**Website Description:**

The website serves as a bridge between doctors and patients, providing a dynamic platform for interaction, data sharing, and professional engagement. Doctors and patients each have tailored, secure access to interactive features that support their distinct needs.

Use a structured, modular approach to each process to maximize reusability for future projects.

**Key Features:**

**Doctor** **Experience:**

* **STL Document Management**: Doctors can upload, view, and interact with their 3D STL files directly on their dashboard page. They can also view labelled notes and summaries added by themselves, patients and other doctors for each STL file, providing full transparency on modifications, insights, or product specifications.
* **Retailer Connections and Data Sharing**: Doctors maintain a list of patients they've worked with, view past purchases and services, and read any provided notes.
* **Appointment Scheduling**: Doctors can schedule appointments with their selected patients, view their upcoming appointments, and manage these interactions easily from their dashboard.
* **Peer Visibility**: Doctors have access to their patients' records (while they have patient consent) and can draw insights or even foster collaboration, creating a community of shared expertise.
* **Professional Showcase (Social Media Page)**: Doctors can post sales highlights, promotional content, or product spotlights on a dedicated professional page. While only doctors can post, logged in users can comment, allowing for public interaction and discussion.

**Patients Experience:**

* **Patients Insights and Interaction**: Patients can view all their uploaded files, interact with the data, and provide notes directly on the customer’s page, fostering transparency and effective communication.
* **Appointment Management**: Patients can make, receive, rsvp and manage their appointments, improving doctor outreach and optimizing scheduling.
* **Personal Data Management:** With fine-grained control, they can decide which doctors have access to their data and revoke or give access at any time.

**Public-Facing Elements:**

* **Landing Page**: A bold, interactive 3D model captures user attention as soon as they arrive. Paired with a concise site description, it immediately communicates the website's purpose and sophistication.
* **Social Media Page**: Open for browsing, this professional page lets anyone view retailer posts, but posting is restricted to verified patients. Comments are open to everyone, encouraging an interactive atmosphere for both doctors and visitors.

**Authentication and Profile Management:**

* Users sign up as either doctors or patients, and their profile status is verified for tailored access to the site’s functionalities. Authentication ensures privacy and security, enabling reliable and controlled data sharing.

**Design:**

The site should have a cutting-edge, futuristic aesthetic with smooth gradients, clean typography, and minimalistic UI elements. Elements might consistent iconography, and intuitive navigation—designed to instil user trust without compromising the futuristic appeal. This duality in design would set a high standard, positioning the platform as a leader in bridging tech innovation with regulatory-grade security and professionalism.

This blend of professionalism with high-tech interaction would give the website a unique presence in the marketplace, catering to both retail businesses and individual doctors with a shared emphasis on quality, transparency, and ease of interaction.

**Additional Features/Notes:**

* Website colour scheme:
  + **1. Use a Mesh Gradient Background**
    - **Blend the Colours:** Create a mesh gradient that combines the colours in your palette (#99B898, #FCECA8, #FF847C, #E84A5F, and #2A363B). Distribute the colours so they flow seamlessly, creating a modern and dynamic effect. For example:
    - Use #99B898 and #FCECA8 in the top-left corner for a soothing, lighter start.
    - Blend #FF847C and #E84A5F diagonally for warmth and energy in the middle.
    - Transition to #2A363B at the bottom for a strong, grounded finish.
    - **Example Implementation:** Use CSS background: conic-gradient() or radial-gradient() with the colours to simulate depth.
  + **2. Clear and Accessible Text**
    - **Choose Text Colours:** Use light text (e.g., white or #FCECA8) on dark sections (#2A363B) and dark text (#2A363B or #99B898) on light sections (#FCECA8, #FF847C).
    - **Contrast Ratio:** Ensure a minimum contrast ratio of 4.5:1 for accessibility, as per WCAG guidelines.
    - **Font Styling:** Use clean, sans-serif fonts for modernity. Apply consistent font sizes with REM units for responsiveness.
  + **3. Utilize Accent Colours for Key Elements**
    - Use **#E84A5F** or **#FF847C** for call-to-action buttons, icons, or interactive elements to draw attention.
    - Apply **#99B898** and **#FCECA8** as subtle highlights for secondary actions or information sections.
  + **4. Organize the Layout Using Hierarchy and Spacing**
    - Use **ample spacing** between sections to allow the gradient to shine without overcrowding the design.
    - Arrange content using **proximity and similarity**, grouping related items by size or alignment for scan ability.
    - Apply **depth and shadows** to buttons or key sections for a polished, futuristic look.
  + **5. Maintain Consistency**
    - Create a **design system** for your elements, defining button states (hover, active), link styles, and heading levels. Stick to the defined colour palette for uniformity.
    - Reserve **#2A363B** for major backgrounds and headers, while using lighter tones for secondary sections.
* The type of users on the website is meant to be divided between doctors and patients which are chosen by people as they sign up to the site (by clicking either between a doctor svg or patient svg). The doctors must be able to upload Dicom files on their dashboard to be segmented by a third-party team and the final stl uploaded to the doctors dashboard by the third party.
  + the Dicom uploads sidebar tab to be a subcategory of STL files and rename STL files to be Medical Data
* A social media section with the following:
  + A navigation link on the landing page next to the about navigation link where non-logged in users can view the social section but are unable to comment/like unless they create an account
  + A social media section navigable through the social navigation link in the logged in dashboard header. The Social media section should have joinable communities based on different types of retailer products, only retailers can post in their communities but any logged in user can comment. Each logged in user should have a simple personalized feed where they can follow people and like, comment
* A team’s subsection in the social section where teams can only be joined when one is given the links. The team’s option should allow the teams to share data which are dated and time stamped and sorted according to their file type, make their own folders and directories and download the folders
  + Ensure that the team’s sidebar and navigation header is only visible and accessible to users registered as doctors
* Storage (Options with a better cost benefit analysis should be explored):
  + AWS S3 for STL files
  + MongoDB for user data, appointments, retailer info
  + CloudFront CDN for static assets
* Performance Optimizations for Kenya:
  + Lazy Loading for STL Models
  + Compression for 3D Files
  + Progressive Image Loading
  + Service Workers for Offline Capabilities
  + Local Caching Strategies
  + Implementation considerations for Kenya:
    - Network Resilience:
      * Implement retry mechanisms for failed requests
      * Add offline indicators
      * Cache critical resources aggressively
    - Data Usage Optimization:
      * Implement metrics tracking for data usage
      * Add user controls for data-heavy features
      * Provide compressed alternatives for large files
    - Local Storage Management:
      * Monitor and manage storage usage
      * Implement cleanup strategies
      * Provide storage usage indicators