Marketplace Builder Hackathon 2025

<u> Day 4 : Building Dynamic Frontend Components</u>

On Day 4 of the Marketplace Builder Hackathon, the focus is on creating dynamic frontend components to enhance the user experience. This document provides the best practices and steps involved in building and managing dynamic components for a marketplace application.

<u>Tools & Technologies</u>

Framework: Next.js

• CSS Framework: Tailwind CSS

• API Management: Axios

• Dynamic Data Source: Sanity CMS

Key Concepts

1. Dynamic Components

Dynamic components are parts of a web application that adapt based on data or user interaction. They make the frontend responsive to real-time updates and external data sources.

2. Reusability

Reusable components reduce redundancy and improve maintainability. Proper state management and prop passing make components adaptable across the application.

3. Performance Optimization

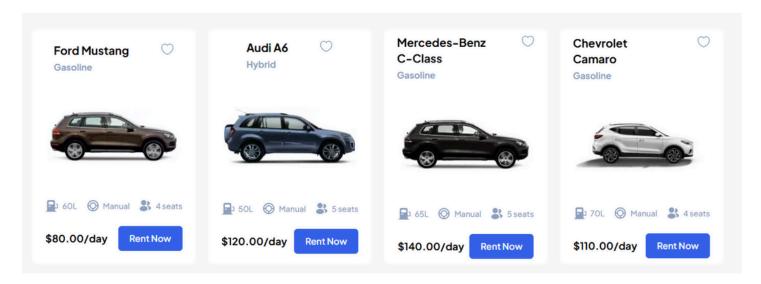
Efficient rendering strategies and avoiding unnecessary re-renders are crucial for maintaining smooth user experiences.

<u>Dynamic Components</u>

Car Listing:

In this component we created a dynamic component to display cars data including name,

type, fuel Capacity, Seats, Rent, and Transmission of cars.



<u>Components to make</u>

Wish List:

In this component we will add the favorite car of the user.

Search Bar:

In this component we will add a filtering function so user can filter out cars on basis of its name or category.

Car Detail Component:

In this component we will make a dynamic page using **Next JS Routing** to show car details dynamically.