

# **DAY 3 - API INTEGRATION AND DATA MIGRATION**

## **Report on API Integration and Data Migration**

### **Overview:**

In this project, I successfully completed the API integration and data migration steps. The primary focus was on utilizing the `product.ts` schema, migrating the data, and importing it into the script to enhance the functionality of the project.

### **Steps Taken:**

#### **1. API Integration Techniques:**

I implemented API integration by connecting my application to external services, ensuring seamless data flow between the front end and the backend. This allowed me to retrieve product information dynamically, ensuring the product data was always up to date.

#### **2. Data Migration Best Practices:**

During the data migration phase, I followed best practices to ensure the integrity of the data. This involved carefully transferring data from legacy systems to the new headless CMS (Sanity), ensuring that all necessary relationships and structures were maintained.

#### **3. Schema Validation and Customization:**

I worked extensively with the `product.ts` schema, defining fields such as product name, price, description, and image URL. This allowed me to customize the schema to meet the specific needs of the project and ensure data consistency. I also validated the schema to prevent errors and ensure smooth data flow.

#### **4. Practical Skills for Building Scalable Marketplaces Using Headless CMS Systems like Sanity:**

By integrating API calls and migrating data effectively, I enhanced the scalability of the marketplace. Using Sanity as the headless CMS, I created a flexible content structure that could easily handle future product updates, ensuring the marketplace can grow without compromising performance.

## **Conclusion:**

This project has significantly improved my skills in API integration, data migration, schema validation, and the use of headless CMS systems like Sanity. These practical experiences are invaluable for building scalable marketplaces, and I now have a deeper understanding of how to manage product data effectively in dynamic, growth-oriented projects.