



# UI Requirements Report: VoiceRead AI Assistant

**Project Description:** A voice-activated AI reading accessibility assistant designed for blind or visually impaired learners. The UI needs to be highly readable, robust, and accessible, built around a dark mode or high-contrast theme (as implied by the existing color variables like `--bg-card`, `--text-muted`, `--border`).

## 1. Global & Layout Components

These are the macro-level structures that hold the application together.

- **App Shell / Main Container:** A full-screen layout divided into a Sidebar (left) and Main Content Area (right).
- **Startup Screen / Splash:** A centered overlay with a large title "🔊 VoiceRead" and a prompt saying "Press any key on your keyboard to start".
- **Top Header (Main Area):**
  - **Title:** "🔊 VoiceRead"
  - **Subtitle:** "Voice-Activated AI Reading Assistant for Blind Learners"
  - **Badge:** Small text indicating the version/project "HackxAmrita 2.0".
- **Status Bar (Bottom of Main Area):** A slim bar at the bottom showing a colored dot (Status indicator: green/red/yellow) and a text message (e.g., "Ready", "Loading...", "Error").
- **Tabs Navigation Bar:** A horizontal row of 4 tab buttons to switch main views:
  1. 📄 Document
  2. 💬 Chat
  3. 🎙️ Voice
  4. 📖 Commands
- **Global Voice Overlay (Heads-Up Display):** A floating pill-shaped banner at the top center of the screen that appears when the microphone is active (Ctrl+M). It needs:
  - A pulsing animation or spinner.
  - State text: "Listening..." or "Processing...".
  - Real-time transcription text appearing dynamically.

## 2. Sidebar Components

The sidebar manages the file, navigation, and bookmarks.

- **Branding Header:** App name and a smaller sub-label.
- **API Status Badge:** A small colored pill. (States: Green "✓ Groq AI Ready" / Orange "⚠ API key not set").
- **Drag & Drop Upload Zone:**
  - A dashed/dotted border rectangular area.
  - Icon (📄 Document icon or⏳ Loading spinner).
  - Text: "Click or drag PDF / DOCX / EPUB / TXT".
  - Needs a visual hover/drag state.
- **Document Info Panel** (Visible when a file is loaded):
  - **File Name Title & Metadata Text** (e.g., "PDF · 24 pages").
  - **Metrics Pills:** Two side-by-side boxes showing [Current Page] and [Total Pages].
  - **Pagination Row:** Two buttons side-by-side: "◀ Prev" and "Next ▶".
  - **Jump to Page Input:** A numeric text box paired with a "Go →" button.
- **Bookmarks List Section:**
  - Section Header with a "+ Add" ghost button.
  - **Bookmark Item Row:** Contains a page badge (e.g., "p.5"), a text label, and a small "x" delete button. Needs a hover state.

## 3. Tab Views & Content Areas

### A. Document Tab (📄 Document)

Displays the parsed text and search features.

- \* **Empty State:** Large folder icon (📁), title "No Document Loaded", and instruction text.
- \* **Search Bar:** Full-width text input with a magnifying glass.
- \* "Search" button (with loading spinner state).
- \* "Clear" ghost button (appears when results are shown).
- \* **Search Results Card:** A container showing the count of results and a list of clickable text snippets highlighting the matched text.
- \* **Reader Area:** Header row showing "Page X of Y" and a small file extension badge.
- \* Large text area for reading the document content out loud.
- \* **Action Buttons (Bottom):** "▶ Read Aloud" (Green/Success styled) and "⏹ Stop" (Ghost styling).

### B. Chat Tab (💬 Chat)

A conversational interface for interacting with the document.

- \* **Missing API Warning Card:** A stylized card containing a key icon (🔑), warning text, and a code block snippet showing (.env file setup).
- \* **Chat History Area (Scrollable):**
- \* **Empty State:** Icon (💬), Title, and a grid of "Suggestion Chips" (small buttons like "Summarize key points", "What is the main topic?").

**User Message Bubble:** Right-aligned, primary color background (e.g., Blue), white text. \* **AI Message Bubble:** Left-aligned, gray/card background. Includes a small "🔊 Read" button underneath the response. \* **System Message Bubble:** Highlighted text indicating a system event ("🤖 System:"). \* **Thinking/Typing Indicator:** A small left-aligned bubble with a spinner. \* **Pending Confirmation Alert:** An info banner asking for voice confirmation ("Yes/No") with a red "Cancel" button. \* **Input Box Area (Bottom):** Text input field and a "Send" button. Input needs a "disabled" state when AI is generating.

## C. Voice Tab ( 🎙️ Voice )

The primary manual fallback for voice controls. \* **Mic Control Center (Card):** \* A massive, prominent Microphone Button (needs Idle 🎤, Active/Pulsing 🎤, and Loading ⏳ UI states). \* Helper text below it explaining keyboard shortcuts. \* **Type a Command (Card):** A section with a text input field ("e.g. summarize") and a "▶ Run" button. \* **Quick Actions Grid (Card):** A 2-column or 4-column grid of equal-sized secondary buttons for: Read Page, Stop, Summarize, Prev, Next, Bookmark, Go BM, Help.

## D. Commands Tab ( 📖 Commands )

A pure information/reference page layout. \* **Info Banner:** Top alert block with info styling. \* **Command Dictionary Table/List:** Categorized lists (Reading, AI, Navigation, Bookmarks). Each row should have a highlighted "Command Keyword" (e.g., "read document") and its corresponding "Description". \* **Tips Card:** A styled container with a bulleted list of helpful application tips.

# 4. Reusable UI Primitives (Design System Requirements)

Ensure Dora.run generates this set of core design tokens: 1. **Buttons:** \* Primary (Blue) \* Secondary/Outline (Dark gray/border) \* Success (Green) \* Danger (Red) \* Ghost/Transparent (minimal visual weight) \* **Sizes:** Normal, Small (for badges/bookmarks) and Full-width. 2. **Inputs:** Text inputs, Number inputs, and fully styled `textarea` or rich-text containers. 3. **Containers:** "Cards" with rounded corners (e.g., `12px` or `16px` border-radius), subtle borders, and optional drop-shadows. 4. **Feedback Elements:** \* Alert boxes (Info, Warning, Error variant styles). \* Spinners (circular loading rings). \* Status dots (tiny colored circles).