

Technical Foundation for SNKRS.io

System Architecture

1. **Frontend (Next.js):** A responsive interface that supports seamless browsing and personalization.
2. **Sanity CMS:** Manages customizable products, customer profiles, and order history.
3. **Third-Party APIs:**
 - Payment Gateway (Stripe/PayPal/Local): Handles "Try Now, Pay Later" and installment plans.
 - AR Visualization API: Supports virtual try-on features.
 - Logistics API: Tracks deliveries and returns.

Key Workflows

1. **User Registration:**
 - Input user data -> Validate -> Store in Sanity CMS.
2. **Customization Process:**
 - User selects style -> Custom options dynamically fetched from Sanity -> Product preview generated.
3. **Order Placement:**
 - Products added to the cart -> API validates payment -> Order stored in Sanity CMS.
4. **AR Try-On (Future):**
 - User accesses AR feature -> API fetches product dimensions -> Virtual preview displayed.

API Requirements

- **Endpoint:** `/custom-products`
 - **Method:** GET
 - **Description:** Fetch all customizable options for selected products.
 - **Response Example:** `{ "id": 101, "color": ["red", "blue"], "size": [6, 7, 8] }`
- **Endpoint:** `/order-status`
 - **Method:** GET
 - **Description:** Fetch delivery status.
 - **Response Example:** `{ "orderId": 123, "status": "In Transit" }`

Sanity Schema Example

- **Product Schema:**

```
export default {  
  name: 'product',  
  type: 'document',  
  fields: [  
    { name: 'name', type: 'string', title: 'Product Name' },  
    { name: 'price', type: 'number', title: 'Price' },  
    { name: 'customOptions', type: 'array', of: [{ type: 'string' }], title: 'Custom Options' },  
  ],  
};
```