Oltre il Chatbot

Costruisci il Tuo Assistente Vocale AI

Who am I?

Giuseppe Spina

Let's just say…

- Start your own business

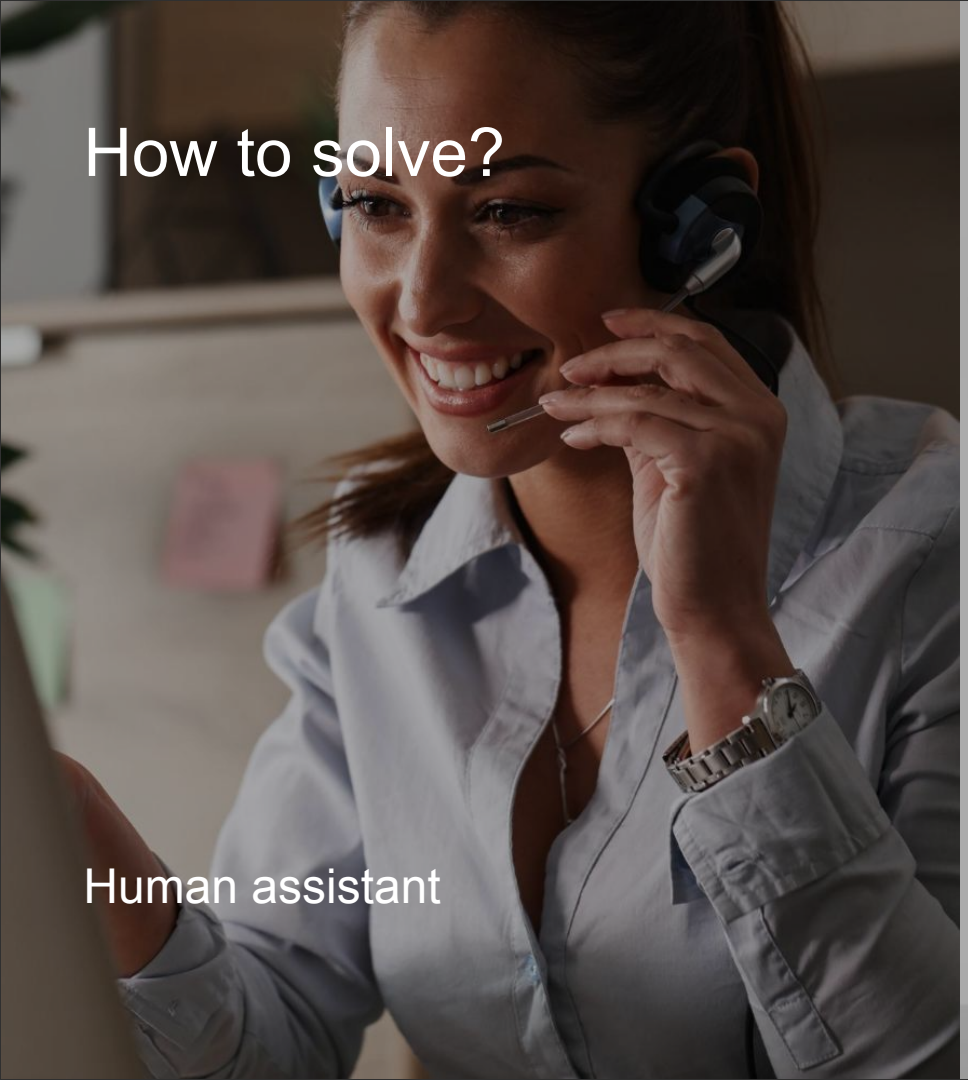
Let's just say…

- Start your own business
- Sales increases

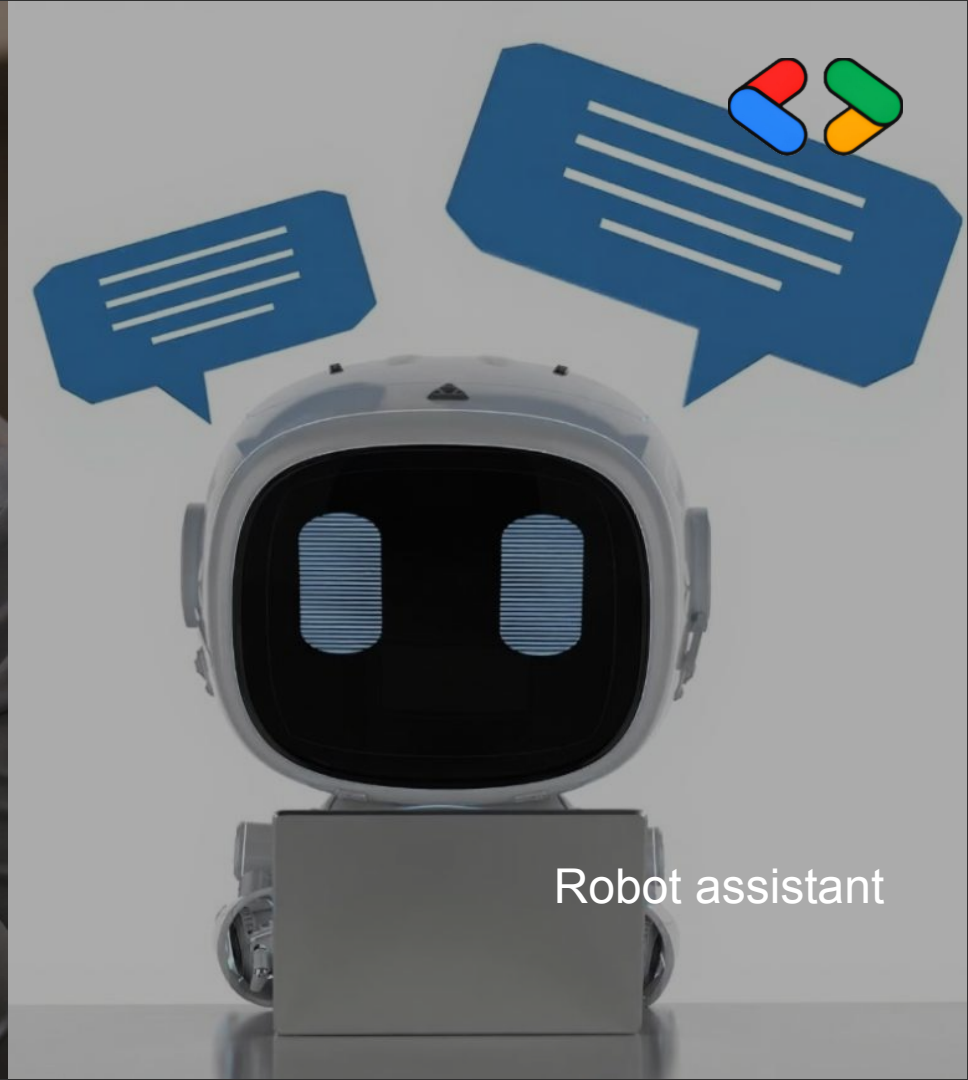
…but

- Always on the PC to solve customer problems

How to solve?



Human assistant

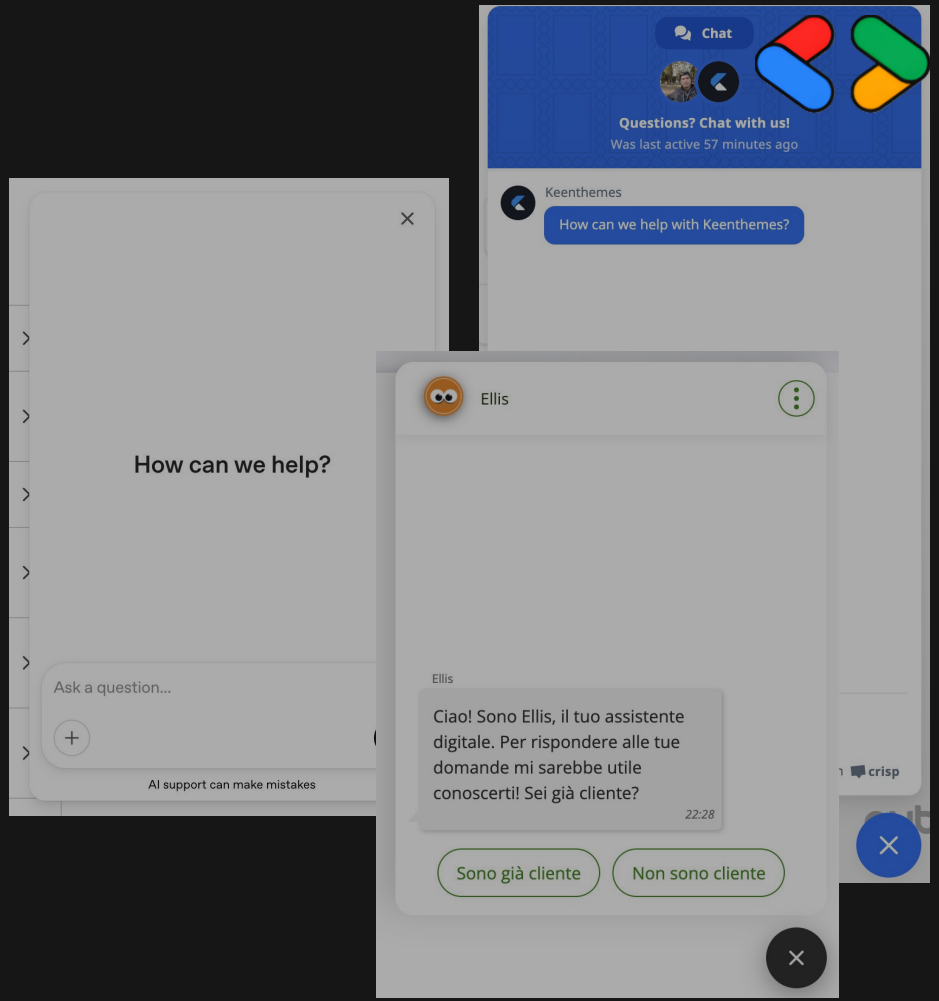


Robot assistant

Common answer: Chatbot

Why:

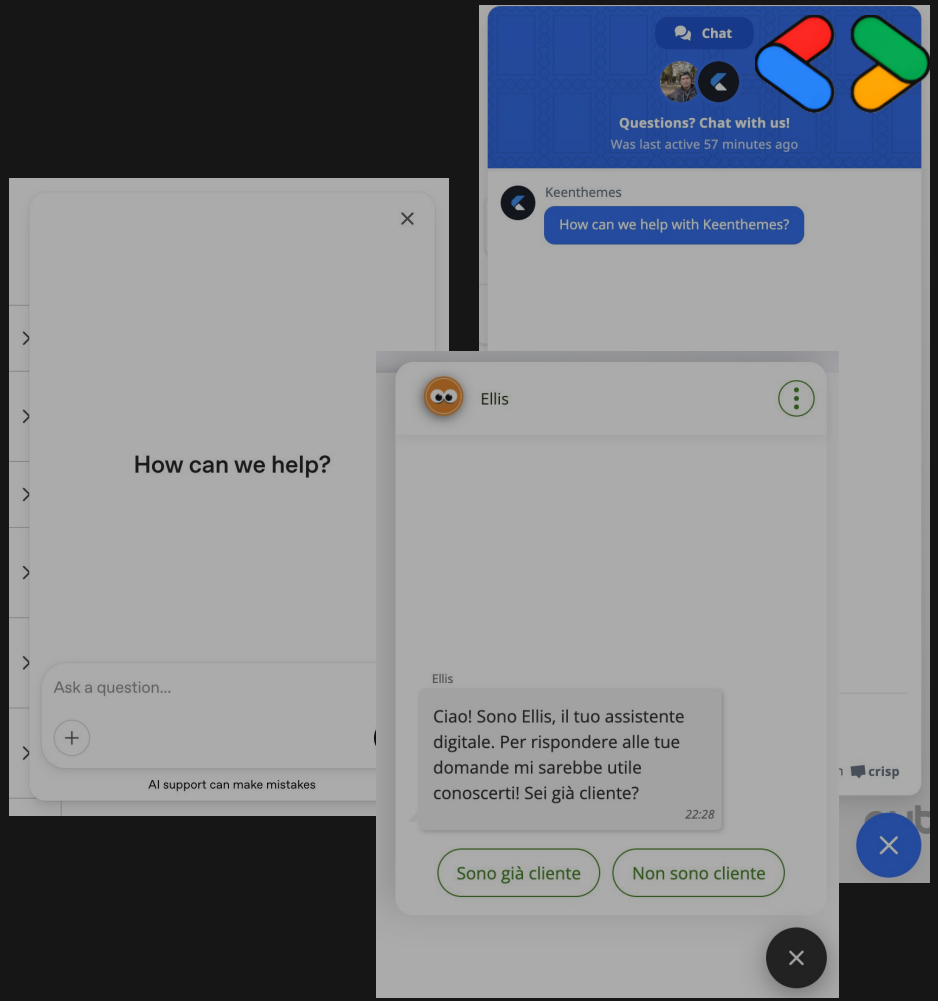
- Cost reduction (30%)



Common answer: Chatbot

Why:

- Cost reduction (30%)
- Active 24/7



Common answer: Chatbot

Why:

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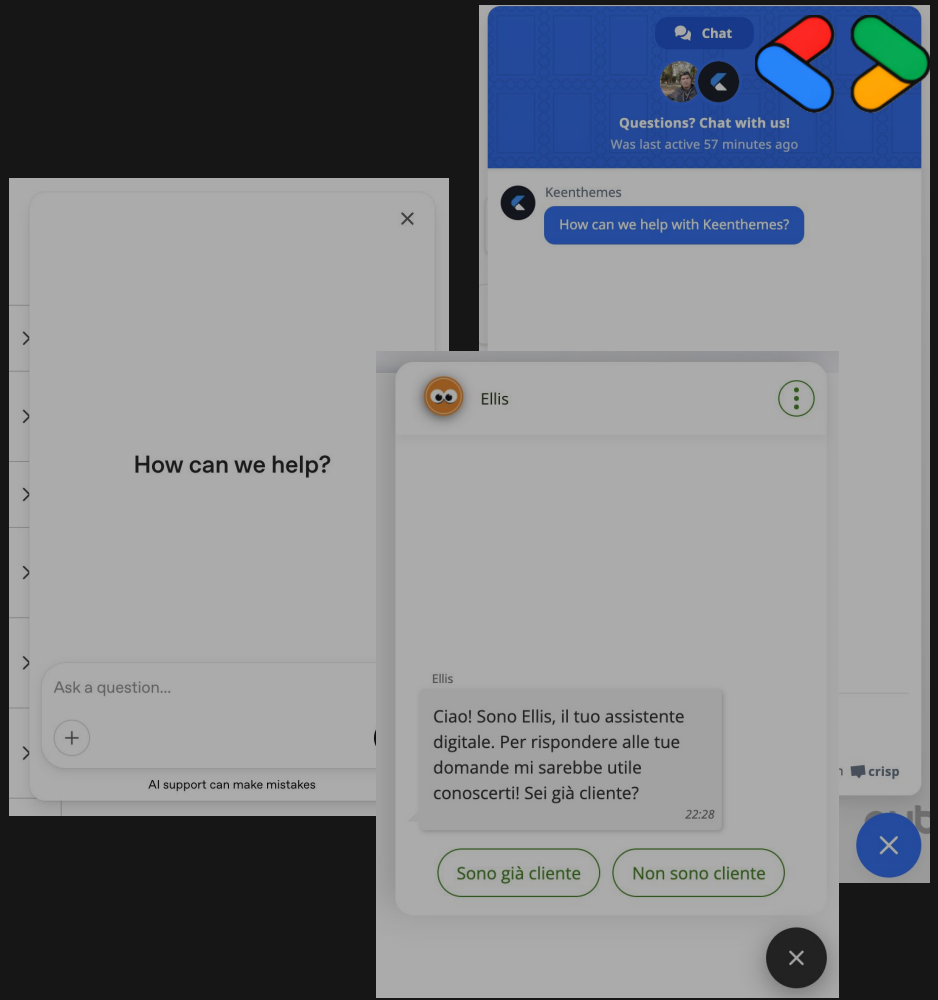
- No waiting for customers

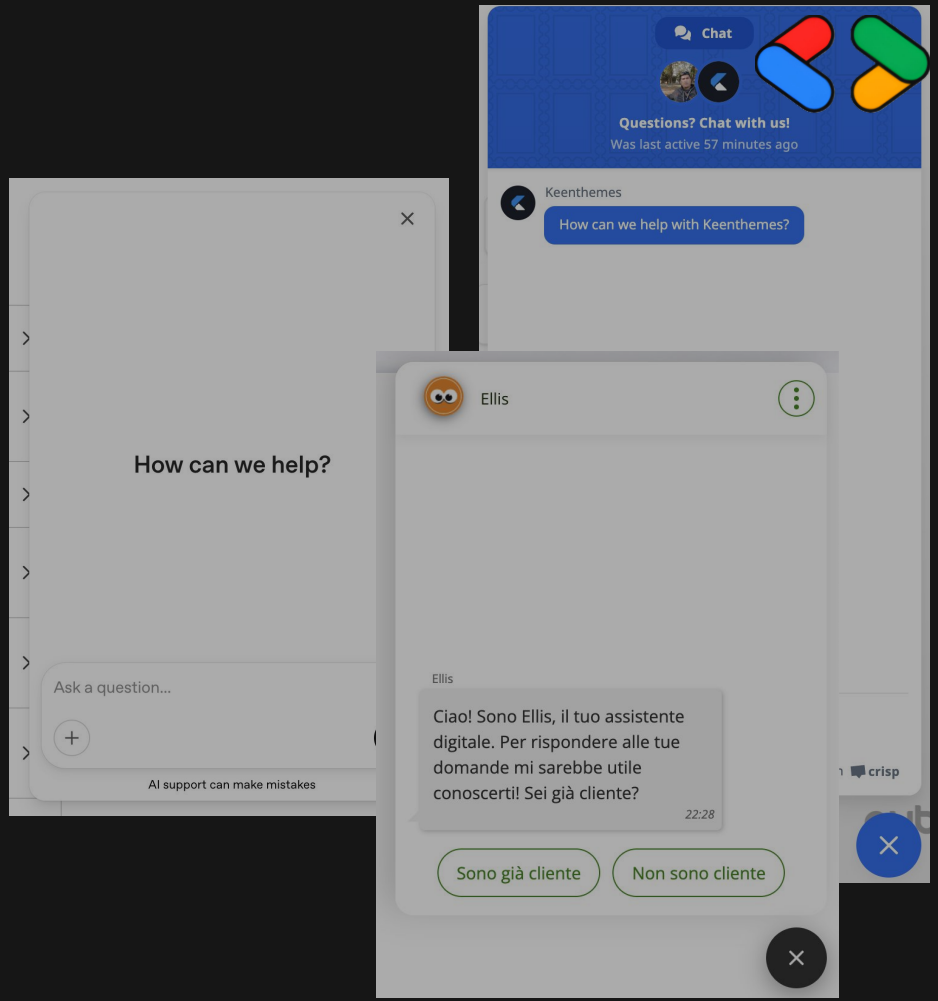


Common answer: Chatbot

Why:

- Cost reduction (30%)
- Active 24/7
- No waiting for customers

Users use them... if they work



“Why don't you understand what I want?”

Problem:

- What are you saying?

“Why don't you understand what I want?”

Problem:

- What are you saying?
- No Context

“Why don't you understand what I want?”

Problem:

- What are you saying?
- No Context

Over **38%** of users hate them for this reason


It's time for evolution

Voice assistant with AI

- Go beyond the limits of chatbots

Voice assistant with AI

- Go beyond the limits of chatbots
- Understands the context well

Voice assistant with AI

- Go beyond the limits of chatbots
- Understands the context well
- More human-like interaction


What makes this magic possible?

Anatomy of our assistant

- Brain: LLM model

Anatomy of our assistant

- Brain: LLM model
- Voice: Websocket

Brain - LLM model

- AI trained on huge amounts of data

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- Understands/generates human language

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- AI trained on huge amounts of data
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This enables the LLM to use the **Context**

Brain - Multimodal LLM Model

- Not just text

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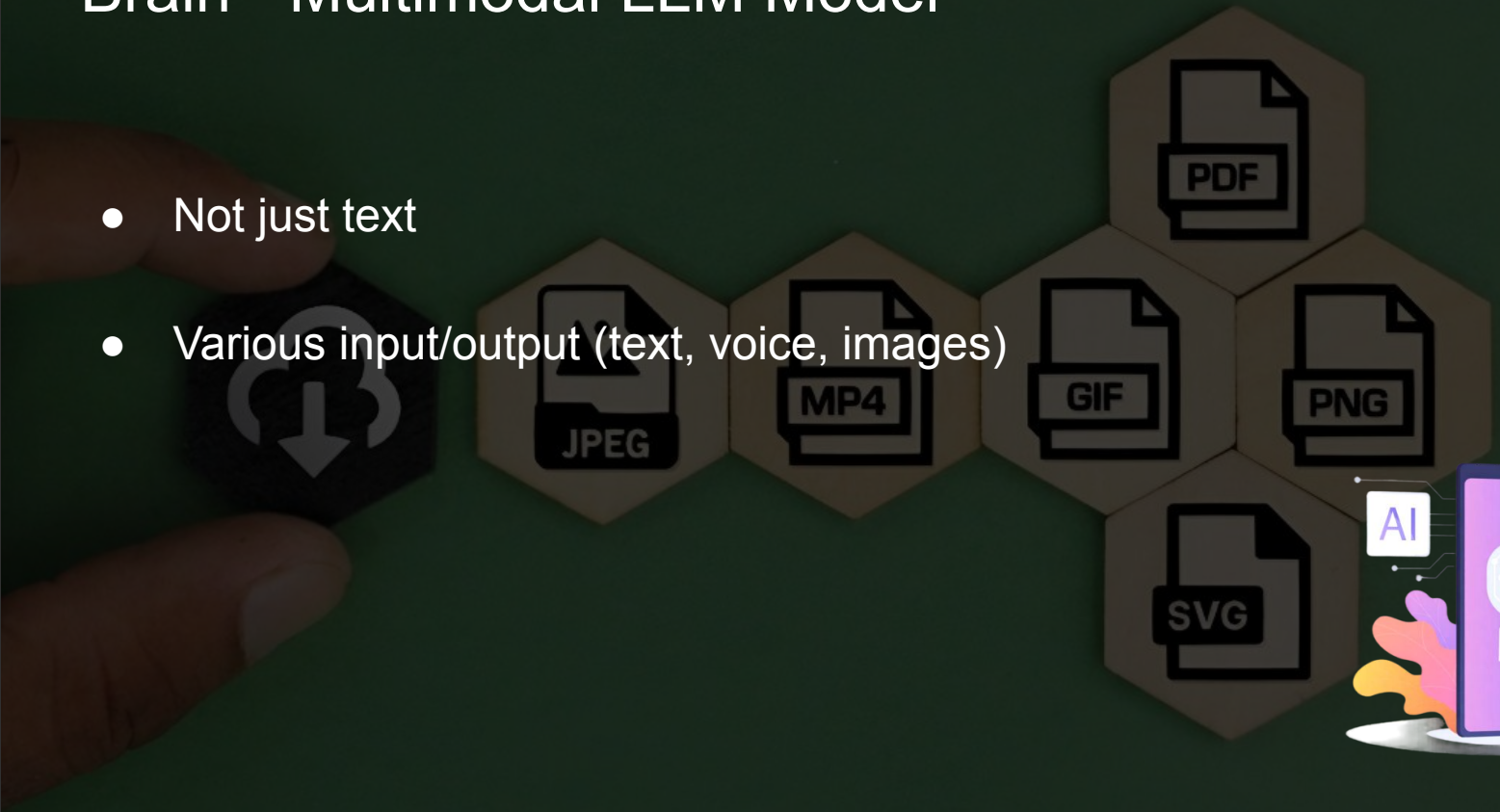
- Not just text
- Various input/output (text, voice, images)



Brain - Multimodal LLM Model

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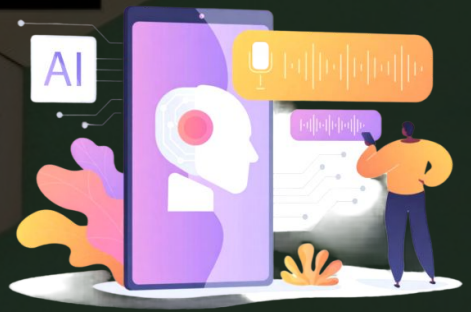


A more **human-like** interaction

Brain - Gemini Live Service

Why:

- Easy integration

Brain - Gemini Live Service

Why:

- Easy integration
- Real-time response

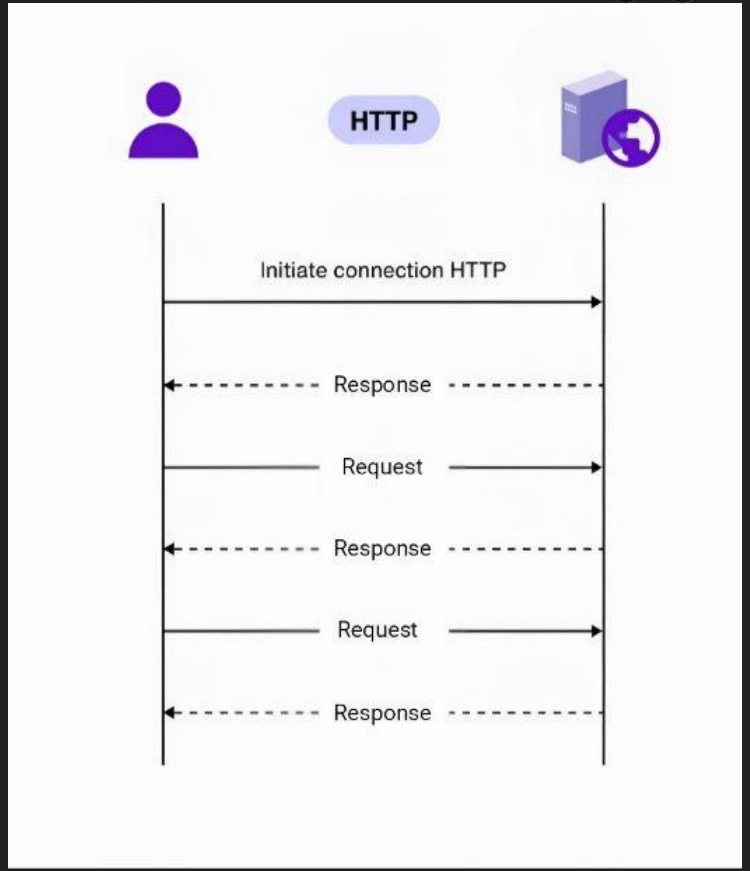
Brain - Gemini Live Service

Why:

- Easy integration
- Real-time response
- Smoother interaction

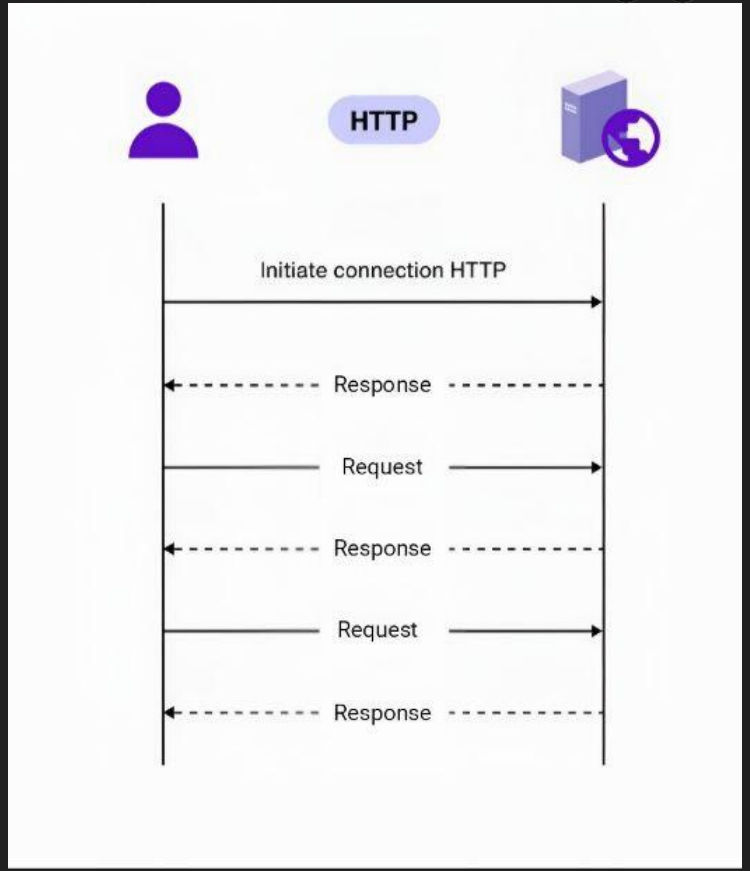
Voice - Websocket

- HTTP
  Request



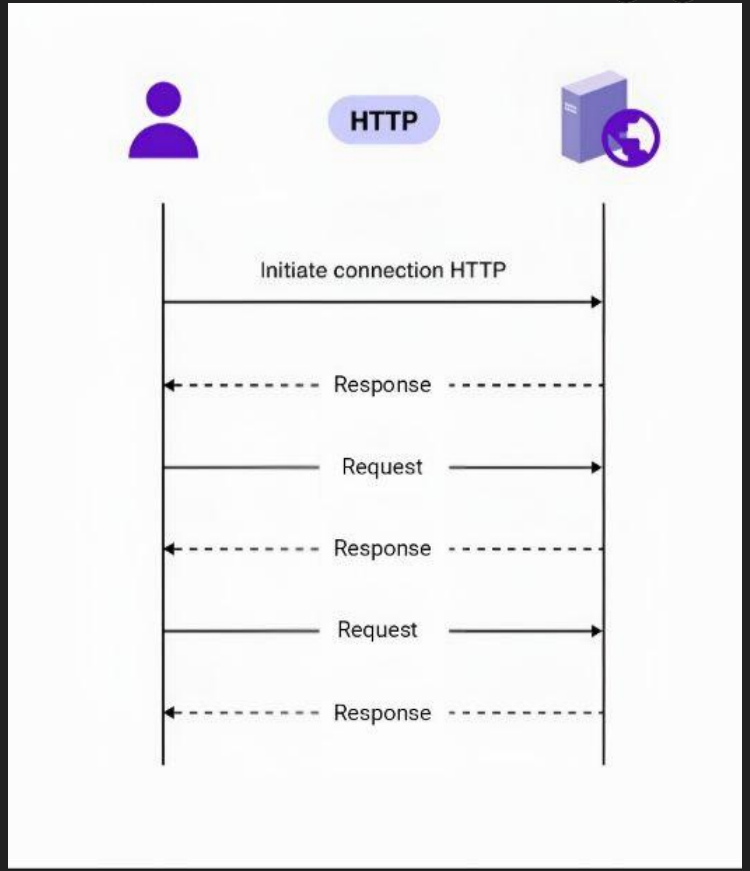
Voice - Websocket

- HTTP
  Request → Response



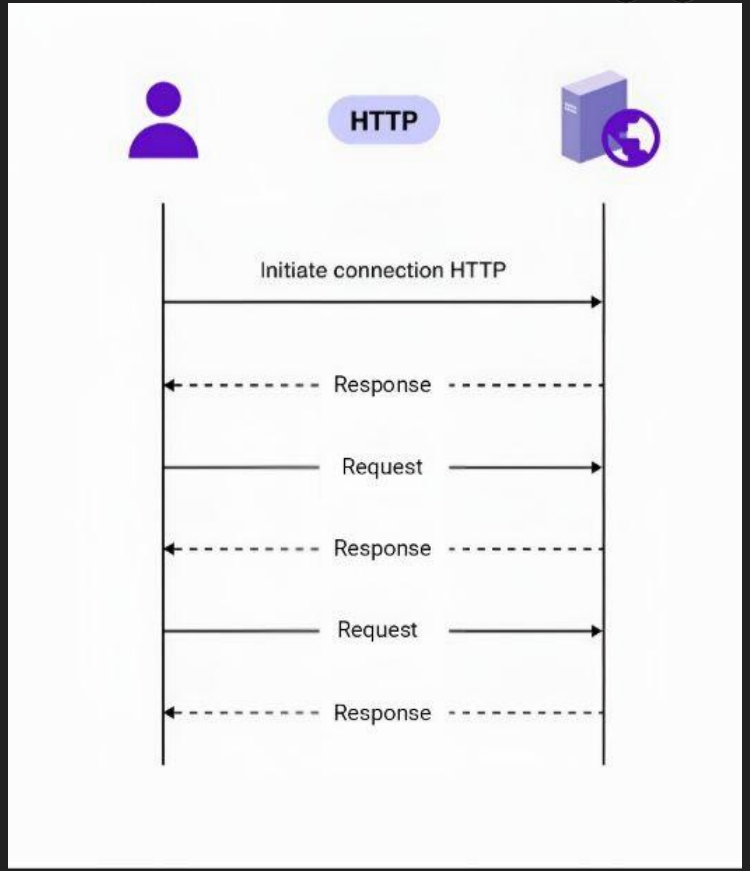
Voice - Websocket

- HTTP
  Request → Response … Request



Voice - Websocket

- HTTP
  Request → Response … Request (etc)
  (**Slow**)



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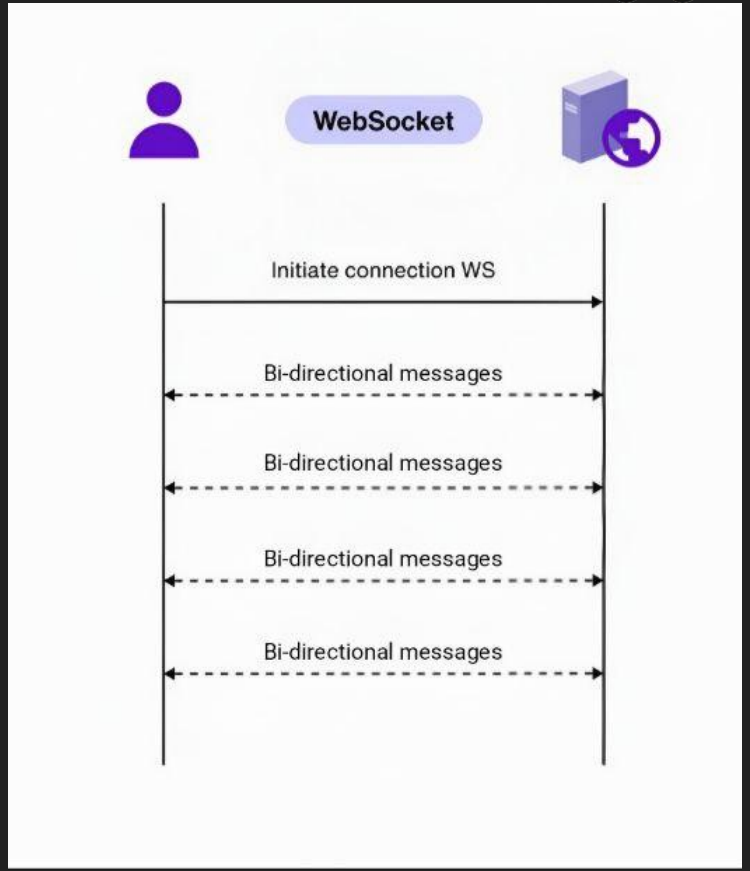
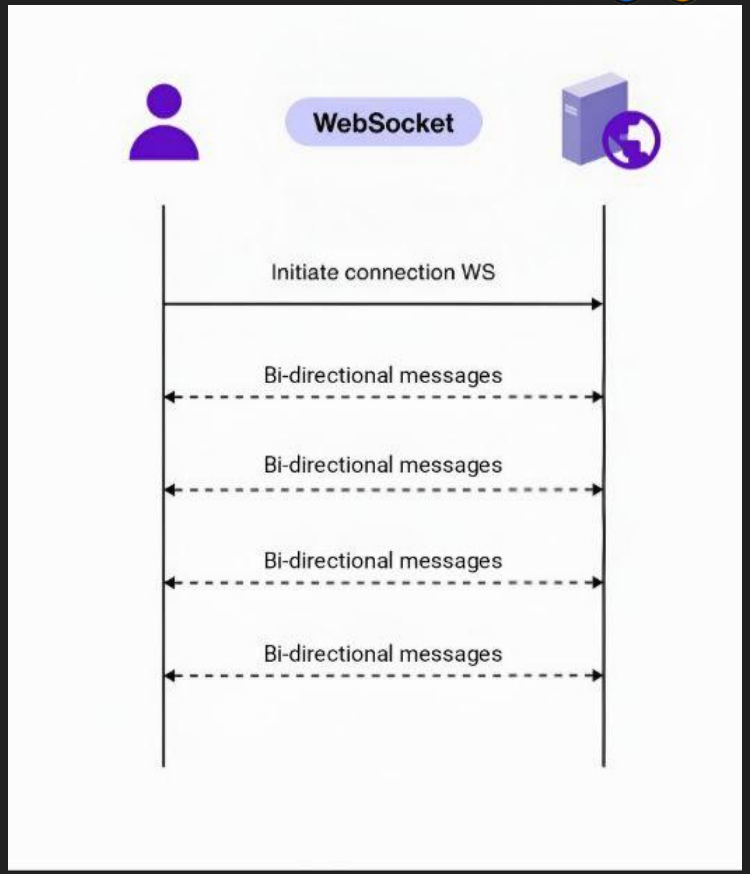


Voice - Websocket

- HTTP
  Request → Response … Request (etc)
  (**Slow**)

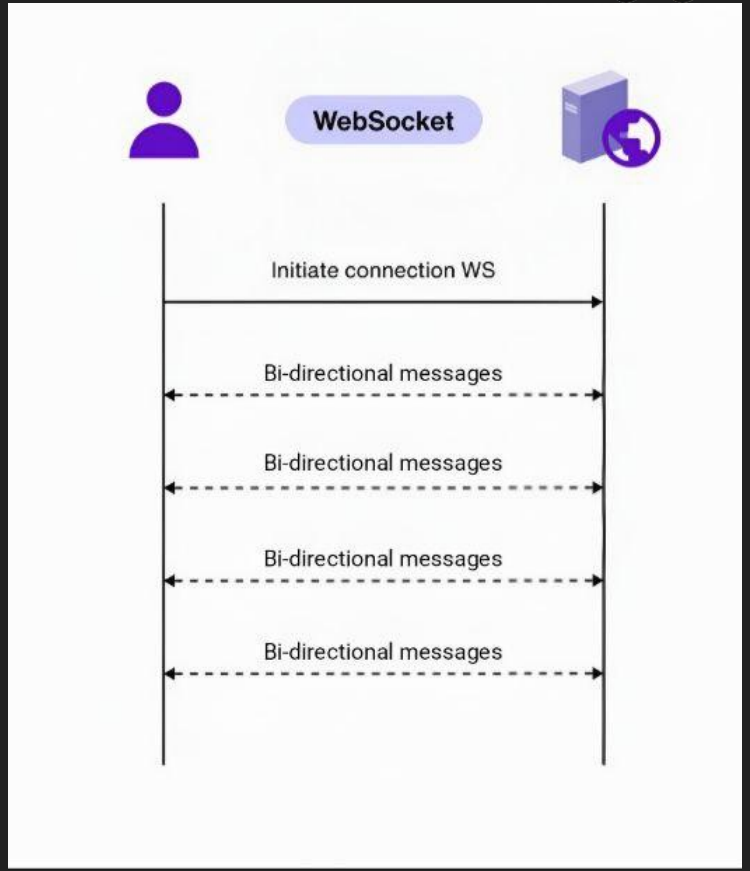
- Websocket
  Always open channel

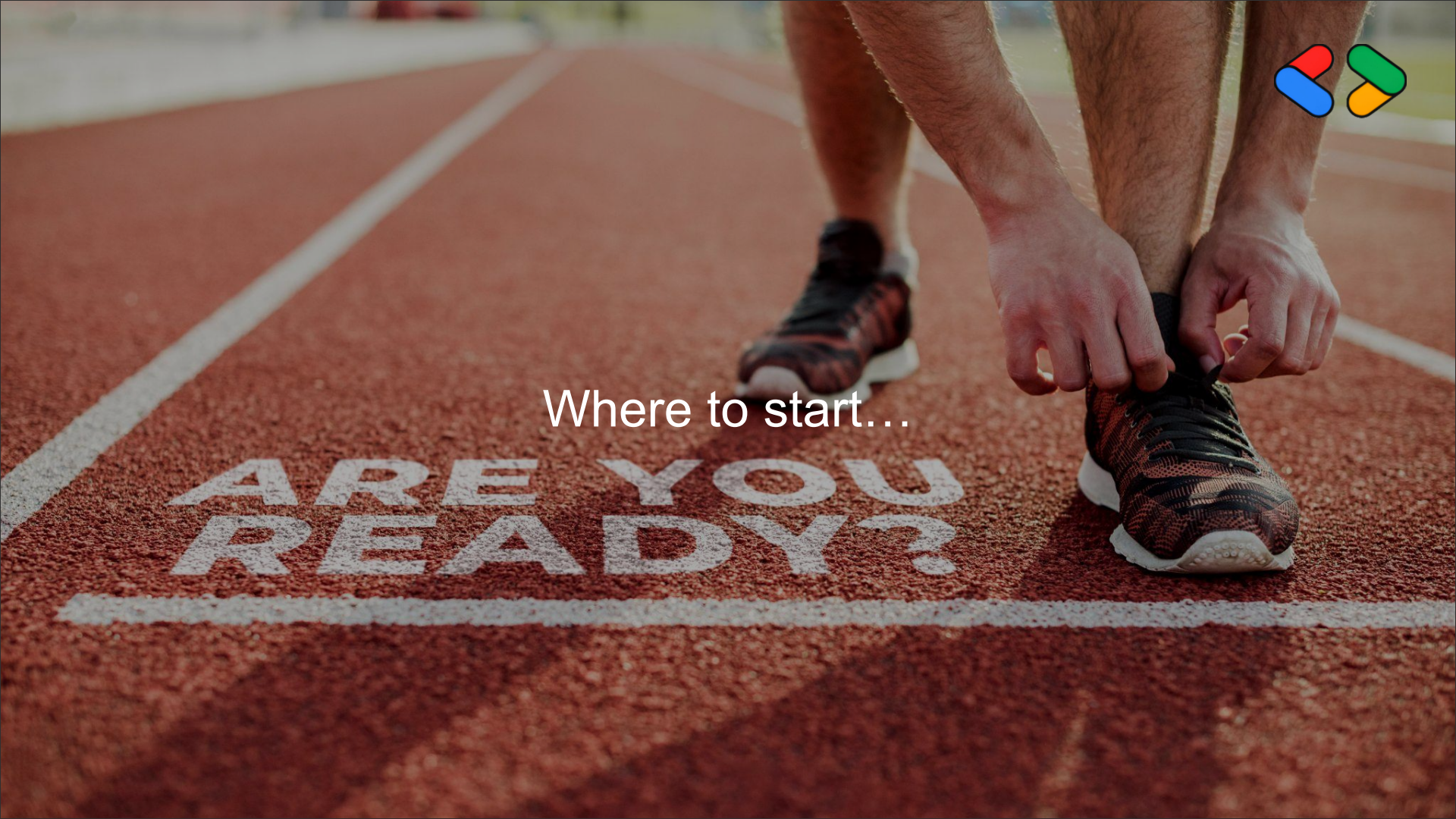


Voice - Websocket

- HTTP
  Request → Response … Request (etc)
  (**Slow**)

- Websocket
  Always open channel
  (**Instantaneous**)





Where to start…

…with useless information

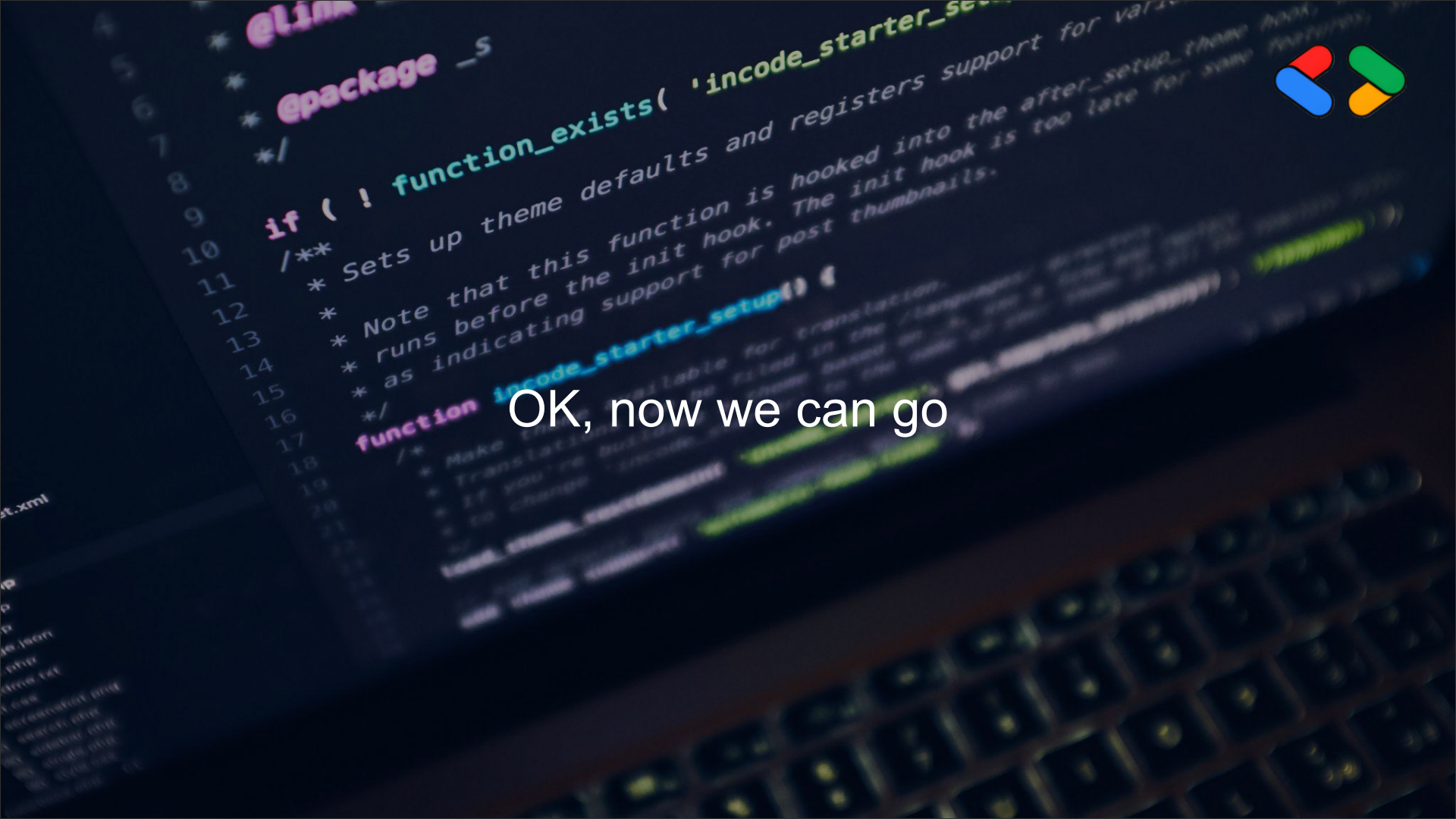
- Google API KEY

… but first, useless information

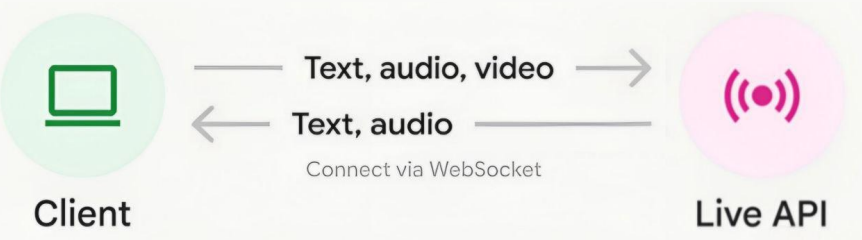
- Google API KEY
- Models list

… but first, useless information

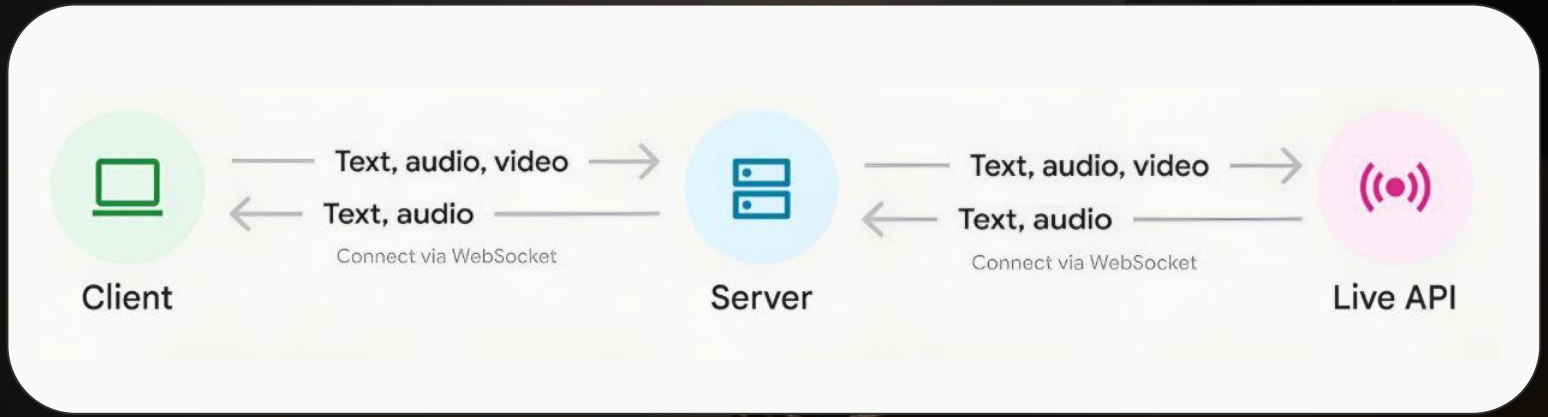
- Google API KEY
- Models list
- Google Live Doc


OK, now we can go

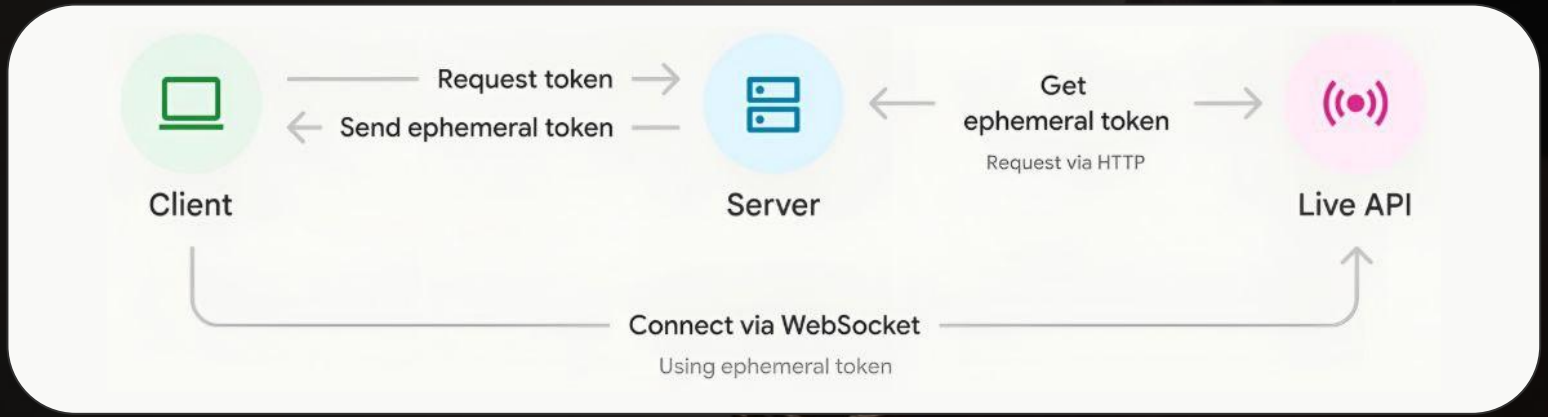
Client - Gemini solution



Client - Server - Gemini solution



Ephemeral token solution



Thank you for your attention

Leave me some feedback if you like

Github Repo