ShopSphere - Angular Shopping App

WORKFLOW AND OVERVIEW

Introduction

- A web application that allows users to:

✔ View a list of products (**Shop Page**)
✔ Search for products
✔ Filter products by **price** and **color**
✔ View detailed product information
✔ Add products to the shopping cart
✔ View and manage items in the **Cart Page**
✔ Submit an **Enquiry** (Login required)

Technologies Used

✓ Angular
✓ TypeScript & Bootstrap
✓ Local Storage
✓ API Calls (JSON file / Backend API)

App Workflow

How does the app work?

1. User visits the **Shop Page** (/shop).
2. Search for products using the search bar.
3. Filter products by **price** and **color** using custom pipes.
4. Click **"View Details"** to see more info (/shop/:id).
5. Click **"Add to Cart"**, which stores the product in **localStorage**.
6. Visit **Cart Page** (/cart) to review selected products.
7. Visit **Enquiry Page** (/enquiry) → **Protected by AuthGuard**.
8. Click **"Login"** to access the **Enquiry Page**.

Angular Concepts - Components & Routing

Parent-Child Components

✓ **ShopComponent (Parent):** Displays all products.
✓ **ProductCardComponent (Child):** Displays individual product details.
✓ Uses **@Input**() to pass product data from parent to child.
✓ Uses **@Output**() to handle events (add to cart).

Routing & Parameters

✓ **Dynamic Routing (/shop/:id)** → Fetches product details using ActivatedRoute.
✓ **RouterLink Navigation** → Moves between pages.
✓ **Routing Guard (AuthGuard)** → Protects the **Enquiry Page** by redirecting unauthorized users to the **Login Page**.

Search & Filter Features (Custom Pipes)

✔ **Custom Pipes:** PriceFilterPipe, ColorFilterPipe
✔ PriceFilterPipe: Filters products based on the selected price range.
✔ ColorFilterPipe: Filters products by selected color.

Form Handling (Login & Enquiry Form)

✔ **Template-Driven Form** → Used for the **Login Form** input fields.

Thank You!