

Home Haven - Technical Documentation

1. Project Overview

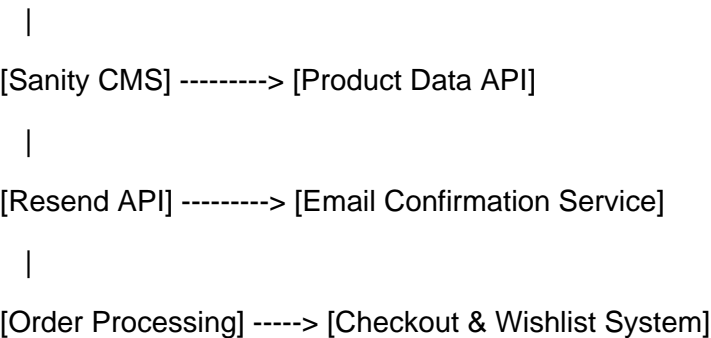
Home Haven is an eCommerce website designed to provide a seamless shopping experience. Built with modern technologies, it ensures high performance, scalability, and user-friendly navigation.

Technology Stack:

- Frontend: Next.js 14, TypeScript, Tailwind CSS
- Backend: Sanity CMS
- Payment Method: Cash on Delivery (COD)
- Email Service: Resend API (for order confirmation emails)

2. System Architecture

[Frontend (Next.js 14)]



Workflow:

1. Users browse products fetched from Sanity CMS.
2. Users add products to Wishlist or Cart.
3. Upon checkout, order details are stored in Sanity CMS.
4. Resend API sends a confirmation email after order placement.
5. Users receive a success notification on order completion.

3. API Endpoints

Products API

- Endpoint: /api/products
- Method: GET
- Description: Fetch all available products from Sanity CMS.
- Response Example:

```
{  
  "id": 1,  
  "name": "Product A",  
  "price": 100,  
  "stock": 50  
}
```

Orders API

- Endpoint: /api/orders
- Method: POST
- Description: Save user order in Sanity CMS and trigger Resend API.
- Payload Example:

```
{  
  "userId": 123,  
  "products": [{ "id": 1, "quantity": 2 }],  
  "totalPrice": 200  
}
```

- Response Example:

```
{  
  "orderId": 567,  
  "status": "Success",  
  "emailSent": true  
}
```

Wishlist API

- Endpoint: /api/wishlist
- Method: POST
- Description: Save user wishlist items.
- Payload Example:

```
{
```

```
"userId": 123,  
"productId": 1  
}  
- Response: { "status": "Added to Wishlist" }
```

4. Email Confirmation (Resend API Integration)

Triggering Email on Order Placement:

```
import { Resend } from 'resend';  
  
const resend = new Resend(process.env.RESEND_API_KEY);  
  
export async function sendOrderConfirmation(email, orderId) {  
  await resend.emails.send({  
    from: 'support@homehaven.com',  
    to: email,  
    subject: 'Order Confirmation',  
    html: `

Thank you for your order! Your order ID is ${orderId}.

`  
  });  
}
```

5. Key Features

- Dynamic Product Fetching: Sanity CMS ensures real-time product updates.
- Cart & Wishlist System: Users can add, remove, and manage items.
- Order Processing: Checkout system integrated with order management.
- Email Notifications: Automatic confirmation emails via Resend API.
- Scalability: Optimized for future features like payment gateways.

6. Future Enhancements

- Implementing online payment methods.
- Adding user authentication (NextAuth.js).
- Improving UI with animations and enhanced interactivity.

7. Conclusion

Home Haven is built with Next.js 14, TypeScript, Tailwind CSS, and Sanity CMS, ensuring a modern and scalable eCommerce solution. This documentation serves as a technical reference for development, maintenance, and future feature expansions.