

Hackathon 3

API INTEGRATION & DATA MIGRATION

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API Integration & Data Migration for Clothing Website

API Integration:

To ensure seamless functionality, I will integrate multiple APIs to connect the frontend, backend, and third-party services. Here's how the integration will work:

1. User Authentication API:

- Allows users to sign up, log in, and manage accounts securely.
- Token-based authentication (JWT) ensures secure user sessions.

2. Sanity CMS API:

- Fetches product data, categories, and other dynamic content for display on the frontend.
- Enables content management, such as adding or updating products, via the backend.

3. Cart and Order Management API:

- Handles cart actions like adding/removing items and calculating totals.
- Processes orders by sending order details, user information, and payment data to the backend.

4. Payment Gateway API (e.g., Stripe):

- Processes payments securely during checkout.
- Sends payment confirmation and updates order status on successful transactions.

1. **Shipment Tracking API:**

- Tracks order shipping status in real time and displays updates to users.
- Integrates with courier services for precise delivery zone management.

Data Migration:

To set up a reliable and scalable backend, data migration from existing sources or files to Sanity CMS will be performed.

1. **Preparation:**

- Structure product, user, and order data in CSV/JSON format for compatibility with Sanity CMS.
- Define schemas in Sanity for products (name, price, stock, etc.), users (profile, address, etc.), and orders (items, total cost, status).

2. **Migration Process:**

- Use the Sanity CLI or custom scripts to upload the prepared data.
- Validate the imported data to ensure consistency and accuracy.

3. **Testing:**

- Test the migrated data by fetching it via the Sanity API in the frontend.
- Verify that all relationships (e.g., product-category, user-orders) work as intended.

4. **Ongoing Synchronization:**

- Set up webhooks to keep the Sanity database updated whenever new products, users, or orders are added.

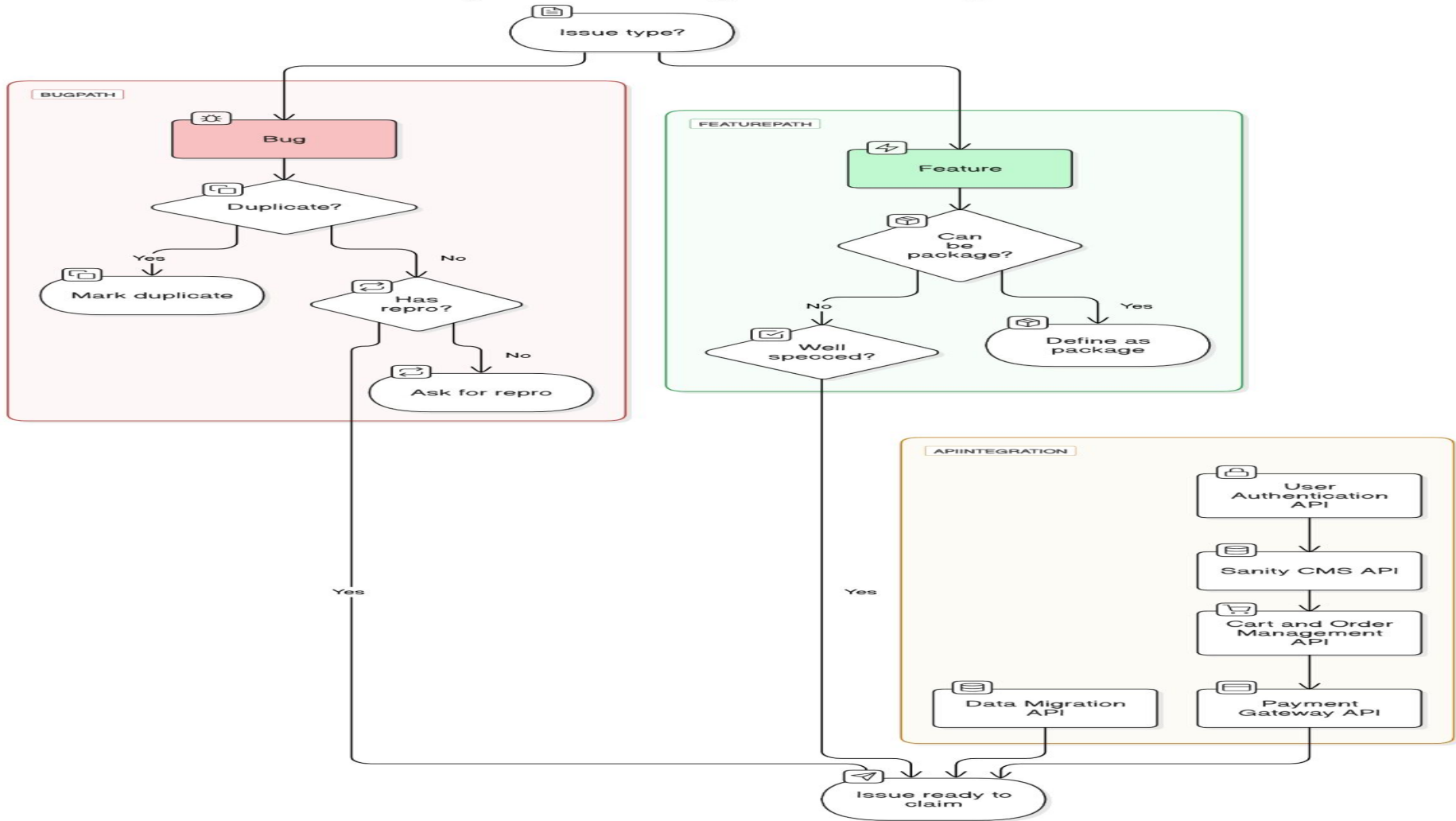
By combining robust API integration with efficient data migration, the clothing website will offer dynamic functionality and ensure a smooth user experience across all operations.

```
import { createClient } from '@sanity/client';
```

```
const client = createClient({  
  projectId: '48lw4pwe',  
  dataset: 'production',  
  useCdn: true,  
  apiVersion: '2025-01-13',  
  token: 'skw7s0MKrd8sFxrwpfjqygcKJkt7310hQYDzPrCAdtNS0ohMaQaYuoM06m58xoqyKBaEAGjR8BIhjgZoPBxjHp43h8TvFn4F6t4tDR3YgAfZzoRZZsFkSHBqWzbj7C0W2hspd3  
});
```

```
async function uploadImageToSanity(imageUrl) {  
  try {  
    console.log(`Uploading image: ${imageUrl}`);  
  
    const response = await fetch(imageUrl);  
    if (!response.ok) {  
      throw new Error(`Failed to fetch image: ${imageUrl}`);  
    }  
  
    const buffer = await response.arrayBuffer();  
    const bufferImage = Buffer.from(buffer);  
  
    const asset = await client.assets.upload('image', bufferImage, {  
      filename: imageUrl.split('/').pop(),  
    });  
  
    console.log(`Image uploaded successfully: ${asset._id}`);  
    return asset._id;  
  } catch (error) {  
    console.error('Failed to upload image:', imageUrl, error);  
    return null;  
  }  
}
```

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T-shirts >

Shorts >

Shirts >

Hoodie >

Jeans >

Price



Colors



Size



Gradient Graphic T-shirt

★★★★☆ 3.5/5

\$145



Polo with Tipping Details

★★★★★ 4.5/5

\$180



Black Striped T-shirt

★★★★★ 5.0/5

\$105 ~~\$150~~ -30%

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Content

[Products](#)

Products



Classic Polo Shirt



Black Athletic Jogger Pants with Side S...



Skinny Fit Jeans



Beige Slim-Fit Jogger Pants



Black Striped T-Shirt



Checked Shirt



LOOSE FIT BERMUDA SHORTS



Vertical Striped Shirt



Sleeve Stripe T-Shirt



COURAGE GRAPHIC T-SHIRT



Gray Slim-Fit Jogger Pants

Checked Shirt

for casual outings, weekends, or layering over a t-shirt. Its versatile design ensures it pairs well with jeans or chinos, making it a wardrobe essential for any season.

Image



Category

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