



E-COMMERCE FURNITURE

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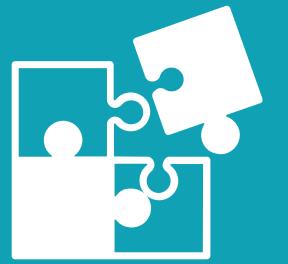
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Thank You



PLATFORM OVERVIEW



PURPOSE

To create an intuitive online marketplace for buying furniture.

TARGET AUDIENCE:

- Homeowners
- Office decorators
- Interior designers



UNIQUE SELLING POINTS:

- High-quality furniture options.
- Customizable designs.
- Affordable pricing.



KEY FEATURES

01

Product Browsing:

- Advanced filtering and sorting options.
- High-resolution product images with 360° views.

02

User Authentication:

- Secure sign-up/login process.
- Role-based user management.

03

Shopping Cart:

- Persistent cart storage.

04

Order Management:

- End-to-end order tracking.
- Notifications for order status.

05

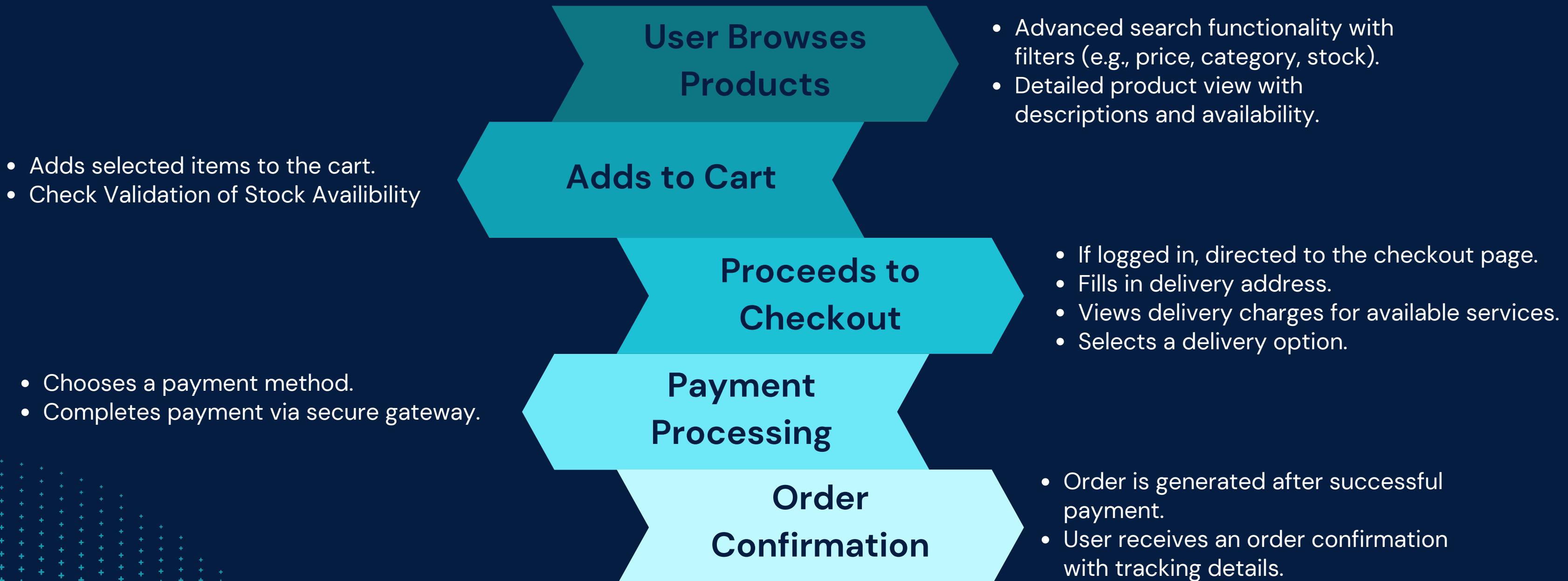
Secure Payments

- Multiple payment gateways.
- PCI-DSS compliance.



PLATFORM WORKFLOW

- USER JOURNEY -



API ENDPOINTS

PRODUCT APIs:

- **GET /api/products**
 - Fetches all products with filters.
- **GET /api/products/:id**
 - Retrieves details of a single product.

CART API:

- **PUT /api/cart/validate-stock**
 - Validates stock availability for all items in the cart before checkout.

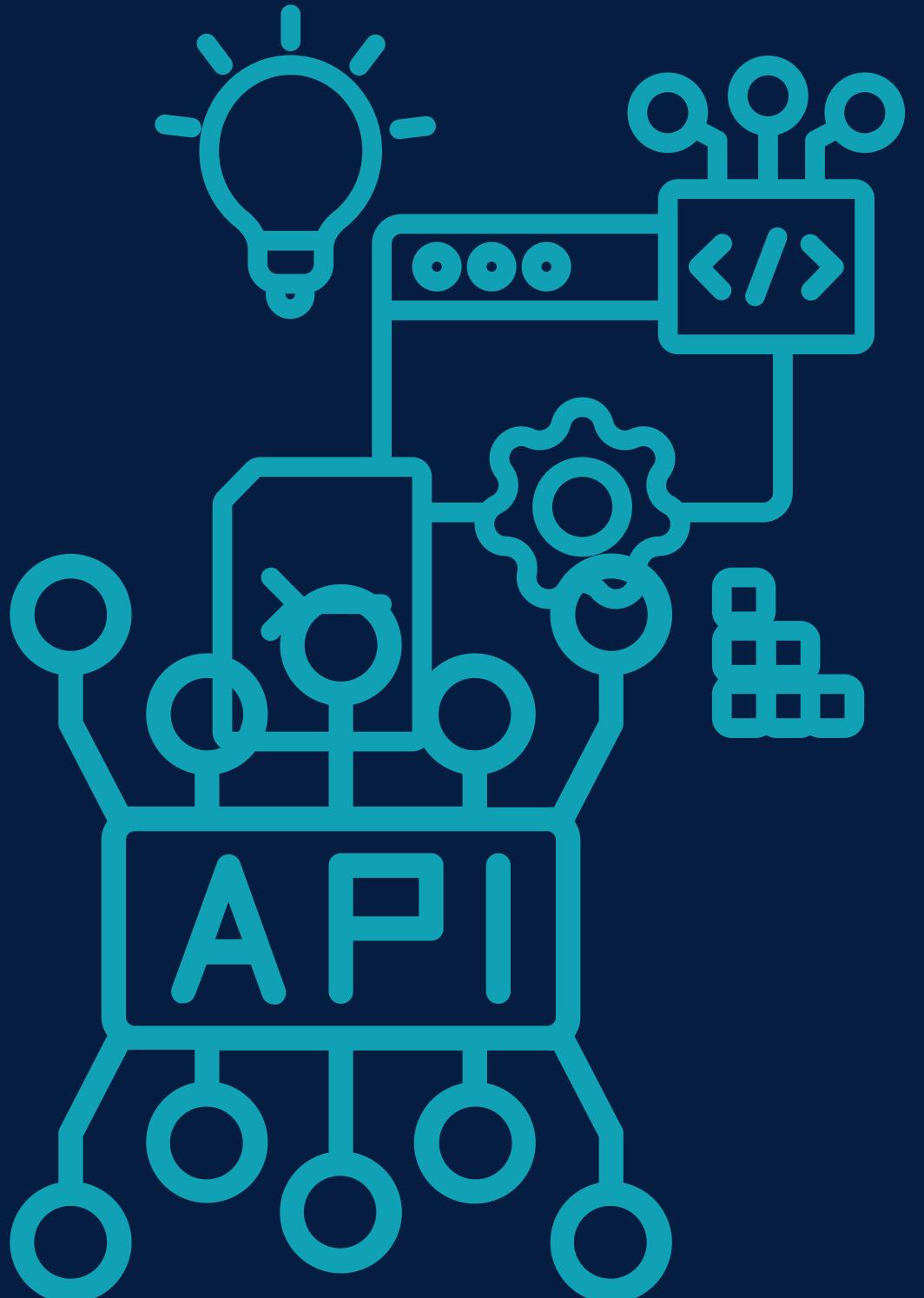
SHIPMENT AND PAYMENT APIs:

- **POST /api/shipment/calculate**
 - Calculates delivery charges based on the address and service selected.
- **POST /api/payment/process**
 - Processes payment securely and confirms the transaction.

ORDER API:

- **POST /api/orders**
 - Generates a new order after payment is confirmed.
 - Includes delivery details, selected service, and payment status.

- **GET /api/orders**
 - Get all order of the login user for history



ORDER GENERATION FLOW

- **Delivery Address Entry:**
 - User fills in the delivery address on the checkout page (Address only first time).
- **Delivery Charges Calculation:**
 - User clicks "Check" to view delivery charges for different services.
 - Charges are displayed based on the selected service (e.g., standard, express).
- **Service Selection:**
 - User selects a preferred delivery option.
- **Payment Completion:**
 - User completes payment securely via an integrated payment gateway.
- **Order Generation:**
 - After payment, the order is generated and saved in the database.
 - User receives a confirmation email with order and tracking details. (Coming Soon)

SYSTEM ARCHITECTURE

- **Frontend:**

- Platform:**

- Developed using **Next.js** for a responsive, dynamic, and mobile-friendly experience.

- Features:**

- User-friendly UI for seamless product browsing and interaction.
 - Integrated checkout flow with real-time validation.

- **Backend:**

- System:**

- Powered by **Sanity CMS**, enabling efficient content and data management.

- Responsibilities:**

- Product and user information management.
 - Order handling and role-based access control.

- Endpoints:**

- APIs for cart validation, order processing, shipment calculation, and payment processing.

SYSTEM ARCHITECTURE

- **Database:**

- **Platform:**

- **Sanity CMS** serves as both the content store and backend.

- Data Handled:**

- User details, product information, order histories, and delivery charges.

- **Third-Party Services:**

- ShipEngine API:**

- For shipment tracking and delivery logistics.

- Payment Gateway APIs (e.g., Stripe/PayPal):**

- Secure and PCI-compliant payment processing.

- **Third-Party Services:**

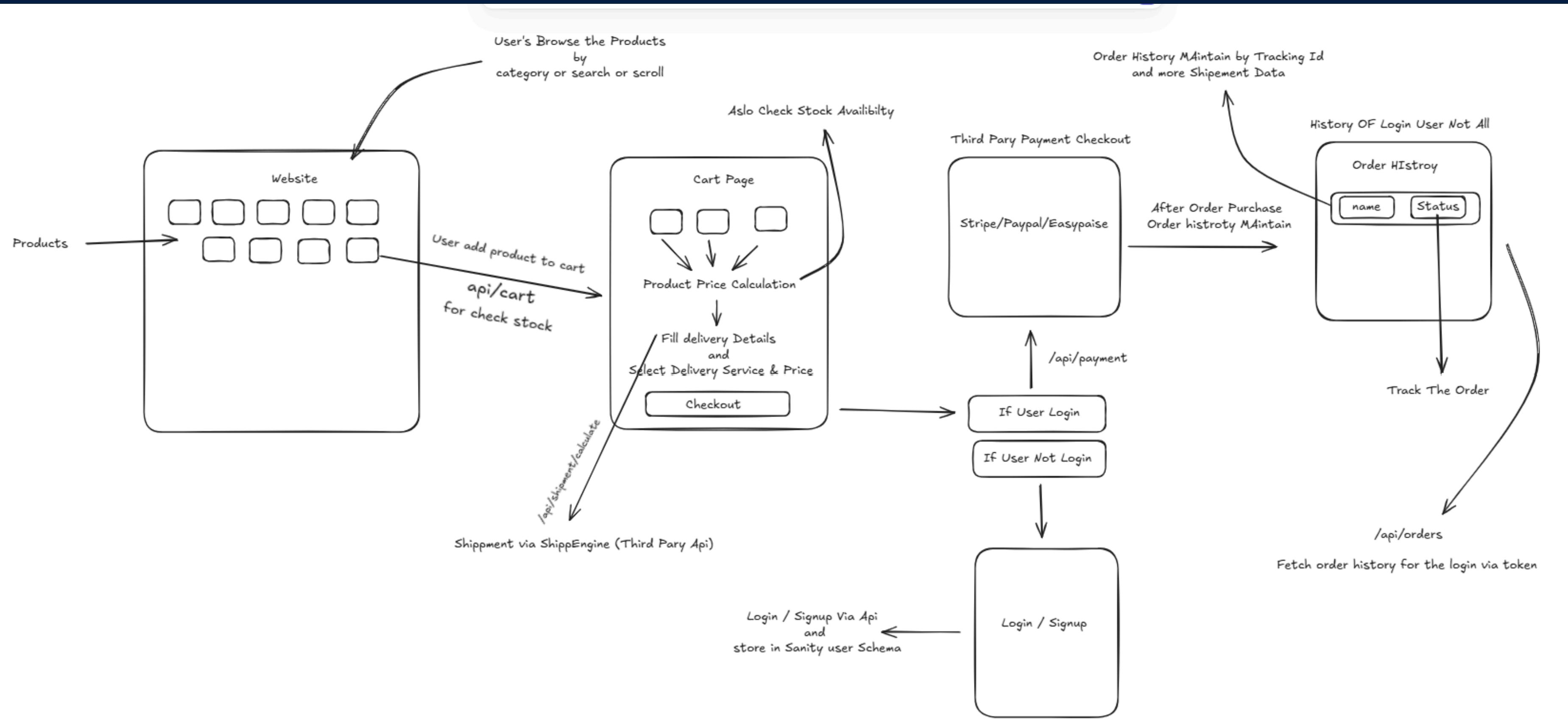
- Frontend:**

- Hosted on Vercel for quick deployment and scalability.

- Backend:**

- Managed via Sanity Studio for schema-driven content and real-time updates.

SYSTEM ARCHITECTURE DIAGRAM



DATABASE SCHEMA OVERVIEW

- **User Schema:**
 - **Fields:** name, email, password, address.
- **Product Schema:**
 - **Fields:** name, price, original price, stock (size + quantity), image, category, tag, description.
- **Order Schema:**
 - **Fields:** user ID, product details, payment status, shipping status, createdAt.
- **Cart Schema:**
 - **Fields:** user ID, product ID, quantity.
- **Shipping Schema : (for Shipping)**
 - **Fields:** user ID, weight , dimensions.





GOALS AND NEXT STEPS

Goals

- Launch a scalable e-commerce platform.
- Ensure seamless user experience and secure transactions.

Next Steps

- Integrate advanced analytics for customer insights.
- Optimize performance for faster load times.
- Expand third-party integrations (e.g., logistics).



Thank's For Watching

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