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12014

Hekto Website

Affordable Furniture & Electronics Accessories Marketplace

TECK STACK:

Frontend:

Framework : Next.js (React-based framework)

- I will use Server-Side Rendering (SSR) and Static Site Generation (SSG) to enhance performance.
- I will add a built-in routing system and components to easily manage multi-page website.
- I will implement SEO-friendly tags , which are essential for e-commerce platforms.

Styling: Tailwind CSS

- I will use Tailwind CSS making responsive design easy.
- It is highly customizable.

State Management: React Context API

- I will use React Context API for state management.
- It will help manage cart state, and product filters efficiently.

Backend:

Headless CMS: Sanity CMS

- I will use Sanity CMS for a flexible and customizable content management system.
- It offers built-in APIs, making frontend and backend integration seamless.

APIs:

Payment Gateway: Stripe

- I will use Stripe or PayPal for secure payment processing.
- They offer easy integration with both frontend and backend.

Shipment Tracking: Shipengine or Shippo

- I will integrate Shipengine or Shippo for real-time shipment tracking.

Hosting & Deployment:

Frontend Hosting: Vercel

- I will use Vercel as it is an optimized hosting platform for Next.js applications.
- It provides automatic deployments and better performance.

FRONTEND (NEXT.JS):

Pages:

- **Home Page:**
 - Displays featured products, latest, trending products, and combo deals in a well-organized layout.
 - A hero section with a slider featuring a sofa image and interactive text.
- **Product Listing Page:**
 - Shows products in a grid format with sorting and filtering options for a better user experience.
- **Product Details Page:**
 - Displays product details, quantity update options, an add-to-cart button, and color selection.
- **Cart Page:**
 - Shows cart items, subtotal, and total price.
- **Checkout Page:**
 - Provides delivery details and payment options.
- **Order Confirmation Page:**
 - Displays order ID and delivery details.

Styling:

- **Tailwind CSS:**
 - Ensures a responsive design with a well-structured theme.

BACKEND (SANITY CMS):

Data Schemas:

- **Product Schema:**
 - Stores product details.

for example:

```
export default {  
  name: 'product',  
  type: 'document',  
  fields: [  
    { name: 'name', type: 'string', title: 'Product Name' },  
    { name: 'price', type: 'number', title: 'Price' },  
    { name: 'description', type: 'text', title: 'Description' },  
    { name: 'image', type: 'image', title: 'Product Image' }  
  ]  
};
```

- **Order Schema:**

- Stores Order details.

for example:

```
export default {  
  name: 'order',  
  type: 'document',  
  fields: [  
    { name: 'customerId', type: 'string', title: 'Customer ID' },  
    { name: 'products', type: 'array', of: [{ type: 'reference', to: [{ type: 'product' }] } ] },  
    { name: 'totalPrice', type: 'number', title: 'Total Price' },  
    { name: 'status', type: 'string', title: 'Order Status' }  
  ]  
};
```

- **Delivery Zone Schema:**

- Stores Delivery Zone details.

for example:

```
export default {  
  name: 'deliveryZone',  
  type: 'document',  
  title: 'Delivery Zone',  
  fields: [  
    { name: 'zoneId', type: 'string', title: 'Zone ID', description: 'Unique  
    identifier for the delivery zone.', validation: (Rule) => Rule.required() },  
    { name: 'zoneName', type: 'string', title: 'Zone Name', description: 'Name of  
    the delivery zone (e.g., Gulshan, DHA).', validation: (Rule) => Rule.required()  
    },  
    { name: 'areaCoverage', type: 'array', title: 'Area Coverage', description:  
    'Areas covered in this zone (e.g., streets, neighborhoods).', of: [{ type: 'string'  
    }], validation: (Rule) => Rule.required() },  
    { name: 'assignedDrivers', type: 'array', title: 'Assigned Drivers', description:  
    'List of drivers assigned to this zone.', of: [{ type: 'string' }], validation: (Rule)  
    => Rule.required() },  
    { name: 'estimatedDeliveryTime', type: 'string', title: 'Estimated Delivery  
    Time', description: 'Estimated delivery time for this zone (e.g., 2 days, 3  
    days).', validation: (Rule) => Rule.required() },  
  ],  
};
```

THIRD-PARTY APIS:

- **Payment Gateway (Stripe):**

- Endpoint: /payment
- Method: POST
- Purpose: Handles payment processing.
- Response Example:
- { "status": "Success", "transactionId": "12345" }

- **Shipment Tracking (Shipengine/Shippo):**

- Endpoint: /shipment
- Method: GET
- Purpose: Provides real-time shipment tracking.
- Response Example:
- { "orderId": "101", "status": "In Transit", "ETA": "2 days" }

AUTHENTICATION:

User Authentication Flow:

- User will sign up or log in.
- User data will be stored in Sanity CMS.
- A token will be generated and stored on the frontend.
- The token will be sent with each request for authentication.

DEPLOYMENT:

- **Frontend Hosting: Vercel**

- Optimized hosting for Next.js applications.
- Supports automatic deployments and scaling.

TECHNICAL ROADMAP:

- **Day 1:** First i defined **business goals** and **data schema**.
- **Day 2:** Complete **system architecture** and **technical documentation**.
- **Day 3:** Implement **frontend components** and **backend schemas**.
- **Day 4:** Integrate **APIs** and start **testing**.
- **Day 5:** Perform **final testing** and **deploy the project**.

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