Day 3 - API Integration and Data Migration

Introduction

This document provides an overview of API integration and data migration strategies tailored to the EasyDrive car rental platform. This platform leverages Sanity-Next.js for backend capabilities and focuses on effective management and presentation of car rental data.

API Integration

1. Framework: Sanity-Next.js is utilized for seamless data fetching and management.

2. Key Endpoints:

   - /cars: Provides data for available car rentals.

   - /categories: Retrieves rental categories.

   - /availability: Checks the car's current rental status.

3. Techniques Used:

   - Client-side Fetching: Ensures responsiveness for user interactions.

   - Data Binding: Integration of car details into frontend components.

Data Migration

1. Source and Destination:

   - Source: Legacy car rental data.

   - Destination: Sanity.io for unified content management.

2. Migration Workflow:

   - Extract: Extract data from legacy CSV/SQL files.

   - Transform: Cleanse and transform data into a schema supported by Sanity.

   - Load: Push data using Sanity's API.

3. Challenges Addressed:

- Schema Validation Errors: Resolved through data type corrections.

- Dependency Mapping: Ensured relational data integrity between cars and availability.

Functional Testing of EasyDrive

1. Products Listing:

   - Display of rental items with images, descriptions, prices, and availability.

   - Test filtering/sorting (e.g., price range, category).

2. Booking Process:

   - Validate booking functionality with accurate data flow.

   - Test payment gateway integration.

Sanity-Next.js Overview

Sanity-Next.js enables flexible content management with real-time data queries.

Key Benefits:

   - Scalable architecture.

   - Strong developer tooling and integrations.

   - Streamlined workflows for integrating dynamic content.