

# Sanity API Documentation

## Overview

Sanity.io is a headless CMS that provides a powerful API for managing content. This documentation covers how to authenticate and interact with the Sanity API using an API token.

## Day 1 Overview: Market-Builder Hackathon 2025 - Laying the Foundation for Your Marketplace Journey

On the first day of the "Market-Builder Hackathon 2025," the foundational setup and planning phase was completed. The key activities included:

### 1. Project Planning & Requirements Gathering

- Defined the vision and scope of the marketplace project.
- Identified key features such as vendor management, product listings, user authentication, and payment integration.

### 2. Sanity CMS Setup

- Created a new Sanity.io project.
- Defined initial content schemas for marketplace products, vendors, and transactions.
- Generated an API token to enable content management securely.

### 3. Frontend & Backend Architecture

- Selected a tech stack (React.js for frontend, Node.js for backend).
- Planned API endpoints for fetching and managing marketplace listings.
- Set up initial folder structures and installed required dependencies.

## Day 2 Overview: Market-Builder Hackathon 2025 - Planning the Technical Foundation

On the second day of the "Market-Builder Hackathon 2025," the focus was on planning and establishing the technical foundation of the marketplace. Key activities included:

### 1. Defining the Database Schema

- Designed a scalable database schema to support marketplace transactions.
- Established relationships between users, vendors, and product listings.

### 2. API Design & Documentation

- Planned RESTful API endpoints for managing users, products, orders, and payments.
- Created API documentation to ensure seamless integration between frontend and backend teams.

### 3. Security & Authentication Planning

- Established best practices for securing user data and API requests.
- Implemented role-based access control (RBAC) to define permissions for admins, vendors, and customers.

### 4. Infrastructure & Deployment Strategy

- Chose cloud services and hosting solutions for deployment.
- Discussed CI/CD pipelines for automating code integration and deployment.

### 5. Frontend & Backend Synchronization

- Ensured smooth communication between frontend and backend by defining response formats.
- Set up initial API request handling in the frontend.

## Day 3 Overview: Market-Builder Hackathon 2025 - API Integration and Data Migration

On the third day of the "Market-Builder Hackathon 2025," the focus was on integrating APIs and migrating existing data into the new system. Key activities included:

#### 1. API Integration

- Connected the frontend with backend APIs to enable dynamic data interactions.
- Integrated third-party APIs for payment processing, authentication, and analytics.

#### 2. Data Migration Strategy

- Planned the migration of existing marketplace data to the new system.
- Developed scripts to transfer and validate data from legacy systems.

#### 3. Testing & Debugging

- Conducted API testing using tools like Postman to ensure proper functionality.
- Identified and fixed integration issues to ensure a seamless user experience.

#### 4. Performance Optimization

- Optimized API response times using caching and indexing techniques.
- Ensured efficient handling of large-scale data migrations.

## Day 4 Overview: Market-Builder Hackathon 2025 - Building Dynamic Components

On the fourth day of the "Market-Builder Hackathon 2025," the focus was on building several key components for the marketplace. If you are unsure how to implement dynamic functionality, consider breaking down the problem and following best practices for modular development. Key activities included:

#### 1. Developing Reusable UI Components

- Created modular and reusable components for product listings, search filters, and shopping carts.
- Used state management techniques to ensure smooth interactions.

## **2. Enhancing User Experience**

- Implemented real-time search and filtering functionality.
- Designed intuitive UI/UX for seamless navigation.

## **3. Handling Dynamic Data**

- Fetched and displayed dynamic content from the Sanity CMS.
- Ensured proper synchronization between backend data and frontend components.

## **4. Implementing Marketplace Features**

- Added vendor dashboards for product management.
- Integrated a secure checkout system with order tracking functionality.

## **5. Debugging & Performance Testing**

- Conducted unit and integration tests to validate component functionality.
- Optimized rendering and API calls to enhance performance.

# **Day 5 Overview: Market-Builder Hackathon 2025 - Testing, Error Handling, and Backend Integration Refinement**

On the fifth day of the "Market-Builder Hackathon 2025," the focus was on testing the entire system, improving error handling, and refining backend integrations. Key activities included:

## **1. Comprehensive Testing**

- Conducted unit, integration, and end-to-end tests to ensure application stability.
- Used automated testing tools such as Jest, Mocha, or Cypress.

## **2. Error Handling Implementation**

- Implemented proper error messages and logging mechanisms.
- Ensured user-friendly error notifications for better UX.

## **3. Backend Integration Refinement**

- Reviewed and optimized API endpoints for performance and security.
- Ensured seamless data flow between frontend, backend, and database.

## **4. Security Enhancements**

- Conducted penetration testing to identify vulnerabilities.
- Applied security best practices to protect user data and transactions.

## **5. Final Debugging & Performance Optimization**

- Fixed remaining bugs and performance bottlenecks.
- Ensured smooth deployment and scalability considerations.

# Day 6 Overview: Market-Builder Hackathon 2025 - Deployment Preparation and Staging Environment

On the sixth day of the "Market-Builder Hackathon 2025," the focus was on preparing for deployment, setting up the staging environment, and conducting final tests. Key activities included:

## 1. Deployment Strategy Planning

- Defined the deployment pipeline and release management strategy.
- Set up a versioning system for codebase updates.

## 2. Staging Environment Setup

- Created a replica of the production environment for final testing.
- Configured environment variables and database connections.

## 3. Final Testing Before Deployment

- Conducted comprehensive functional, security, and performance tests.
- Simulated high-traffic scenarios to validate system resilience.

## 4. Deploying the Marketplace

- Launched the application in the production environment.
- Verified database migrations and API endpoint stability.

## 5. Post-Deployment Monitoring & Optimization

- Set up logging and monitoring tools to track system health.
- Fixed any issues detected post-deployment to ensure smooth user experience.

This concludes the structured development, testing, and deployment phases of the "Market-Builder Hackathon 2025." The next steps will focus on launch strategy and post-launch monitoring.

To be continued this project in MARKET BUILDERS.