DAY 4 - BUILDING DYNAMIC FRONTEND COMPONENTS FOR YOUR MARKETPLACE

This document is prepared for the **CarrylT Marketplace Hackathon**, where a variety of components are utilized and functionalities are integrated to address key challenges, making the process smoother and empowering users to confidently engage with the platform.

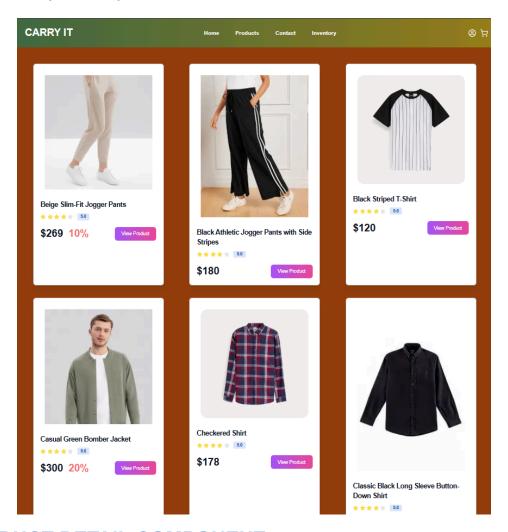
The document covers the following features:

- Product Listing: A comprehensive listing of products, designed to help users quickly browse through various categories. The product listing is dynamic and supports sorting, filtering, and pagination for an optimal browsing experience.
- Product Details: Each product has its dedicated page displaying essential information such as images, descriptions, specifications, prices, and user reviews to help users make informed purchasing decisions.
- Add to Cart Functionality: A seamless way for users to add products to their cart, update quantities, and view the cart summary. This functionality ensures that users can easily manage their selected items for checkout.
- Wishlist: Users can save their favorite items to a wishlist for future reference. This feature enhances the shopping experience by allowing users to come back to items they're interested in without needing to search again.
- Checkout Process: A simple, secure, and efficient checkout process that
 collects the necessary information from users (shipping address, payment
 details) to complete their purchase. This includes features like applying
 promo codes and selecting shipping options.
- **Filter Products on Display**: Advanced filtering options allow users to narrow down the displayed products based on categories, price ranges, colors, ratings, and other attributes. This enhances the user experience by making it easier to find the exact products they are looking for.

Lets Dive In:

PRODUCT LISTING COMPONENT:

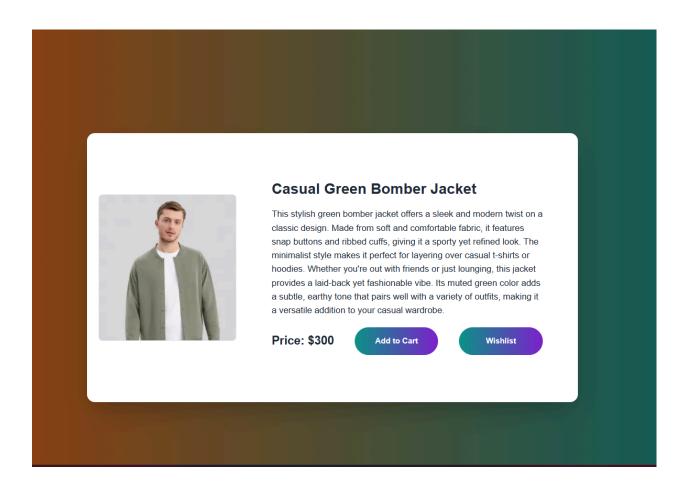
- In this component, Groq query played an important role in displaying the products on display.
- By mapping each of the item in the array, all the products can be displayed easily on the frontend



PRODUCT DETAIL COMPONENT:

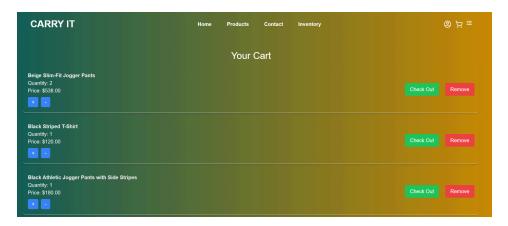
- The product detail component can be achieved be setting the slug
- A slug is typically a unique, human-readable identifier for a product, page, or resource in your system. It is often used in URLs for SEO-friendly links. Based on your description, slugs must be unique for each product and cannot have duplicates across your system.

 A product detailing page can be opened dynamically using slug with the best practices.



ADD TO CART FUNCTIONALITY:

- The Add to cart functionality offers the user to save a product to list or buy it with the checkout process .
- The products are added to the cart by the using usestate and useeffect for storing the products and re-rendering the change in the cart.
- The products are taken from local storage and converted into string by using a method of stringify to display on screen



WISHLIST FUNCTIONALITY:

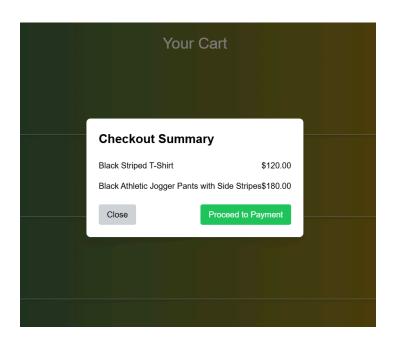
 Wishlist functionality is also added to let the users take the advantage of saving the product for adding it to cart later on.

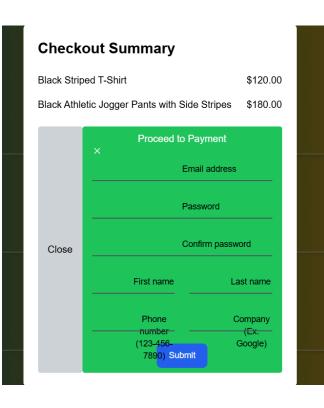


CHECK OUT PROCESS:

 The checkout process ensures that the customer is ready to buy the product.

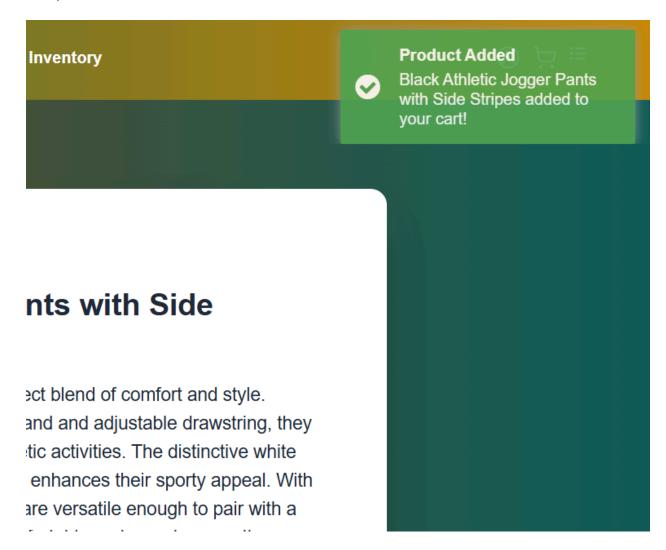
- When the customer fills out all the information for the order, the system processes the payment, confirms the order details, and generates a receipt or confirmation for the purchase.
- the customer may receive an email or text message with a summary of their order and tracking details after checkout process





NOTIFICATIONS COMPONENT:

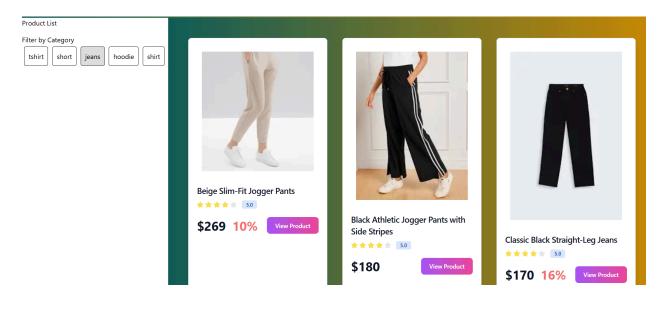
- The notifications functionality is added in the website to ensure the customers that the product has been added to the cart or wishlist successfully.
- The customer don't have to worry and continue their searching for the products.

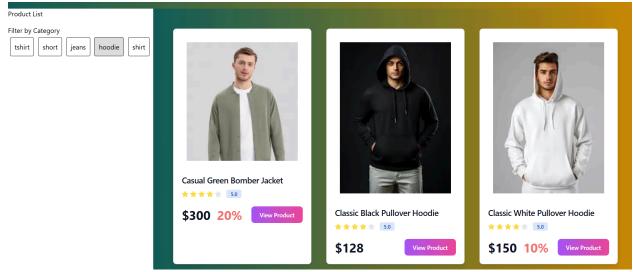


FILTER PRODUCTS FUNCTIONALITY:

• The Filter component is added to filter out the products based on their category .

- This functionality can create easy access to products without doing any extra searching.
- This functionality ensures that the website is user-friendly and easy to use.





Conclusion:

The different functionalities are added inside the website to create a better user experience and provide more access to locate products, ensure a smooth checkout process with complex filtering, personalized recommendations, and easy navigation. Additionally, features like a search bar, product sorting, category filters, wishlists, and secure payment

gateways are implemented to enhance convenience, allowing users to find exactly what they need quickly. Seamless integration of tracking systems, order status updates, and customer support ensures that users feel confident throughout their shopping journey, from browsing to checkout and delivery.