# API Requirments

| EndPoint | Method | PurPose | Response Example |
|---|---|---|---|
| /Product | GET | Fetch all product | {"id":1, "name", "Product A", "Price" :99} |
| /Order | POST | Create a New Order | {"order ID": 123", "Status", "Success"} |
| /Shipment | GET | Fetch order Shipment Status | {"order ID": 123", "Status", in Transit"} |

# Home Page

- user Lands on the Homepage
- Displays featured categories , popular products and a search bar.

# Product Browsing

- user select a category or uses the search Bar.
- Products are displayed with Options to filter by price , brand , or ratings.

# Product details

- user clicks on a product to view its details.
- Page include s product description, price ,availability and user reviews.

# Add to Cart

- users adds the product to the cart.
- Cart updates dynamically with quantity and price.

# Check Out

- user proceeds to the checkout page.
- Provides shipping address and selects a delivery Option.
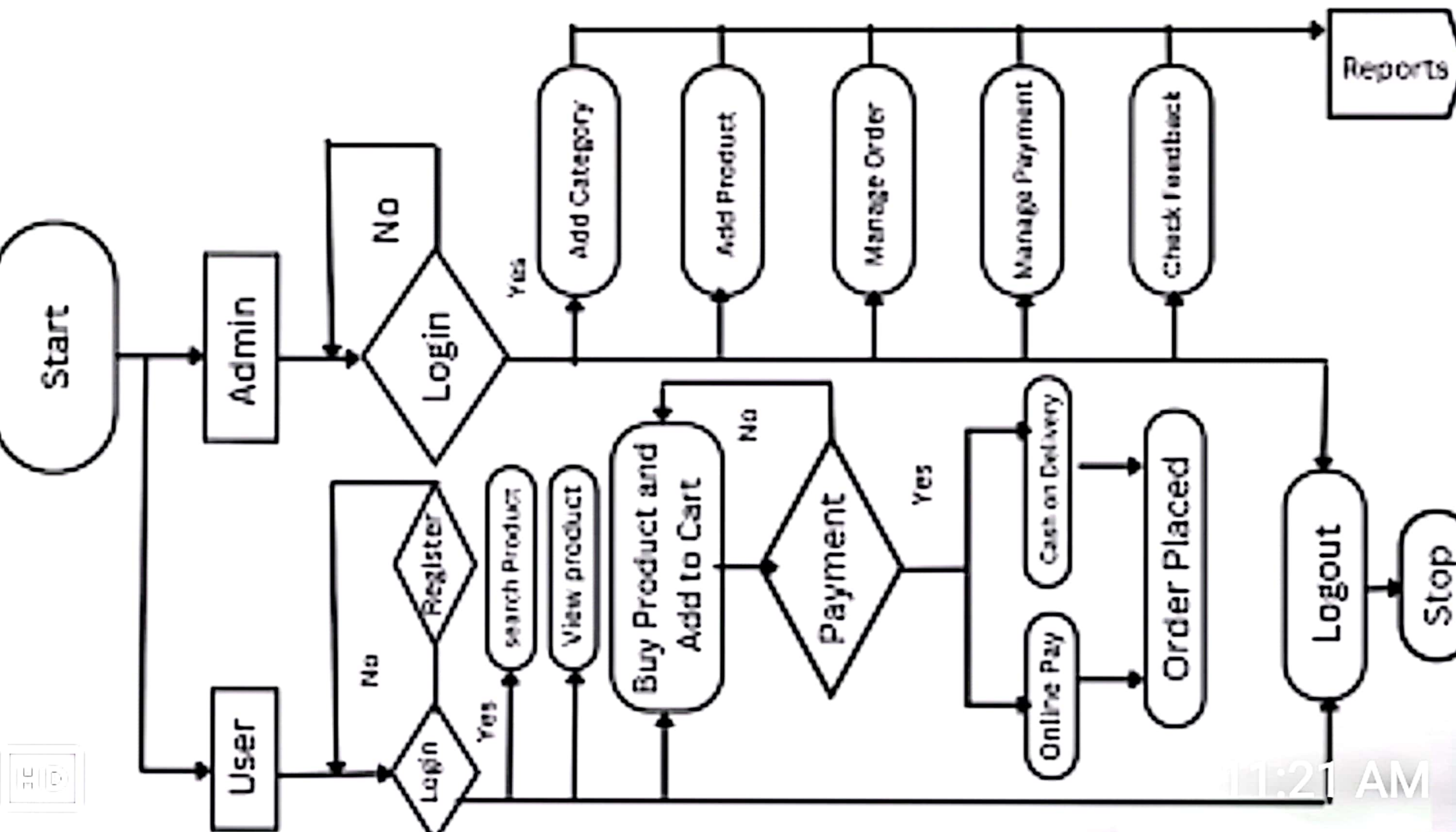
# Order Confirmation

- order details are displayed and sent via email.
- Order status is updated in the backend.

# Shipment Tracking

- Users visits the "Order history" section.
- real-time shipment tracking is enabled via API integration.

# Delivery

Product is delivered to the user's address.

Flowchart:

Start → Admin, User

**Admin** → Login
- No → (loops back to Login)
- Yes → Add Category, Add Product, Manage Order, Manage Payment, Check Feedback → Reports

**User** → Login / Register
- No → Register
- Yes → Search Product, View Product, Buy Product and Add to Cart → Payment
  - No → (loops back to Buy Product and Add to Cart)
  - Yes → Cash on Delivery, Online Pay → Order Placed

Order Placed → Logout → Stop

# Entities

## Clothes items

- Fields:  id, name, price, description ,image ,categoryID
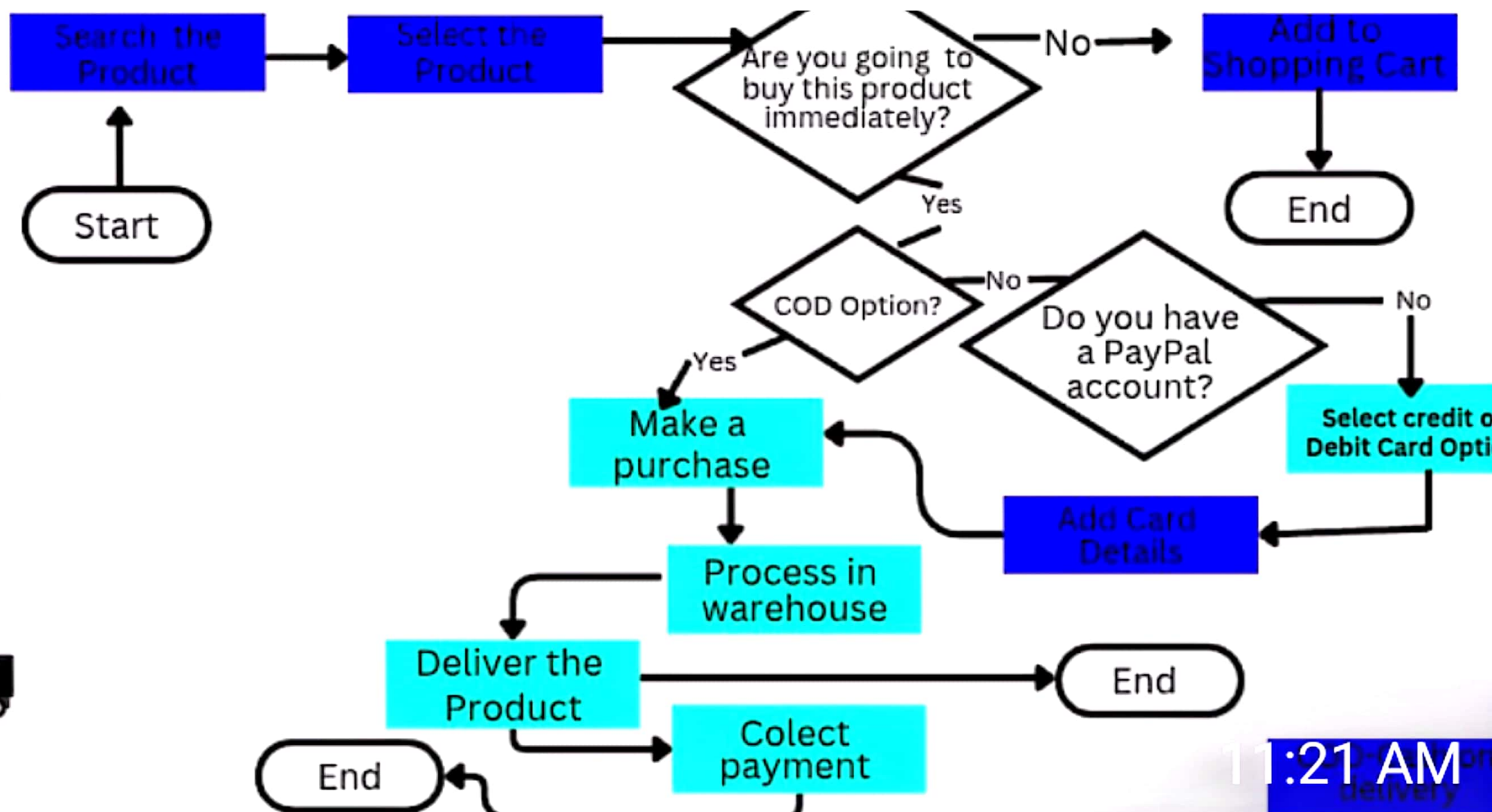
## Categories

- Fields: id, name

## Users

- Fields : id, name, email, password.

## Orders

- Fields : id, userID, orderDate, status.

## Payment gateway

- Processes User payments Securely and provides transaction confirmation.

Ecommerce site

Placing the Order

Shipping the Order

Search the Product

Select the Product

Start

Are you going to buy this product immediately?

No

Add to Shopping Cart

End

Yes

COD Option?

No

Do you have a PayPal account?

No

Select credit or Debit Card Option

Yes

Make a purchase

Add Card Details

Process in warehouse

Deliver the Product

End

Colect payment

End

11:21 AM

# Components and Role

## Front-end(Next.js)

- Display the User Interface For Browsing products , managing the cart , and placing Orders.
- Handless user interactions and communicates with backend services via API's.

## Sanity CMS

- Acts as the primary Backend to manage product data customer details , and order records.
- provides API's for the frontend to fetch and update data.

## Product Data API

- Provides endpoint to fetch product listing details and inventory status.

## Third-Party API's

- Integrates services like shipment tracking and payment processing.

## Payment gateway

- Processes User payments Securely and provides transaction confirmation.