

SPARROW AI

“Never Wing a Call Again”

Complete Project Summary

AI Partner Catalyst Hackathon - ElevenLabs Challenge

Live Demo: <https://sparrow-ai.brianmwai.com>

Repository: <https://github.com/brn-mwai/sparrow-ai-partner-catalyst>

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1 What is Sparrow AI?

Sparrow AI is a **voice-first sales training platform** that lets users practice cold calls, discovery conversations, and objection handling with realistic AI prospects powered by **ElevenLabs Conversational AI** and **Google Gemini**.

User speaks → ElevenLabs processes → AI responds with voice →
Gemini analyzes → Instant feedback

2 The Problem

91% of sales teams missed quota in 2024

- **3-6 months** average ramp time for new sales reps
- **\$97,690** cost to replace one failed sales rep
- **67%** of reps miss their individual quota
- **No safe place to practice** — reps learn on real prospects

Sales is a performance skill. You get better by *doing*, not reading. But every practice opportunity today costs real money.

3 Our Solution

3.1 Three Practice Modes

3.2 Key Features

1. **AI Prospect Generation:** Gemini creates unique, realistic buyers with backstories
2. **Voice Conversations:** ElevenLabs enables natural speech interaction

Mode	Goal	Skills Practiced
Cold Call Simulator	Book a meeting	Openers, attention, value props
Discovery Call	Uncover pain	Questions, listening, qualification
Objection Gauntlet	Handle pushback	Reframing, persistence, closing

3. **Real-time Scoring:** Instant feedback during and after calls
4. **Detailed Coaching:** Timestamped moments with specific suggestions
5. **Progress Tracking:** Skill development visualization over time

4 Technological Implementation

4.1 Core Integration

Technology	Provider	Use Case
Conversational AI	ElevenLabs	Real-time voice conversations
LLM Intelligence	Google Gemini 2.0	Persona generation, call analysis
Fast Inference	Groq (Llama 3.1)	Real-time scoring
Database	Supabase	Data persistence
Authentication	Clerk	User management
Hosting	Vercel	Edge deployment

4.2 ElevenLabs Features Used

- **Conversational AI Agents:** Core voice interaction engine
- **Dynamic Variables:** 15+ variables per session for persona customization
- **Voice Library:** Multiple voices for different prospect personalities
- **React SDK:** Seamless frontend integration ([@elevenlabs/react](#))
- **Client Overrides:** Gender-appropriate voice selection

4.3 Google Cloud / Gemini Usage

- **Model:** `gemini-2.0-flash-exp`
- **Persona Generation:** Creates detailed prospect profiles from parameters
- **Call Analysis:** Deep analysis of transcripts with structured JSON output
- **Coaching:** Generates actionable feedback with specific suggestions

4.4 Code Quality

- 100% TypeScript for type safety
- Next.js 15 with App Router
- Modular component architecture

- RESTful API design with proper error handling
- Environment-based configuration

5 Design & User Experience

5.1 User Journey

1. **Sign Up:** Quick authentication via Clerk
2. **Dashboard:** View stats, recent calls, improvement areas
3. **Select Mode:** Choose Cold Call, Discovery, or Objection Gauntlet
4. **Configure:** Pick industry, role, personality, difficulty
5. **Briefing:** Review AI-generated prospect details
6. **Call:** Natural voice conversation with real-time transcript
7. **Debrief:** Score card, key moments, full transcript
8. **Progress:** Track improvement over time

5.2 Design Principles

- **Voice-first:** Designed around natural conversation
- **Clean UI:** Minimal distractions during calls
- **Instant feedback:** No waiting for analysis
- **Mobile-friendly:** Practice from anywhere

6 Potential Impact

6.1 Market Opportunity

Metric	Value	Calculation				
TAM	\$5.7B	5.7M	B2B salespeople	× \$1,000/year		
SAM	\$1.5B	2.6M inside sales reps	× \$600/year			
SOM	\$45M	75K users at 10% penetration (Year 5)				

6.2 Who Benefits

- **SDRs:** 800,000+ in US need cold calling practice
- **Inside AEs:** 1.2M+ need discovery and objection skills
- **Sales Teams:** Reduce ramp time, lower turnover
- **Career Changers:** Access quality training without expensive coaches

6.3 Quantified Impact (at 75K users)

- 750,000+ practice calls per month
- \$75M+ saved in reduced turnover costs
- 15,000+ reps reaching quota who otherwise wouldn't

7 Quality of the Idea

7.1 What Makes Sparrow Unique

1. **Voice-first:** Not a chatbot — real voice conversations
2. **Dynamic personas:** Every practice session is unique
3. **Objective scoring:** AI removes manager bias
4. **Adaptive difficulty:** Adjusts to user skill level
5. **Instant availability:** Practice 24/7, unlimited sessions

7.2 Why Now

- **Voice AI maturity:** ElevenLabs reached human-quality in 2024
- **LLM capabilities:** Gemini can roleplay convincingly
- **Real-time inference:** Groq enables instant feedback
- **Market pain:** 91% quota miss rate demands new solutions

8 Findings & Learnings

8.1 Technical Learnings

1. **ElevenLabs Dynamic Variables** are powerful for persona injection
2. **Voice override** requires enabling in Security settings
3. **Signed URLs** provide secure, temporary session access
4. **Gemini structured output** ensures consistent JSON responses
5. **Groq's speed** enables real-time scoring without latency

8.2 Product Learnings

1. Sales reps want *realistic* pushback, not easy wins
2. Timestamped feedback is more valuable than overall scores
3. Voice quality directly impacts immersion and learning
4. Pre-call briefing increases engagement and roleplay commitment

9 Conclusion

Sparrow AI demonstrates the power of combining ElevenLabs Conversational AI with Google Gemini to create a transformative voice-first application. The project:

- Deeply integrates both partner technologies
- Solves a real, quantifiable market problem
- Shows quality software development practices
- Delivers thoughtful user experience design
- Has significant potential impact on millions of sales professionals

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