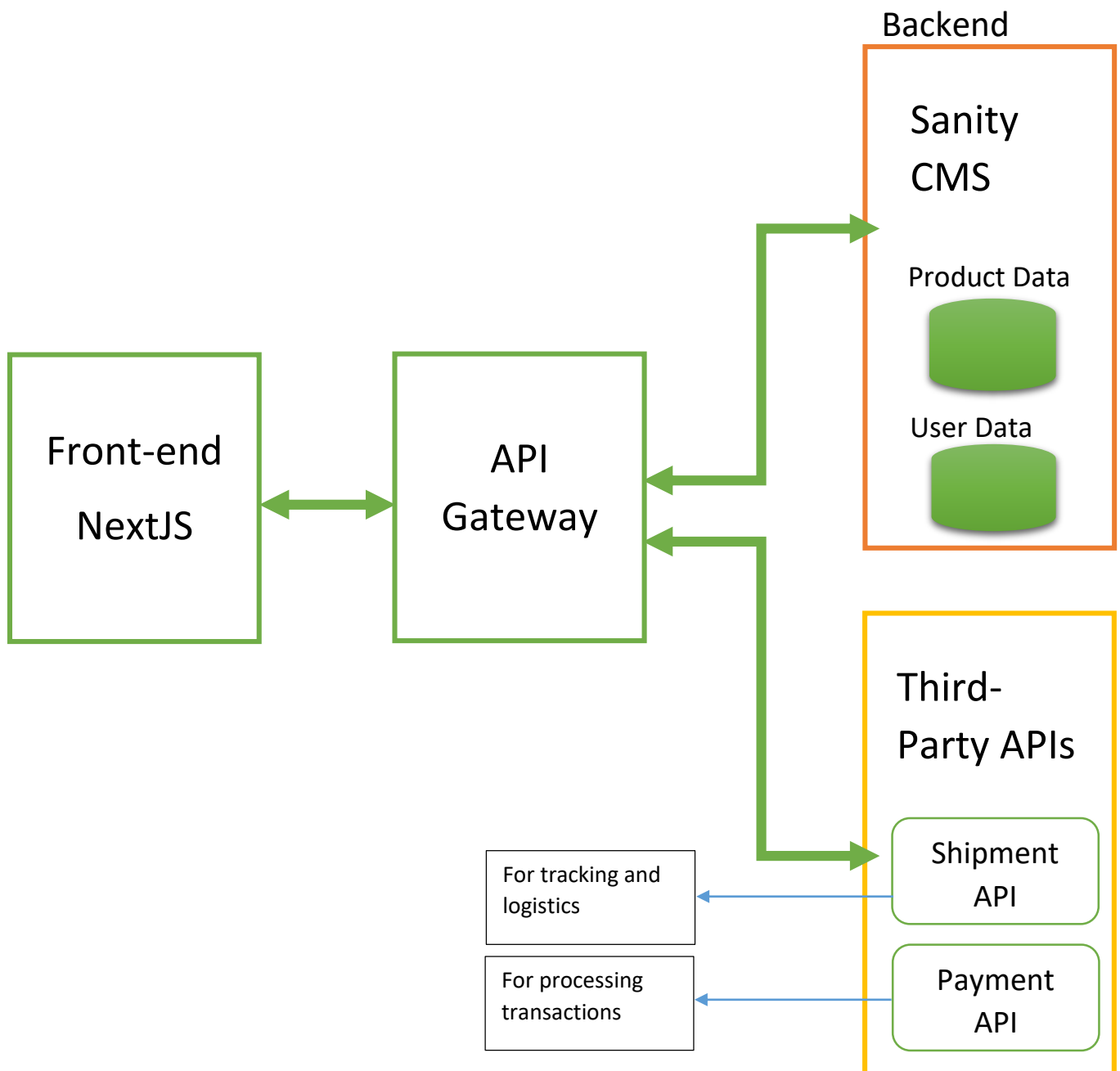


Table of Contents

Workflow Description:	3
Detailed Workflow	4

System Architecture



Workflow Description:

1. Frontend Interaction (Next.js):

- Users interact with the e-commerce platform via a user-friendly interface developed with **Next.js**.
- Main pages include:
 - **Products Page**: Displays the list of available products.
 - **Product Details Page**: Provides detailed information about a selected product.
 - **Sign-up/Login Page**: Allows users to create accounts or log in.

2. User Actions:

- **If User is Not Logged In**:
 - Can browse products and view product details.
 - Must log in or sign up to proceed to the checkout process.
- **If User is Logged In**:
 - Can:
 - Add products to the cart or wish list.
 - View and manage the **wish list**.
 - Access the cart page to review selected items.
 - Proceed to checkout for finalizing the purchase.

3. Checkout Process:

- **Payment Integration**:
 - The checkout process integrates with a **third-party payment API** to handle secure transactions.
- **Shipment Integration**:
 - Shipment details and logistics are managed via a **third-party shipment API**.

4. Content Management with Sanity CMS:

- The website content, including product information and other data, is dynamically managed using **Sanity CMS**.
- This ensures seamless updates to the front-end without requiring additional development.

5. Post-Checkout Workflow:

- On successful checkout:
 - Users receive confirmation of their purchase.
 - Order details are processed and managed via the **third-party APIs** and stored in the system for future reference.

Detailed Workflow

1. User Registration Workflow:

- **Step 1:** User accesses the **Sign-up/Login Page** and provides necessary details (e.g., name, email, and password).
 - **Step 2:** User data is sent to the backend and securely stored in **Sanity CMS**.
 - **Step 3:** A confirmation email or notification is sent to the user upon successful registration.
 - **Step 4:** The user is logged in and redirected to the homepage or their profile page.
-

2. Product Browsing Workflow:

- **Step 1:** User visits the **Products Page** and selects a category or browses the available products.
 - **Step 2:** The **Sanity API** fetches product data based on user interactions (e.g., filtering, sorting).
 - **Step 3:** The fetched product data is dynamically displayed on the front-end, including images, prices, descriptions, and availability.
 - **Step 4:** Users can click on a product to view its **Product Details Page**, with additional details and a button to add to the cart.
-

3. Order Placement Workflow:

- **Step 1:** User selects products and clicks the **Add to Cart** button.
 - **Step 2:** The selected items are stored temporarily in a cart (either in the frontend state or backend).
 - **Step 3:** User proceeds to the **Cart Page**, reviews the selected items, and clicks the **Checkout** button.
 - **Step 4:** At checkout:
 - User provides delivery and payment details.
 - Payment is processed via a **third-party payment API**.
 - **Step 5:** Upon successful payment:
 - Order details are saved in **Sanity CMS** (including order ID, product IDs, user info, and status).
 - A confirmation message is sent to the user.
-

4. Wish List Workflow:

- **Step 1:** User clicks the **Add to Wish List** button on the Product Details Page or Products Page.
- **Step 2:** If the user is not logged in, they are prompted to log in or sign up.
- **Step 3:** For logged-in users, the product is added to their wish list (data stored in Sanity CMS linked to the user account).
- **Step 4:** The Wish List Page dynamically fetches and displays the user's wish list items via the Sanity API.

- **Step 5:** Users can:
 - Remove items from the wish list.
 - Add wish list items directly to the cart for purchase.

5. Shipment Tracking Workflow:

- **Step 1:** After the order is placed, the shipment process begins via a **third-party shipment API**.
- **Step 2:** Order status updates (e.g., shipped, in transit, delivered) are periodically fetched from the shipment API.
- **Step 3:** Users can view the **Order Status** on their profile or order history page.
- **Step 4:** Shipment details, such as tracking number and estimated delivery date, are displayed dynamically to the user.

