FurnitureMart.pk – Hackathon Project

FurnitureMart.pk is a dynamic Furniture marketplace. This repository contains the complete source code, reports, and documentation for the project. The platform enables users to browse furniture products, manage a cart, and perform seamless checkout operations.

Features

- Product Browsing: Responsive product listing with search, filtering, and pagination.
- **Product Details**: Detailed product information, including related products and social sharing.
- **Cart Management**: Add, remove, and persist cart items with toast notifications.
- Error Handling: Graceful fallback messages for API failures and empty states
- Performance Optimization: Optimized for fast loading on desktop and mobile devices.
- Responsive Design: Fully responsive across all screen sizes.

Day-Wise Summary

Day 1: Marketplace Planning

- Defined the purpose, business goals, and data schema for the marketplace.
- Focused on solving local challenges, such as lack of online presence for furniture sellers.
- **Outcome**: Clear plan for the marketplace's hybrid model (online + offline).

Day 2: Technical Foundation

- Created Sanity schemas for products, categories, users, orders, and reviews.
- Planned API endpoints for cart, payment, and shipment integrations.
- Outcome: Detailed system architecture and API design.

Day 3: Data Migration and API Integration

- Imported product and category data from external APIs into Sanity CMS.
- Created a migration script to import data from api to sanity.
- Outcome: Successfully populated Sanity CMS with data and integrated APIs.

Day 4: Dynamic Frontend Development

- Built reusable components: ProductCard, ProductDetail, Cart, Header, Footer, Toast, FilterPanel, SearchBar, Pagination, and RelatedProducts.
- Integrated dynamic data from Sanity CMS.
- Outcome: Interactive and responsive frontend for the marketplace.

Day 5: Testing and Performance Optimization

- Tested key features such as cart persistence, filters, pagination, and error handling.
- Optimized performance using GTmetrix, Lighthouse, and Google PageSpeed Insights.
- Outcome: Achieved high performance scores and verified functionality.

Day 6: Deployment Preparation

- Consolidated all code, documents, and reports into a single repository.
- Deployed the project to Vercel, ensuring a seamless staging environment.
- Outcome: Successfully deployed project with environment variables securely configured.

Tech Stack

- Frontend: Next.js, TypeScript, Tailwind CSS
- Backend: Sanity CMS
- APIs: Stripe (payment), ShipEngine (shipment tracking)
- **Deployment**: Vercel
- Testing: Cypress, Lighthouse, GTmetrix, Google PageSpeed

Performance Results

- **GTmetrix**: 100% Performance, 2.21s load time.
- Google PageSpeed: 96% Desktop, 91% Mobile.
- Lighthouse: SEO 100%, Accessibility 86%.