

AI Interview Coach

Voice-Based Interview Simulation with Agentic AI

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Motivation

Stressful Interviews

Interviews are stressful and unpredictable

Lack of Practice

Few get realistic Q&A feedback loops

Project Goal

AI coach simulates interviews with smart feedback

Project Objectives

Realistic Scenarios

Simulate real interviews using AI

Voice Interaction

Use voice input and output

Answer Evaluation

Evaluate answers with OpenAI LLM

Agentic Loop

Ask → Listen → Evaluate → Improve





What is Agentic AI?

1

Ask

AI poses interview questions

2

Listen

AI hears your answers

3

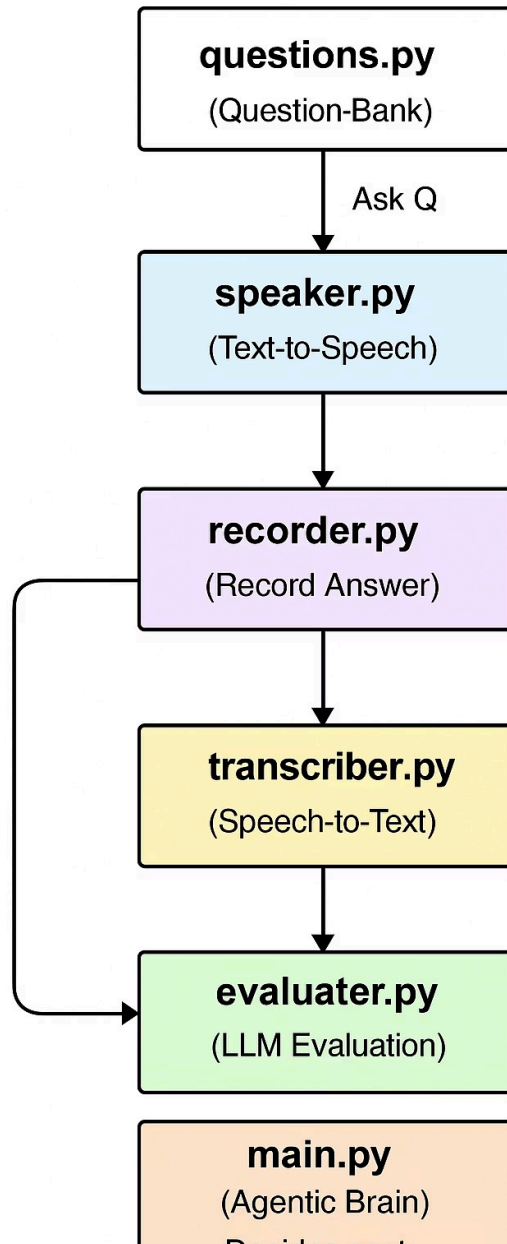
Think

Evaluates answer quality

4

Act

Repeats, gives tips, or moves on



System Architecture

Core components and data flow of the AI Interview Coach system

Workflow Summary

1. Speak question via TTS
2. Record answer with microphone
3. Transcribe answer using Whisper
4. Evaluate answer with LLM
5. Decide to retry, continue, or conclude

File Structure & Responsibilities

| | |
|----------------|------------------------------------|
| main.py | Core loop & logic (agent) |
| questions.py | Interview question bank |
| speaker.py | Text-to-speech (OpenAI/offline) |
| recorder.py | Records user voice |
| transcriber.py | Speech-to-text via Whisper |
| evaluator.py | Feedback & scoring (OpenAI GPT) |
| app.py | Flask API interface |
| config.py | API keys and settings |

Evaluation Strategy

Input

Question asked and transcribed answer

Output

Feedback using LLMs; required answers for Job Roles





Example Run

Question

“Tell me about a recent project you led.”

Answer

User speaks, gets transcribed

Feedback

Good depth, lacked technical details



Benefits

Low Pressure

Practice interviews comfortably

Real-Time Feedback

Intelligent, adaptive responses

Voice Interaction

More realistic and accessible

Scalable

Supports various roles and levels