Gupta
Full-Stack Developer
Built as a learning and portfolio project

📸 Application Screenshots

🔐 Login Page



Sign in to your account

Enter your credentials to continue

Email address

test@gmail.com

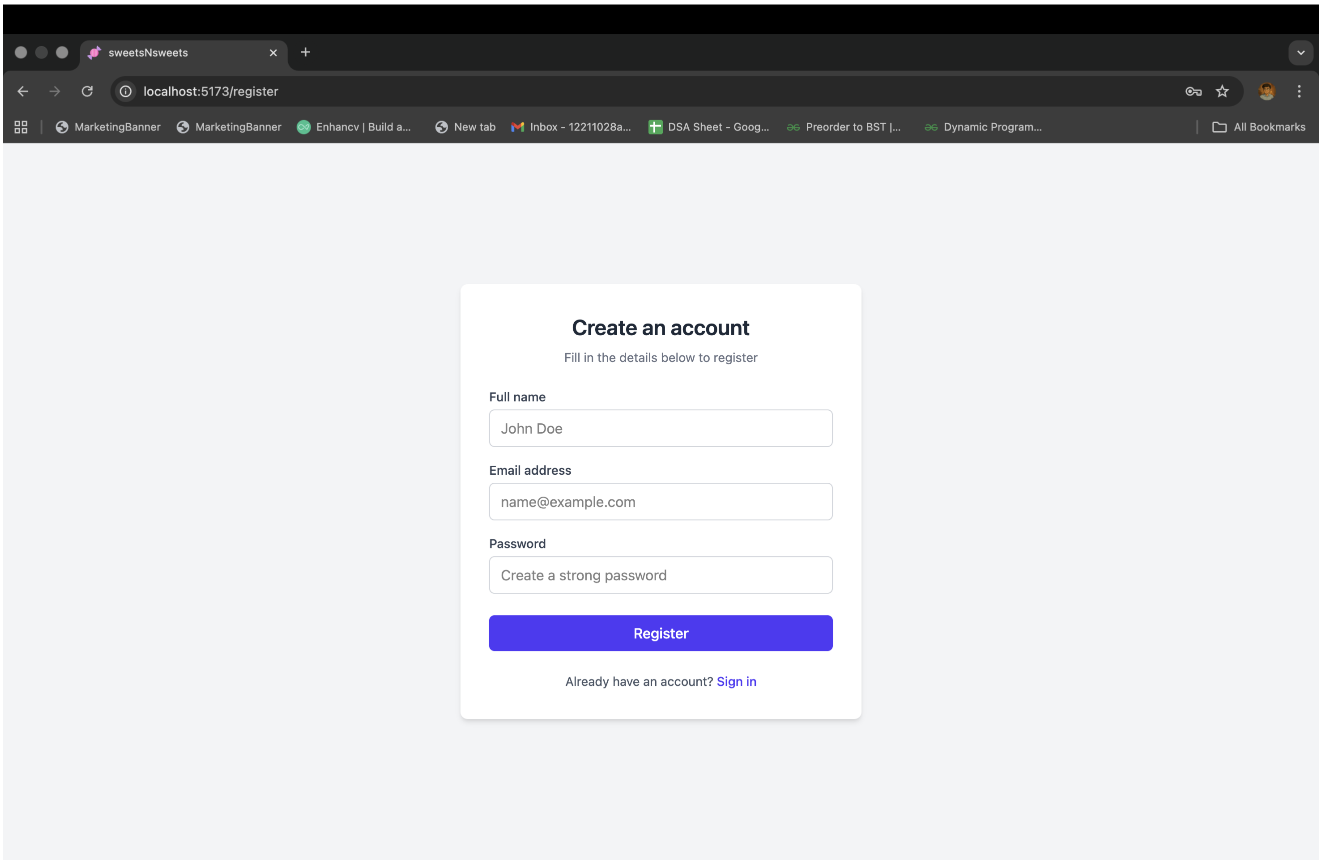
Password

•••••••••

Sign In

Don't have an account? Create one

📝 Register Page



Create an account

Fill in the details below to register

Full name

John Doe

Email address

name@example.com

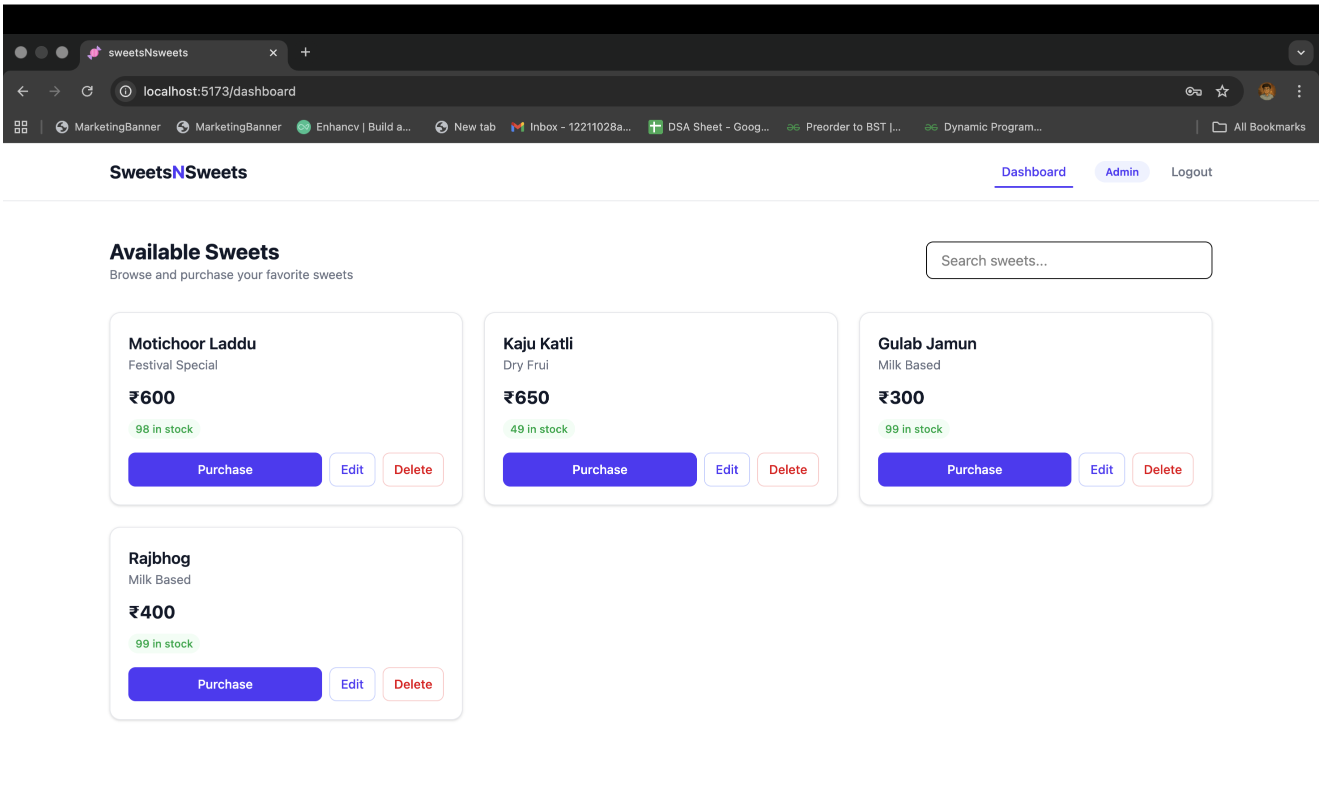
Password

Create a strong password

Register

Already have an account? Sign in

🏠 Dashboard (Admin View)



Available Sweets

Browse and purchase your favorite sweets

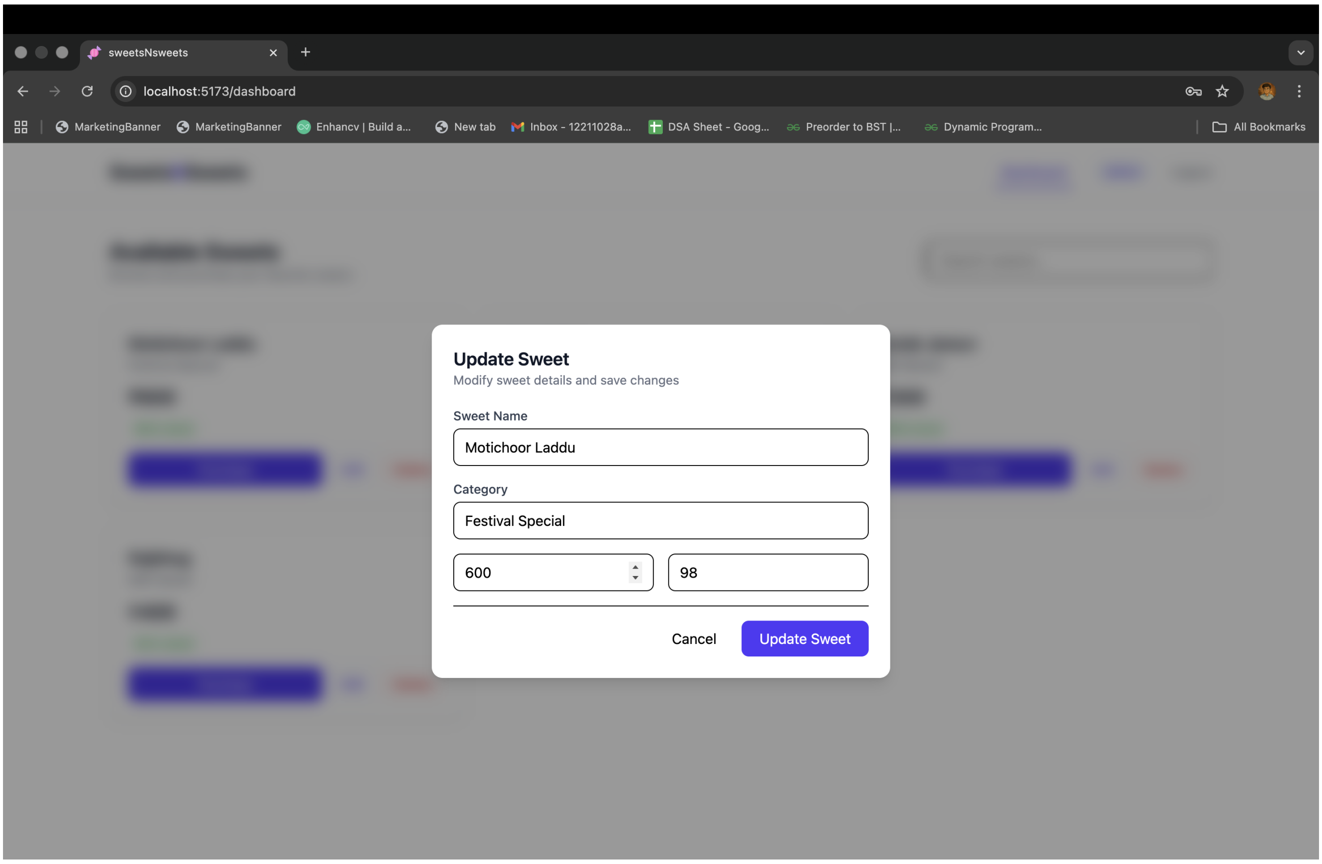
Motichoor Laddu
Festival Special
₹600
98 in stock

Kaju Katli
Dry Frui
₹650
49 in stock

Gulab Jamun
Milk Based
₹300
99 in stock

Rajbhog
Milk Based
₹400
99 in stock

✏️ Edit Sweet Modal



Update Sweet

Modify sweet details and save changes

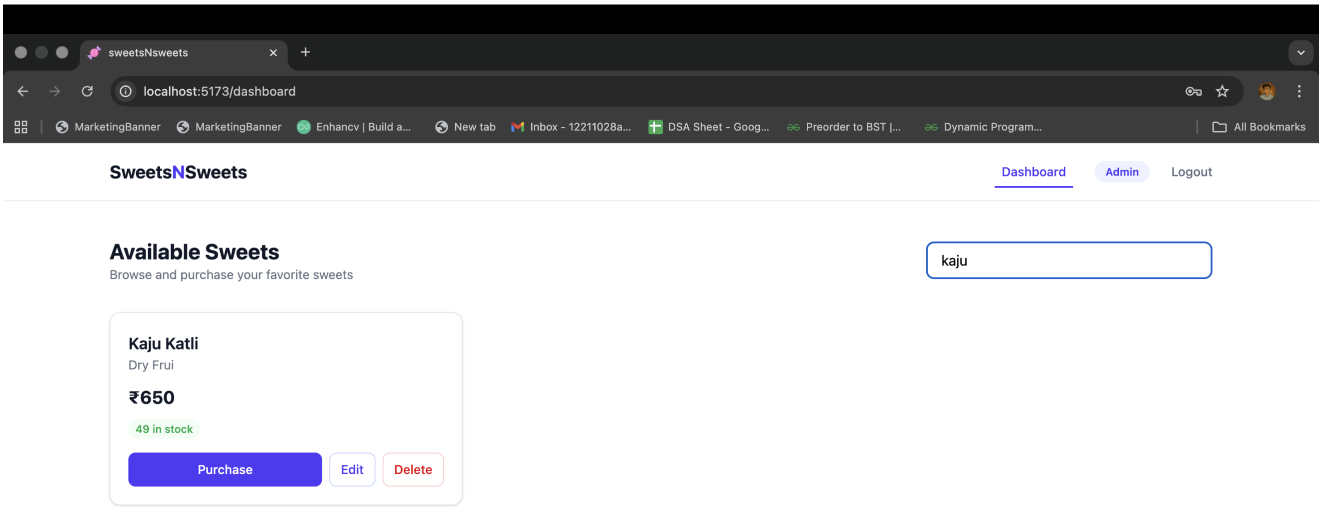
Sweet Name: Motichoor Laddu

Category: Festival Special

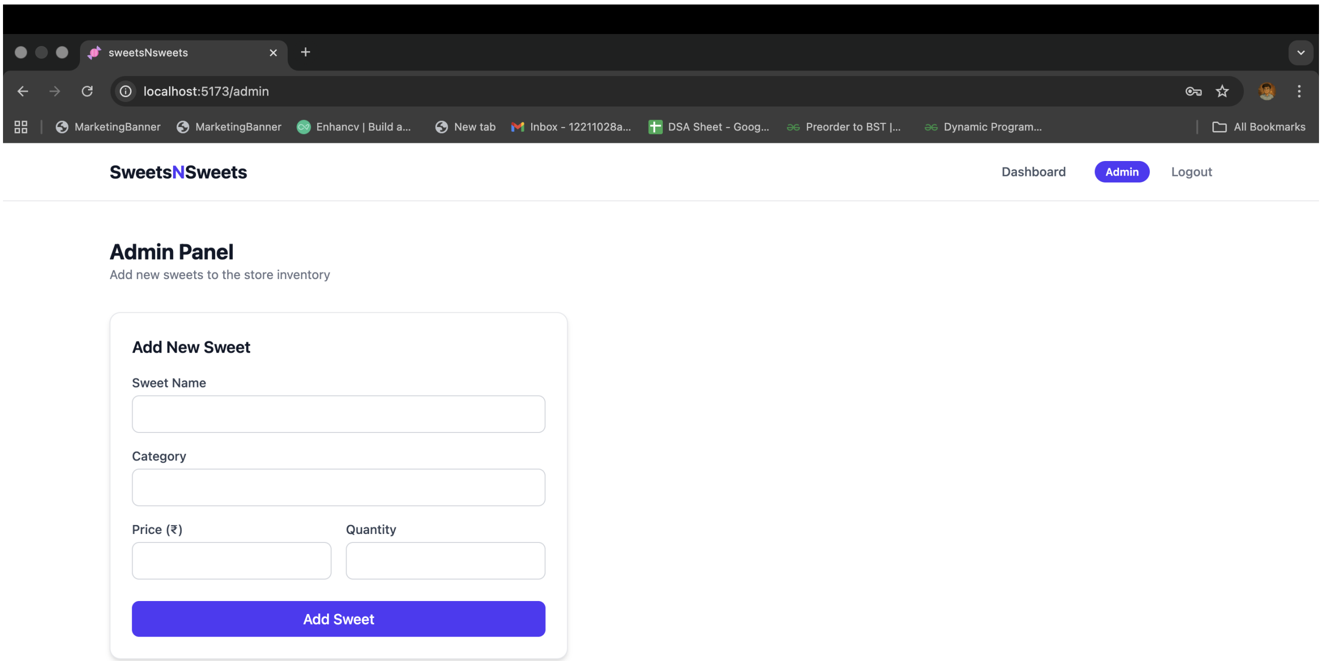
600

98

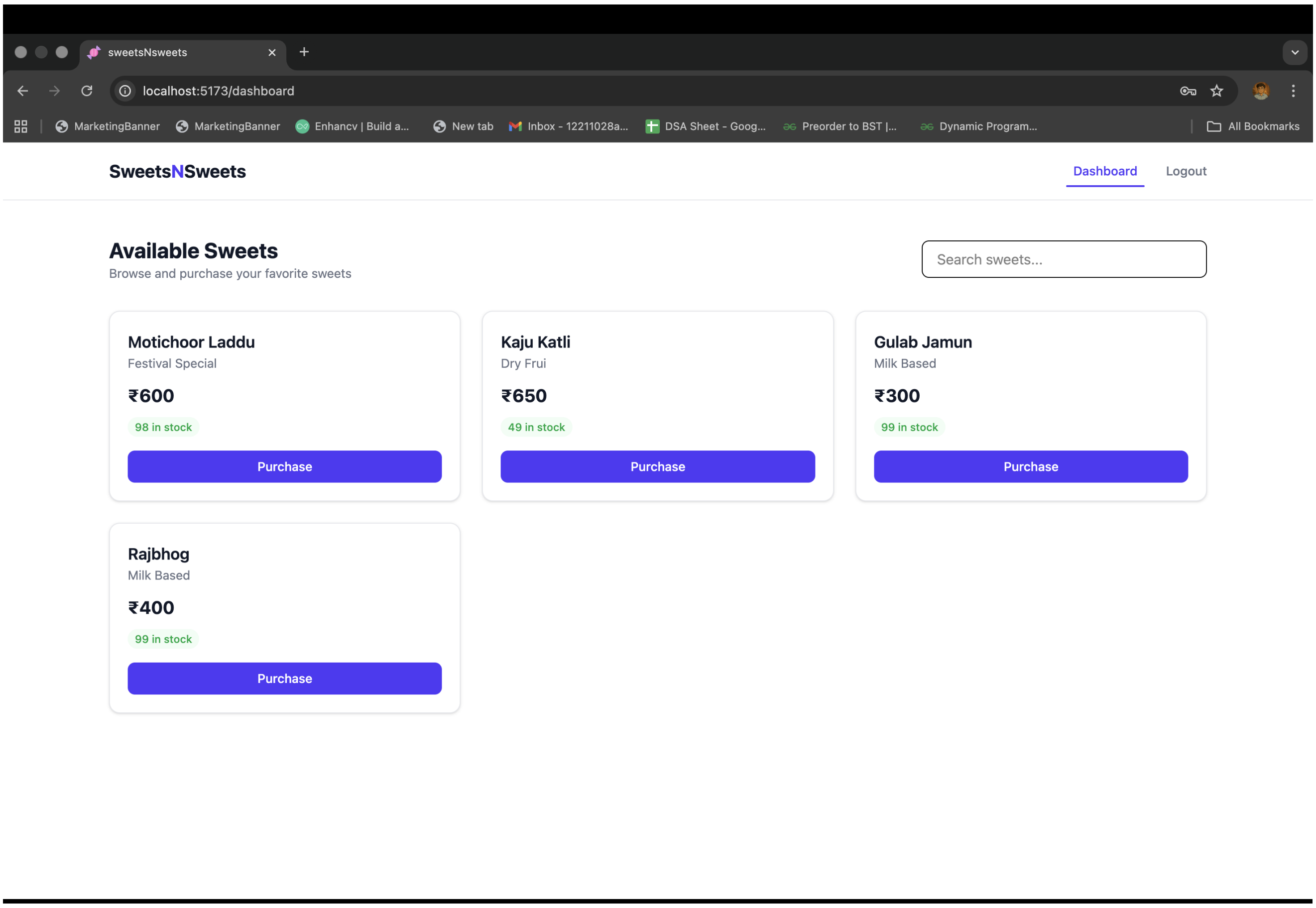
🔍 Search & Filter



➕ Add Sweet (Admin)



👤 Dashboard (User View)



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