

WIEGNITE 3.0

ECHOES OF DECIET

(A voice-driven interrogation game where your real speech, volume, and tone determine if a virtual suspect cracks under pressure)

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Problem Statement

01

Interrogation games are mostly scripted and text-based, reducing realism.

02

Natural voice interaction is missing in digital gameplay.

03

Voice systems rely on complex AI/ML, making them hard for beginners.

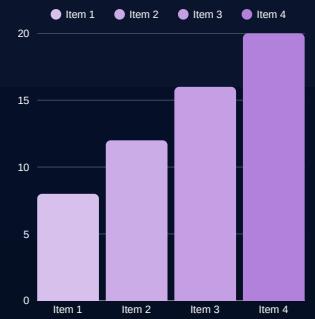
04

There is no simple, accessible voice-based interactive game for realistic interrogation experiences.

Solution Overview

Echoes of Deceit introduces:

Voice-based Interrogation



Real-time Voice Analysis



Keyword-based Questioning



Dynamic Confession System

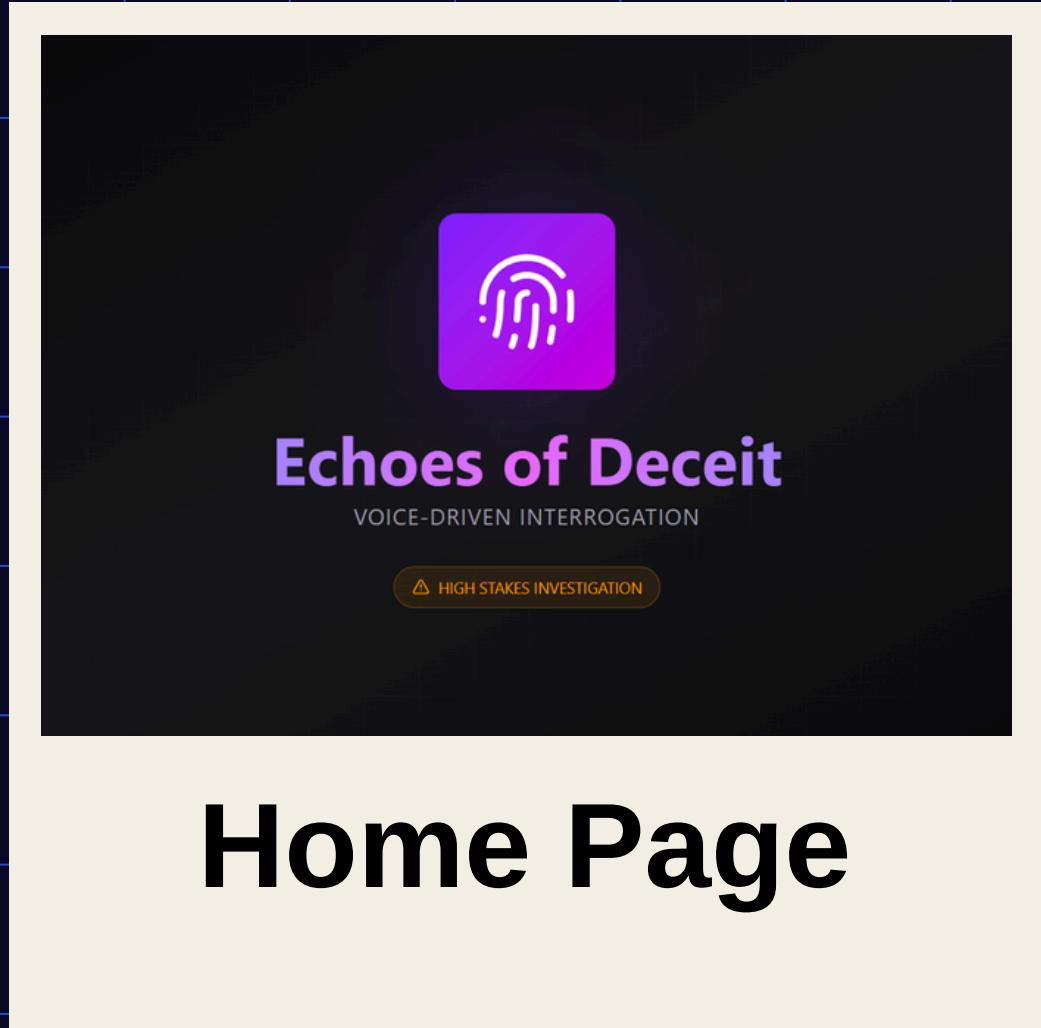


Stress-driven Suspect Behavior

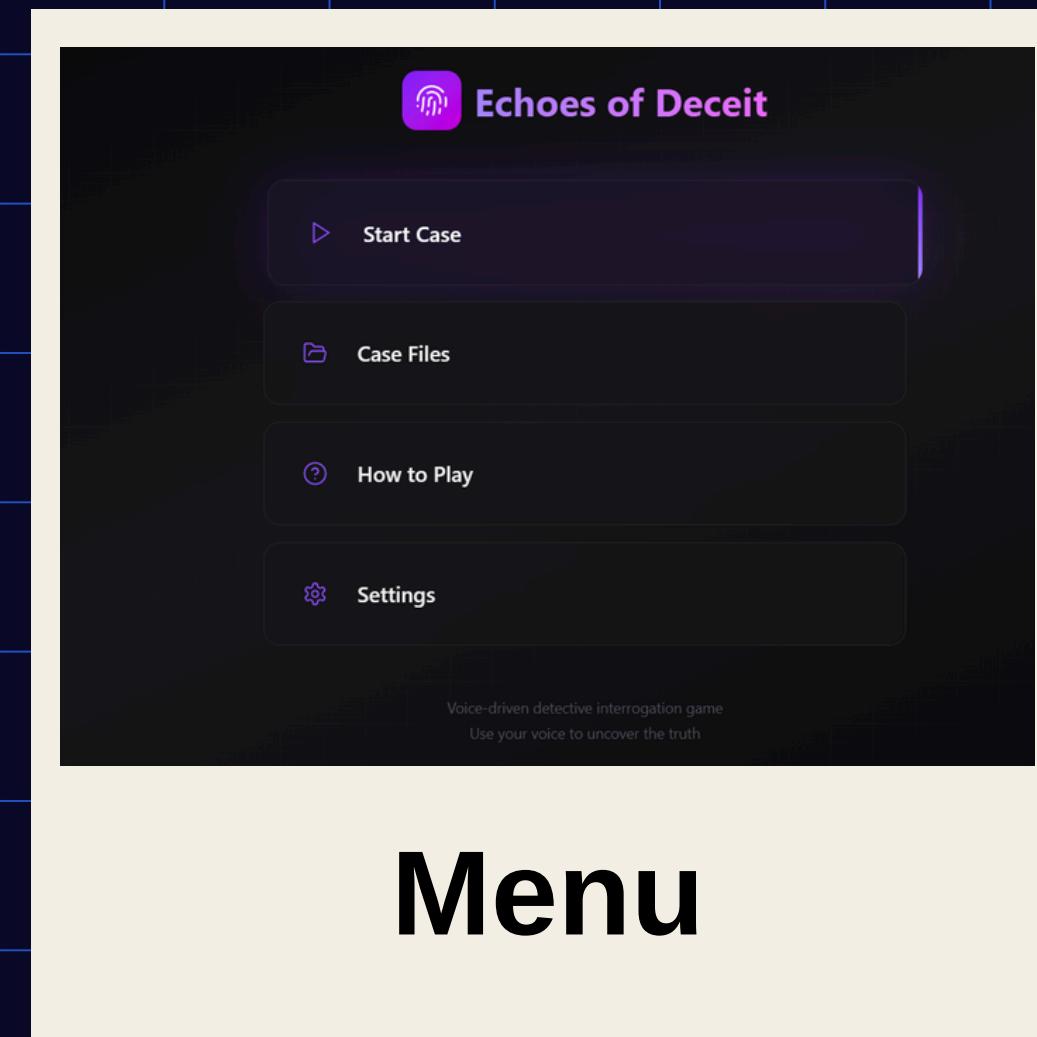


Core Idea:
Human voice as the main game controller.

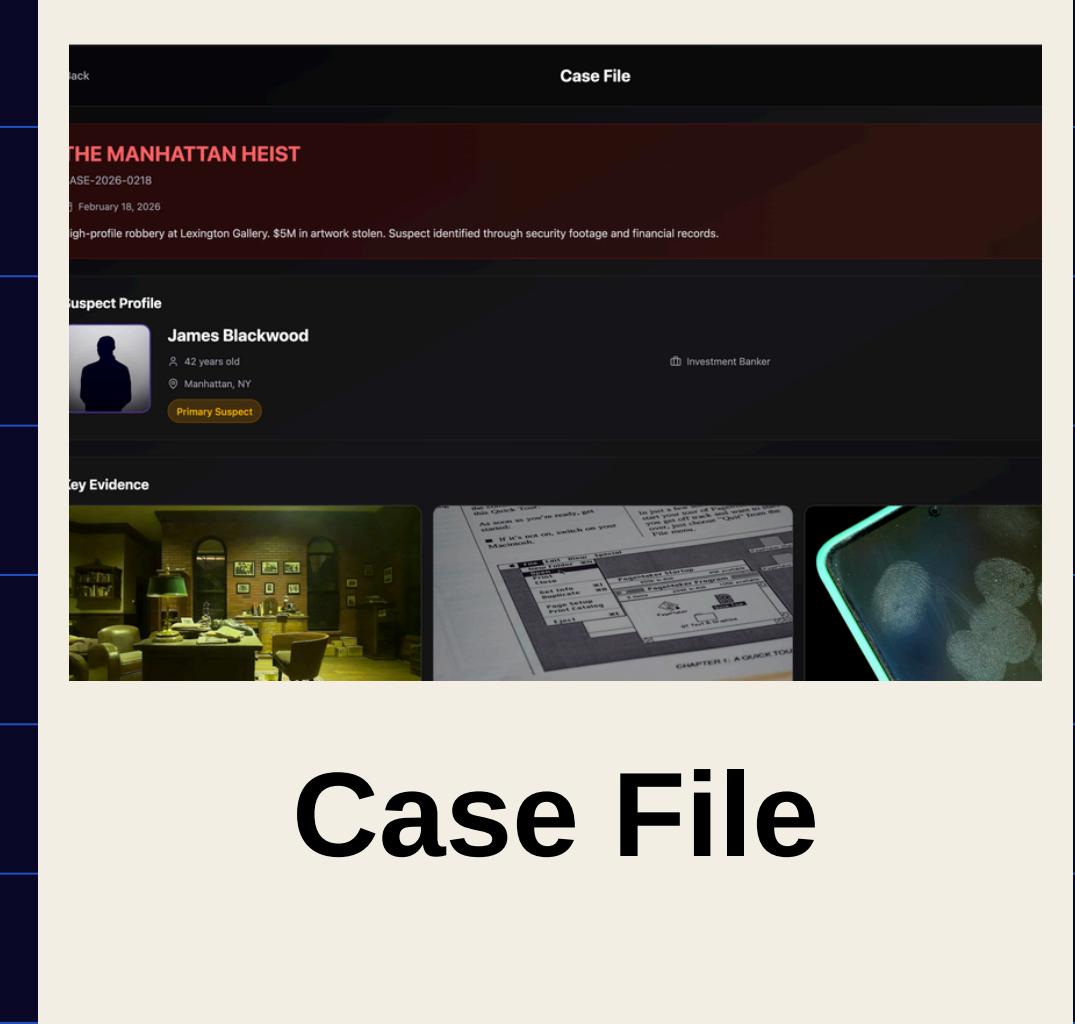
Game Flow & Prototype Testing



Home Page

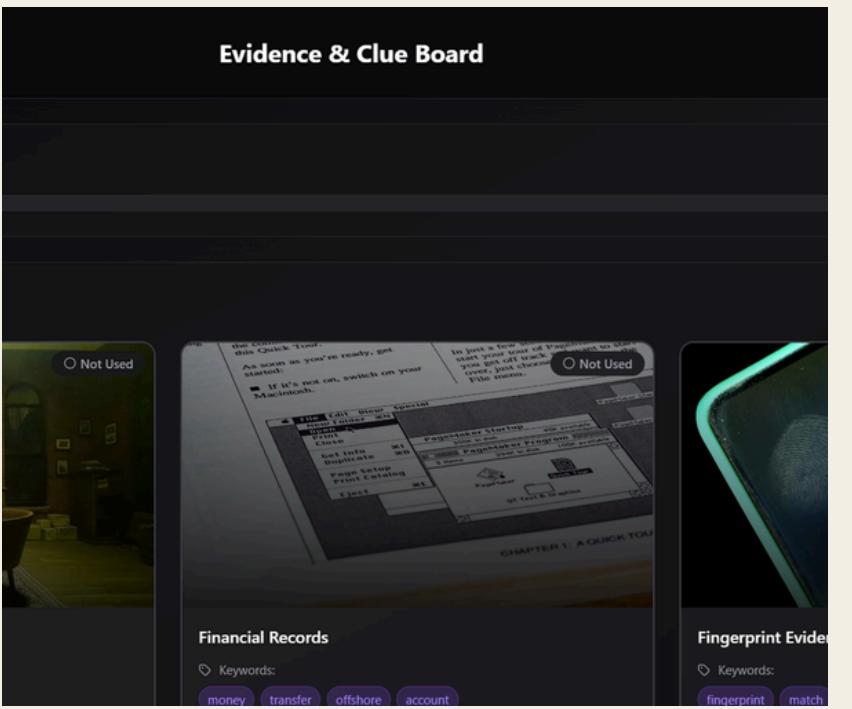


Menu



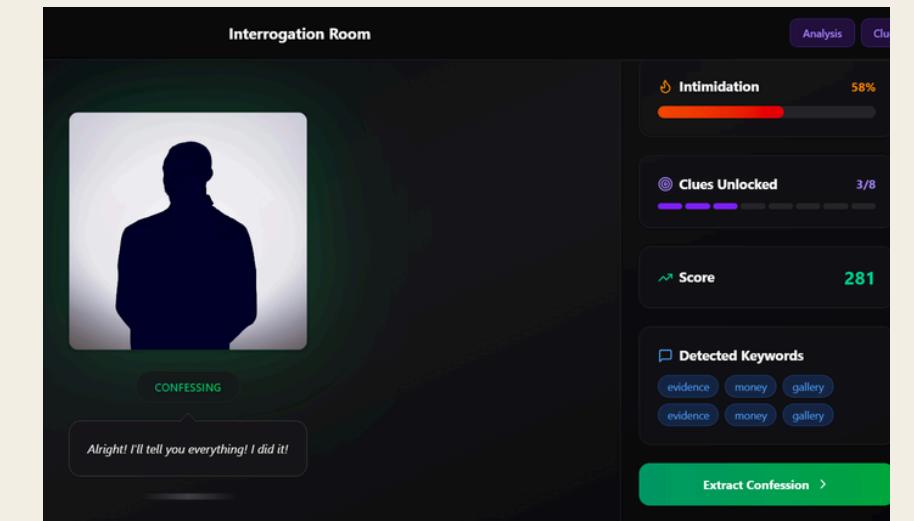
Case File

Evidence & Clue Board



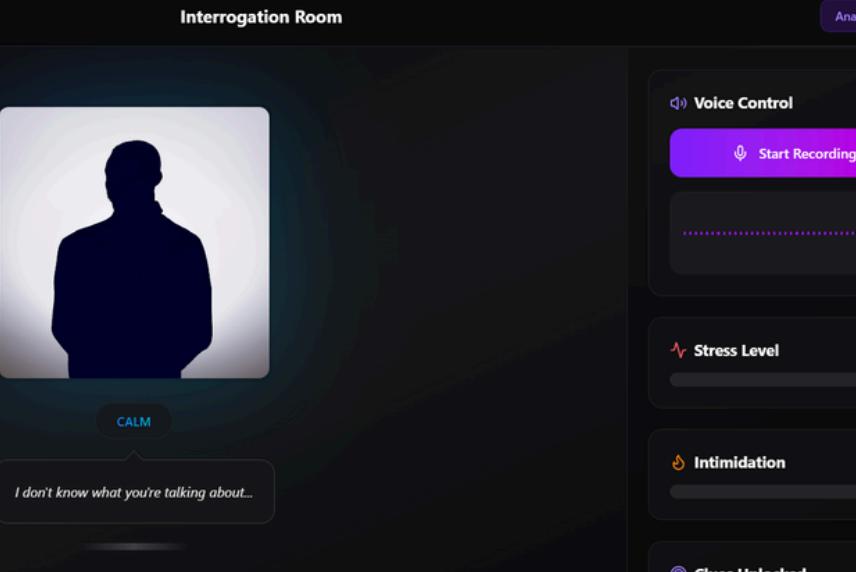
Evidence Board

Interrogation Room



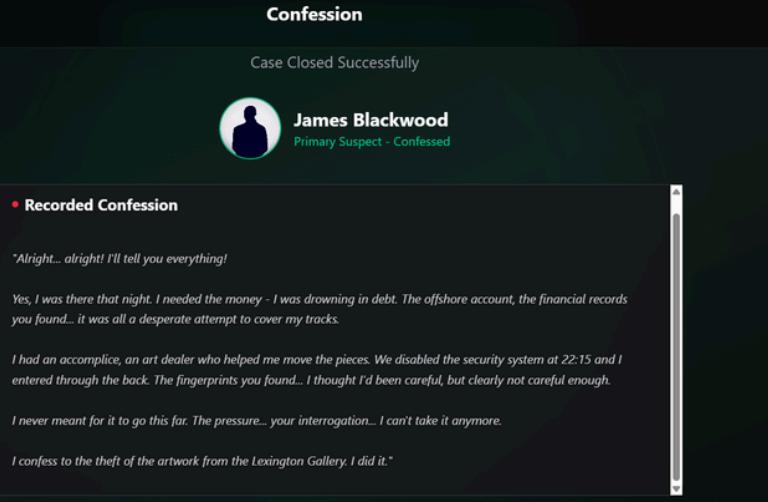
**Keyword Detection, Stress Analysis, Suspect Reaction
Clue Unlock, Score update**

Interrogation Room



Interrogation Voice Input

Confession



Case Summary

Main Menu Case Summary New Case

CASE CLOSED

The Manhattan Heist - Successfully Solved

Performance Overview

- Poor Rating
- 281 Total Score
- 3/8 Clues Found
- 91% Final Stress

Score Breakdown +112

Base Interrogation

Main Menu Case Summary New Case

Evidence Used

- Security Footage
- Financial Records
- Fingerprint Evidence
- Witness Statement
- Phone Records

Clues Uncovered

- Suspect presence at gallery
- Offshore wire transfer
- Previous criminal record
- Alibi inconsistencies
- Fingerprint match

Questions Asked During Interrogation

- Q1: Who were you working with?
- Q2: Where were you on the night of the heist?
- Q3: Where were you on the night of the heist?

Main Menu Case Summary New Case

Achievements

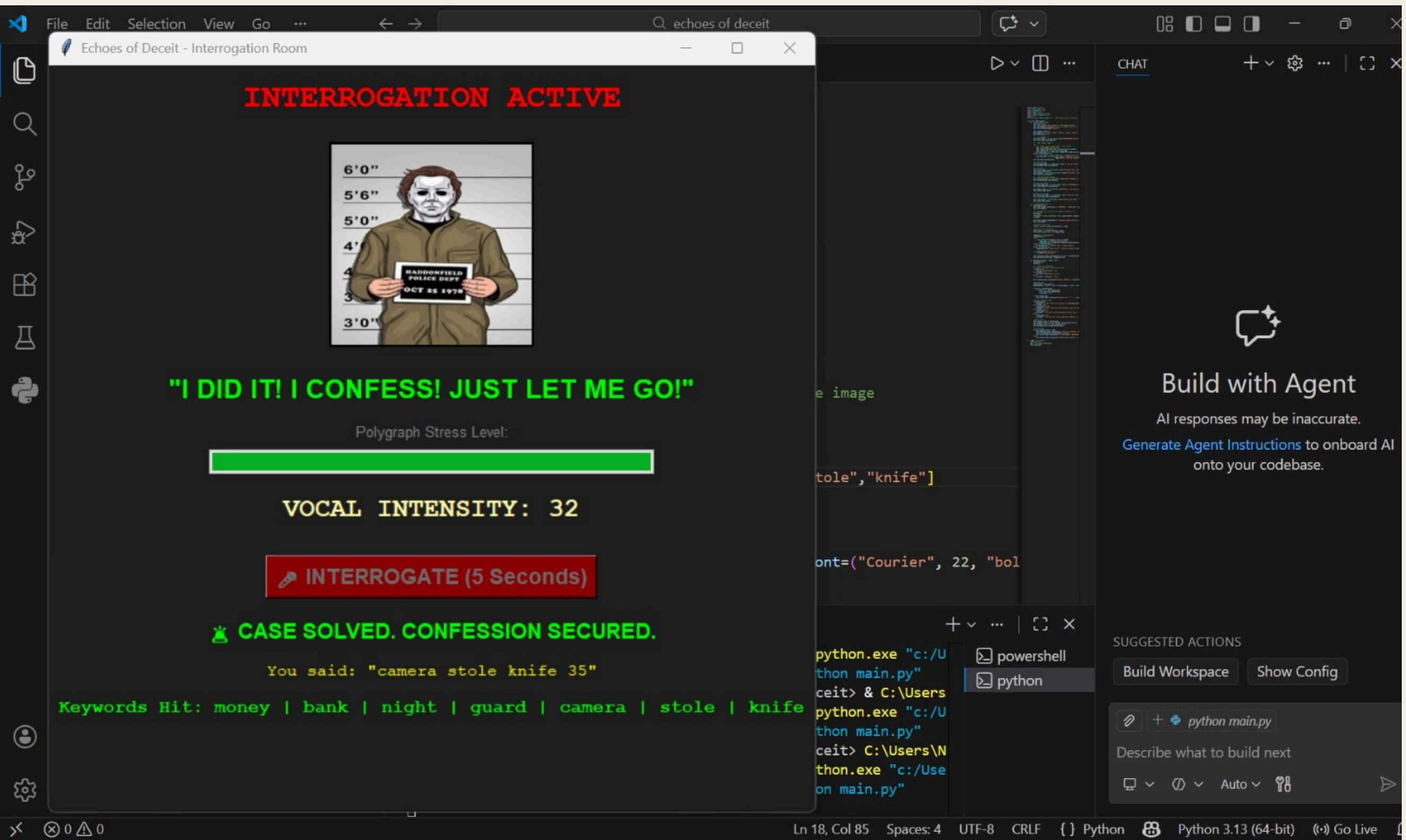
- Evidence Master Unlocked
- Stress Tactician Unlocked
- Clue Hunter Locked
- Perfect Score Locked

Detective Analysis

- ✓ Successfully extracted full confession from suspect
- ✓ Evidence collection and presentation was effective
- ✓ Voice interrogation techniques yielded strong results
- ✓ Stress management tactics successfully broke suspect's defense

Main Menu Start New Case

Python prototype



Tech Stack & Future Scope



Python



SpeechRecognition



NumPy



GitHub



PyAudio

- AI Emotion Detection
- NLP-based Interrogation
- Facial Expression Analysis
- Multiplayer Interrogation
- VR/AR Integration

Accuracy Testing

01

Diverse Voice Testing:
Achieved 90% keyword recognition accuracy across our three team members to ensure the AI handles different accents and pitches.

02

Speech Speed Checks:
Identified a drop to 60% accuracy during rapid speech, leading us to implement UI prompts guiding players to speak clearly.

03

Environment Stress Testing:
Simulated loud environment conditions to test our microphone sensors against heavy background chatter.

04

Identifying False Positives:
Discovered during testing that ambient room noise could accidentally trigger the suspect's "high volume" stress reaction.

05

Mathematical Calibration:
Recalibrated our Root Mean Square (RMS) audio threshold from 40 to >60 to successfully filter out background interference.