

System Architecture Overview:

Components:-

The marketplace system consist of:

Frontend: The user interface for browsing products and placing orders.

Backend (Sonity CMS): Manages products data, user order details, and customer info.

Third-Party API: For payment (e.g. Stripe) and shipment tracking (e.g. UPS)

Dataflow:-

- Frontend fetches product data from sonity cms.
- After order, frontend communicates with payment API (stripe) and shipment API (UPS).

Key Workflows:

User Browses Products:

- Fetches and displays product data from ~~cms~~ Sonity CMS

User Adds Products to cart:-

- Stores cart data temporarily.

User Proceeds to checkout:-

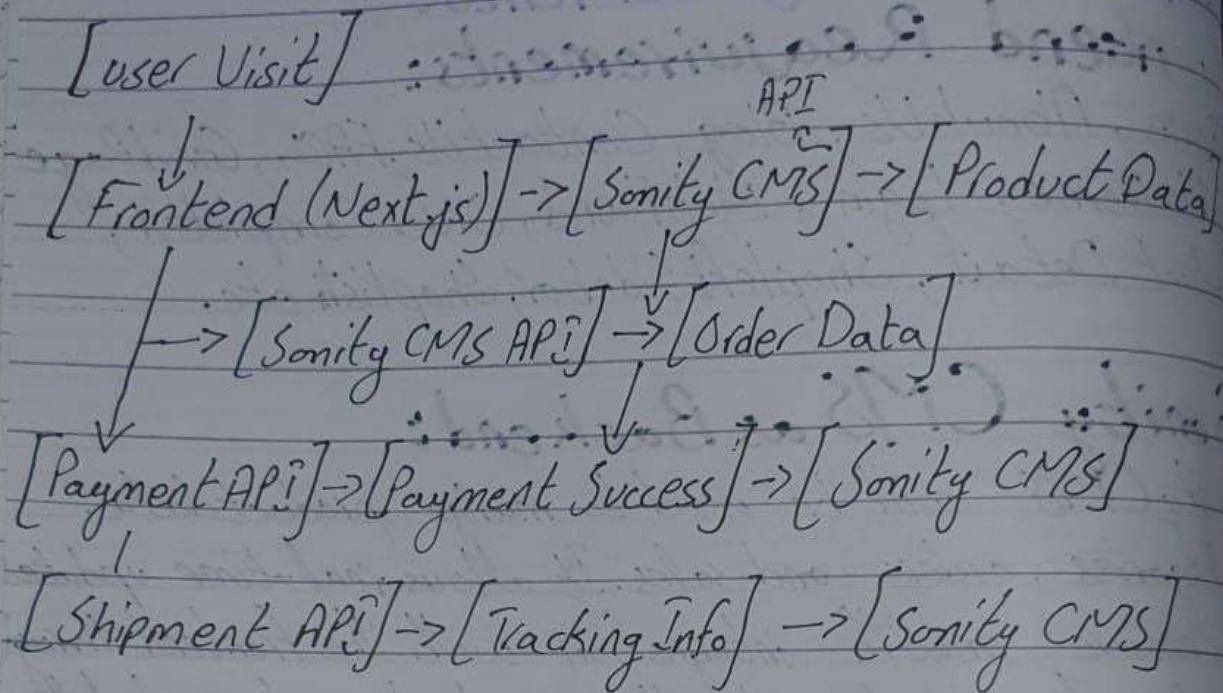
- Sends shipping / payment detail to sonity CMS and payment Api

Sanity Schema Example:-

Product Schema:

```
export const product = {  
  name: "product",  
  type: "document",  
  fields: [  
    { name: "name", type: "string", title: "Product Name",  
      },  
    { name: "price", type: "number", title: "Price",  
      },  
    { name: "stock", type: "number", title: "Stock level",  
      },  
    { name: "category", type: "string", title: "Category",  
      },  
    { name: "description", type: "text", title: "Description",  
      },  
    { name: "image", type: "image", title: "Product image",  
      },  
  ],  
};
```


Design System Architecture:



Plan API Requirements:

Endpoint	Method	Purpose
- /products	GET	Fetch all products
- /orders	POST	Create a new order
- /shipment	GET	Track order status
- /payment	POST	Process payment
- /categories	GET	Fetch all product categories

Technical Requirements:

Frontend Requirements:

- Home, About Us, Blog, Contact Us, FAQs, Grid Page
- HektoDemo, Login, Not Found, Order Completed, Product Detail, Shop left Sidebar, Shop list etc.

Sanity CMS as Backend:

- Sanity CMS will be used to manage product data, categories, orders and sales. It allows real-time updates and ensure smooth integration with the frontend through its API. This makes handling content and marketplace workflows more efficient.

Third-Party APIs:

API Names	Purposes	Endpoints
- Payment Gateway API	Payment Processing	/payments/check-out
- Shipment Tracking API	Real-time shipment tracking	/shipment/{orderID}
- Inventory API	Sync stock levels and product details	/inventory/{productID}
- Email API	Send order and shipping notifications	/notifications/email
- Tax API	Calculate taxes based on location	/taxs/calculate/{amount}