# Day 4 - Building Dynamic Frontend Components for Your Marketplace

# Objective:

The goal of this task was to develop dynamic frontend components to display marketplace data fetched from Sanity CMS or APIs, ensuring a scalable, reusable, and responsive design.

#### **Project Implementation Details**

- 1. API Integration & Data Fetching
  - Successfully fetched product data from Sanity CMS using API.
  - Implemented server-side rendering (SSR) and client-side fetching where necessary.
- 2. Authentication System
  - Implemented user authentication for secure access.
  - Only registered users can view, add, and manage products.
- 3. Dynamic Product Listing Component
  - Created a grid-based layout to display products dynamically.
  - Each product includes:
    - olmage
    - o Name
    - o Price
    - o Description
- 4. Reusability & State Management

- Used modular components for scalability.
- Managed application state effectively to ensure smooth UI updates.

### 5. Responsive Design & UI/UX Improvements

- Fully mobile-friendly and responsive across all devices.
- Applied modern styling for an enhanced user experience.

#### 6. Sanity CMS Integration

- Integrated Sanity CMS as the backend for product management.
- Enabled dynamic content updates without modifying code.

# 7. Error Handling & Debugging

- Implemented proper error handling mechanisms for API requests.
- Logged errors efficiently for debugging and maintenance.