

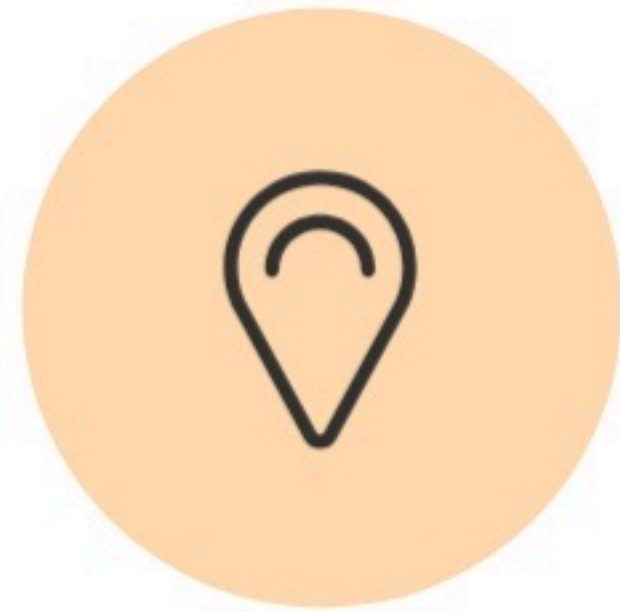


YouTube Video Transcription and Q&A System

System Architecture Overview



Audio Downloader



Whisper Transcriber



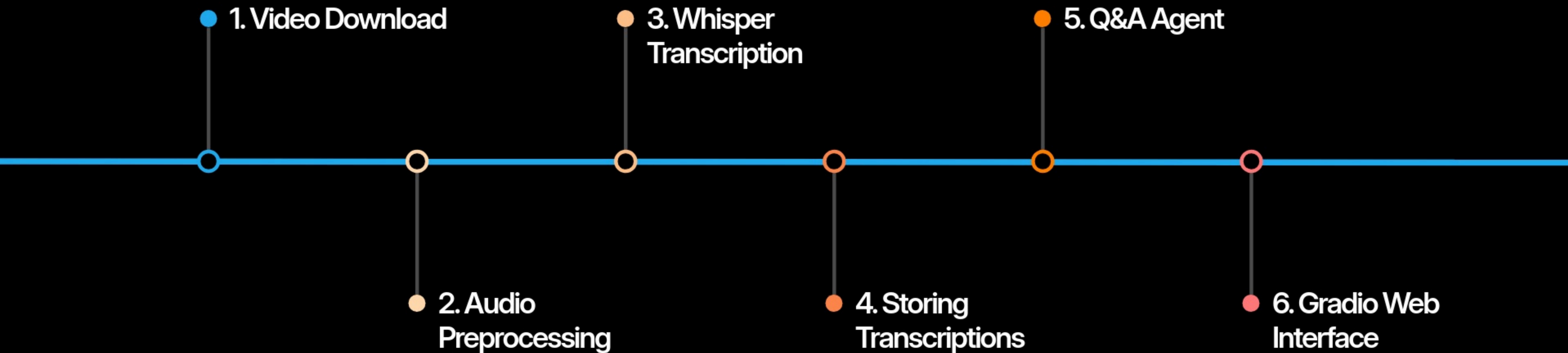
QA Agent



Gradio Web Interface

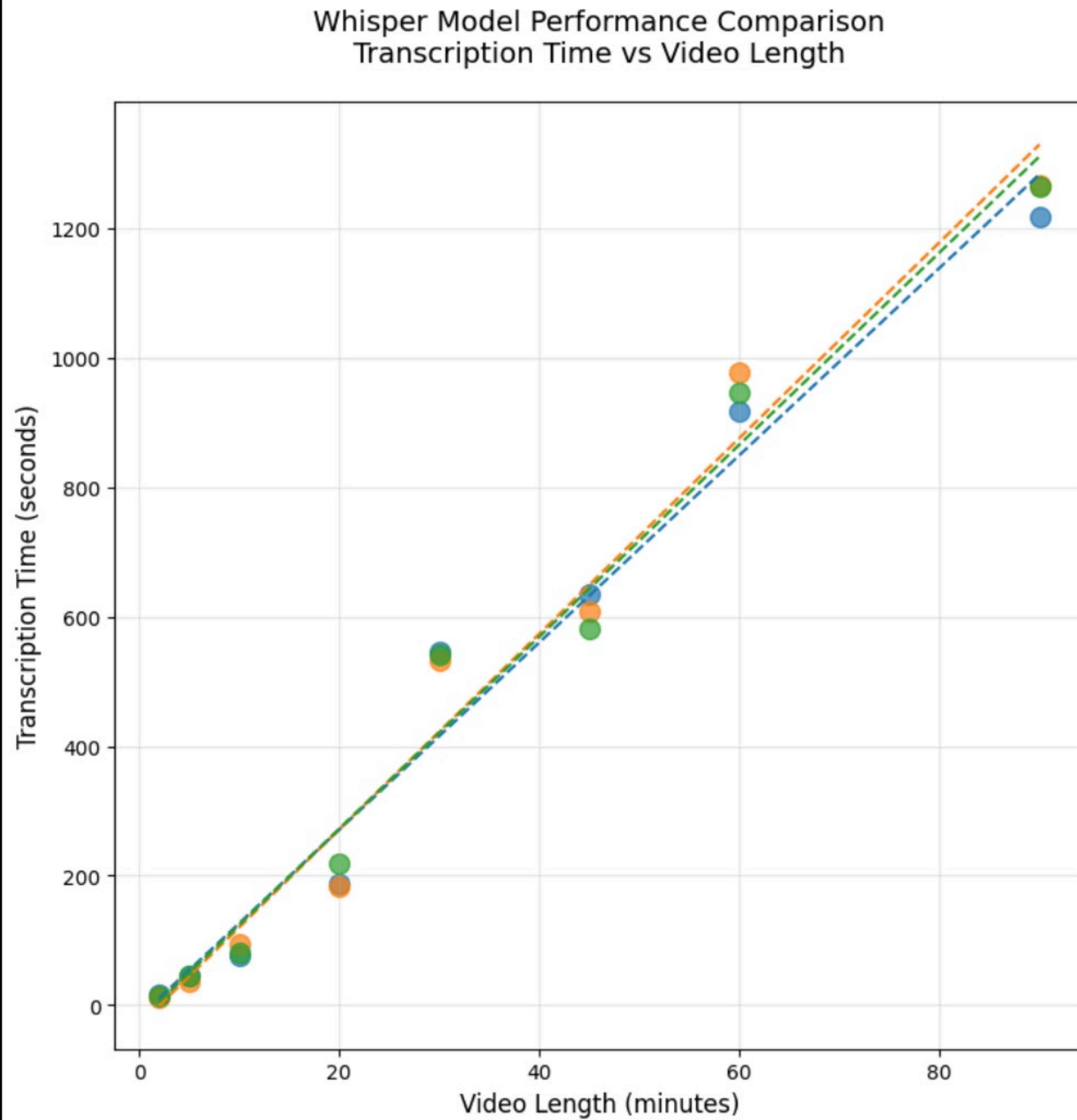
The system architecture is composed of these key components, working together to provide an efficient and comprehensive solution for YouTube video transcription and interactive Q&A.

System Flow Diagram



Performance Evaluation: Whisper Model Comparison

Transcription Time (Seconds)



Evaluation

Stats

Last 7 days

RUN COUNT

43

TOTAL TOKENS

78,100 / \$0.06 ⓘ

MEDIAN TOKENS

1,812

ERROR RATE

5%

% STREAMING

0%

LATENCY

P50: ⌚ 2.72s

P99: ⌚ 6.48s

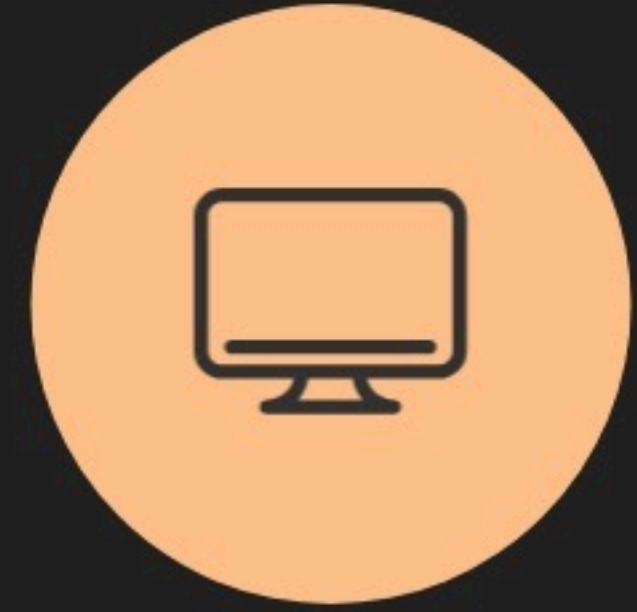
Future Improvements & Live demo



Add cloud support



Enhance Q&A accuracy



Improve user interface

The system meets the project requirements and is a cost-effective solution, with room for future improvements to enhance its capabilities.