Final Project: Design & Launch, organized by section and tailored to your autism-focused communication aid concept.

**Part 1: Brainstorm & Competitor Research**

**Brainstorm – 3 Product Ideas**

1. **Social Cue Deciphering App**   
   An AI-powered mobile app that translates verbal and non-verbal social cues (tone, sarcasm, slang, gestures) into plain, literal language for autistic users in real time.
2. **Expression Analyzer Browser Extension**   
   A browser plugin that scans written content (emails, chats, social media) and flags idioms, irony, and emotional undertones, offering simplified interpretations and context.
3. **Gesture-to-Meaning Companion**   
   A wearable device or phone camera tool that interprets facial expressions, body language, and gestures during live interactions, providing discreet feedback to the user.

**Social Cue Decoder App**

**Competitor Analysis:**

**Sosh: Offers social training and exercises for autistic individuals.**

**It s missing the lack of real-time interpretation of social cues or nuanced expressions.**

**My Talk Tools: Helps form phrases and improve speech structure (synthax, semantics, pragmatics, morphology and phonology).**

**It lacks: emotional tone detection and contextual decoding of slang or irony**

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**Part 2: SDLC Documentation Analysis:**

**Audience**: Autistic individuals (teens to adults) who struggle with interpreting social cues, idioms, and emotional undertones.

* **Problem Solved**: Miscommunication and social anxiety due to difficulty understanding nuanced expressions, sarcasm, and gestures.
* **Core Features**:
  + **Must-Haves**:
    - Real-time speech-to-text translation with tone analysis
    - Gesture and facial expression interpretation
    - Slang and idiom dictionary with context
  + **Nice-to-Haves**:
    - Customizable user profiles
    - Conversation replay and breakdown
    - Community feedback and shared interpretations
* **Agile MVP**:
  + Basic speech-to-text with tone tagging
  + Idiom/slang translation module
  + Simple UI for real-time feedback
* **Security Considerations**:
  + End-to-end encryption for voice data
  + No storage of personal conversations unless opted in
  + GDPR-compliant data handling and anonymization

**Design**

* **Wireframe 1: Home Screen**
  + Top: App name/logo
  + Middle: “Start Conversation” button
  + Bottom: Settings, Help, Profile
* **Wireframe 2: Live Interaction Screen**
  + Top: Live transcription
  + Middle: Highlighted tone/emotion tags
  + Bottom: Suggested interpretations and definitions

**🛠️ Implementation**

* **Tools**:
  + Starter HTML/CSS template
  + AI APIs for tone/emotion detection (e.g., Azure Cognitive Services)
  + JavaScript for real-time updates
* **Content/Images**:
  + Stock image of diverse people communicating
  + Icons for tone (e.g., sarcasm, anger, flirtation)
  + Simple color-coded feedback system

**Testing**

* **Checklist**:
  + All links functional
  + Mobile responsiveness tested via browser dev tools
  + Alt text added to all images
  + Readability checked with accessibility tools (e.g., WAVE)

**Part 3: Landing Page**

**Mockup Ideas**

1. **Minimalist**: Clean layout, bold headline, one central image, CTA button.
2. **Interactive**: Hover-over examples of misunderstood phrases with translations.
3. **Storytelling**: Real user testimonials with emotional appeal.

**✅ Final Choice: Interactive**

* **Product Name**: CueClear
* **Description**: Decode the world around you. CueClear helps autistic individuals interpret tone, slang, and gestures in real time—bridging the gap between intention and understanding.
* **Image**: AI-generated image of two people talking with visual overlays of tone/emotion tags.
* **CTA**: “Learn More” button linking to product demo or email signup.

**Part 4: Future Feature + Reflection**

**Future Feature: Mobile App with Wearable Integration**

**Analysis**

* **Audience**: Users who want discreet, on-the-go support in live social settings.
* **Problem Solved**: Real-time interpretation of gestures and expressions during face-to-face interactions.
* **Core Features**:
  + Camera-based gesture recognition
  + Vibration or visual cue feedback
  + Sync with mobile app for context

**🎨 Design**

* **Wireframe 1**: Wearable dashboard (gesture log, feedback history)
* **Wireframe 2**: Mobile sync screen (live feed, interpretation overlay)

**📝 Reflection**

Working through the SDLC taught me how structured and iterative product development really is. I learned that ideation isn’t just about creativity—it’s about solving real problems with empathy and precision. The hardest part was narrowing down the product scope while keeping the vision intact. I also realized how crucial security and accessibility are, especially for vulnerable user groups.

I used AI to help brainstorm product ideas, structure the SDLC phases, and refine messaging for the landing page. The AI helped me think through user needs and market gaps more clearly, and gave me a strong foundation to build from.