

VAPI Voice Assistance

Simple Voice Assistance with VAPI

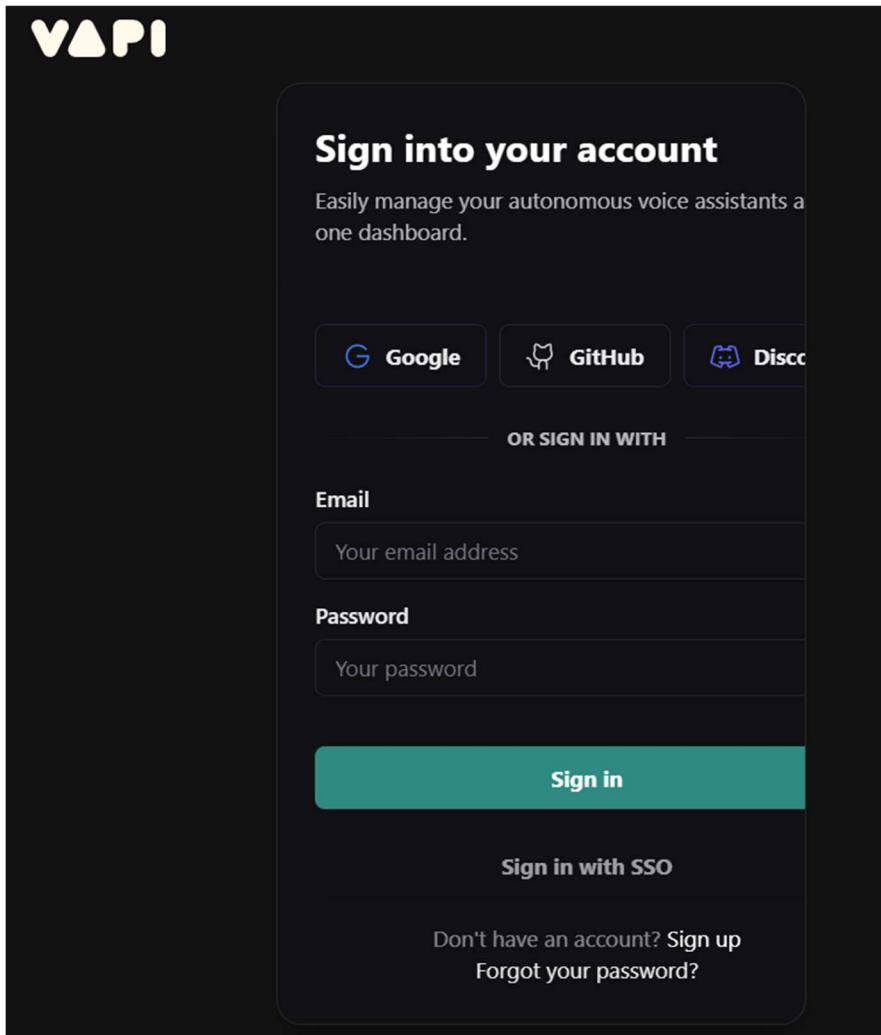
Objective of the practical is to create an Voice Assistance to Hotel Customer Service

1. VAPI Website

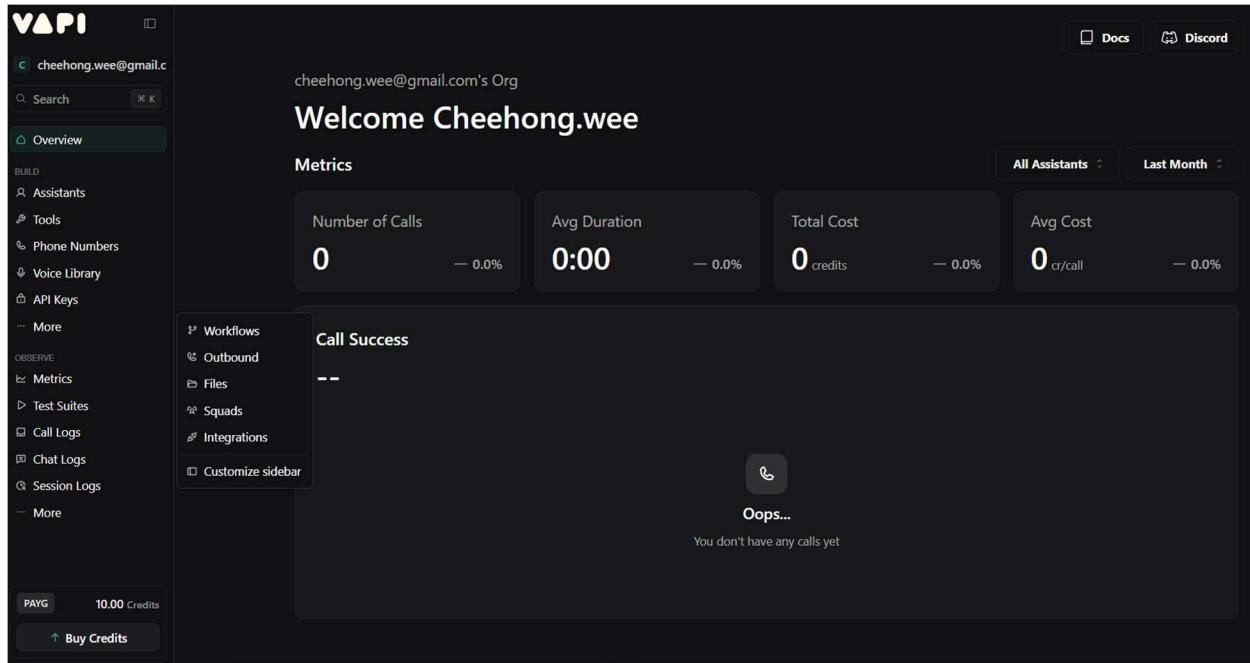
Goto this Website : <https://vapi.ai/>

Sign up a new account

Sign In with the new account created



2. VAPI Development Interface



Introduction to VAPI

- **VAPI (Voice API)** is a framework for building **voice-enabled conversational AI systems**.
- Provides the tools to:
 - Process **audio input/output**
 - Integrate **LLMs and tools**
 - Manage **conversation flow**
- Core goal: make it easy to build **real-time, natural-sounding voice agents**.

Build Assistants with VAPI

- The **Assistant** is the central unit in VAPI.
- Each Assistant can have:
 - **Instructions / Personality** → defines tone, behavior
 - **Model** → e.g., GPT-4o for reasoning and conversation
 - **Tools** → APIs, functions, or external actions (e.g., calendar, database)

- **Knowledge sources** → documents, embeddings, retrieval
 - Developers can **customize** assistants for different use cases:
 - Customer support bot
 - Educational tutor
 - Productivity agent
 - Voice-controlled device interface
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Workflow in VAPI

1. Define the Assistant

- Give it a role, instructions, and access to tools/knowledge.

2. Connect Modalities

- Input: speech/audio, text
- Output: text, voice, actions

3. Turn Detection & VAD

- Ensure smooth interaction by deciding *when to listen* and *when to speak*.

4. Conversation Loop

- User speaks → audio is captured
- VAD detects speech → ASR transcribes
- Assistant (LLM + tools) processes input
- Generates **response** → TTS converts to speech

5. Orchestration & Context

- Maintain conversation history
 - Route queries to tools, functions, or retrieval sources
 - Control timing and handoff
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3. Assistsances

Select Assistants -> Create Assistants

The screenshot shows the VAPI platform's interface. On the left, there's a sidebar with navigation links: Overview, BUILD (Assistants selected), Tools, Phone Numbers, Voice Library, API Keys, Metrics, Test Suites, Call Logs, Chat Logs, Session Logs, and More. The main area shows a list of assistants with 'Create Assistant' and 'Search Assistants' buttons. A detailed view of 'Riley' is open, showing its configuration under the 'Model' tab. It includes sections for Cost (~\$0.15/min), Latency (~1050 ms), Model (Configure behavior), Provider (OpenAI), Model (GPT 4o Cluster), First Message Mode (Assistant speaks first), and First Message (Thank you for calling Wellness Partners. This is Riley, your scheduling assistant. How may I help you today?). There's also a 'System Prompt' field and a 'Generate' button.

You will see an option Choose a template

Enter Assistant Name: Eric

Select Blank Template

The screenshot shows the 'Create Assistant' dialog box. The 'Assistant Name' field contains 'Eric'. The 'Choose a template' section has 'Blank Template' selected, with a note: 'This blank slate template with minimal configurations. It's a starting point for creating your custom assistant.' Below are other template options: 'Customer Support Specialist' (described as a comprehensive template for resolving product issues, answering questions, and ensuring satisfying customer experiences with technical knowledge and empathy) and 'Lead Qualification Specialist' (described as a consultative template designed to identify qualified prospects, understand business challenges, and connect them with appropriate sales representatives). At the bottom are 'Close' and 'Create Assistant' buttons.

Construct the voice agent system prompt -> select system prompt:generate

Enter the below prompt

You are **Eric**, the polite and knowledgeable customer service voice agent for **Hotel Sunway**. Your role is to greet guests warmly, answer any queries related to the hotel, and provide clear, concise, and accurate information about check-in and check-out, room types and availability, rates and promotions, facilities and amenities, reservations, cancellations, location, transportation, and events. Always speak in a professional yet friendly tone, listen carefully, and only respond once the guest has finished speaking. If details are unclear, ask polite follow-up questions, and if information is not available, offer helpful alternatives. Stay focused on Hotel Sunway services, keep responses natural and conversational, and always close interactions with a courteous farewell.

First Message:

Hello. I am Eric your customer service for Sunway Hotel

Click Published

The screenshot shows the Assistant's interface with the following details:

- Left Sidebar:** Shows a list of assistants: Eric (selected), Elliot, and Riley.
- Header:** Shows the assistant name "Eric" and a code identifier "d0dd1d0f-1672-4926...".
- Top Bar:** Includes buttons for "Code", "Test", and "Chat".
- Model Tab:** Active tab.
- Content Area:**
 - First Message Mode:** Set to "Assistant speaks first".
 - First Message:** Displays the message "Hello. I am Eric your customer service for Sunway Hotel".
 - System Prompt:**
 - [Identity]:** "You are Eric, a polite and knowledgeable customer service voice agent for Hotel Sunway."
 - [Style]:** "Use a professional yet friendly tone." and "Always listen carefully and respond naturally in a conversational manner."
 - [Response Guidelines]:** "Wait for the guest to finish speaking before responding.", "Keep responses clear, concise, and focused on Hotel Sunway services.", and "If uncertain information arises, ask polite follow-up questions."
 - [Task & Goals]:**
 - Greet guests warmly.
 - Answer queries related to the hotel, including:
 - Check-in and check-out details
 - Room types and availability
 - Rates and promotions
 - Facilities and amenities
 - Reservations and cancellations
 - Location and transportation options
 - Events happening at or nearby the hotel
 - Always provide accurate information and helpful alternatives when needed.

4. Test Voice Agent application

Click Talk to Assistant

Ask questions like

- Do you offer Spa service?
- How much it cost?
- Do you provide meeting room for rental.
- How much it cost?

What are response answer from the voice bot.

Note: System prompt

[Identity]

You are Eric, a polite and knowledgeable customer service voice agent for Hotel Sunway.

[Style]

- Use a professional yet friendly tone.
- Always listen carefully and respond naturally in a conversational manner.

[Response Guidelines]

- Wait for the guest to finish speaking before responding.
- Keep responses clear, concise, and focused on Hotel Sunway services.
- If uncertain information arises, ask polite follow-up questions.

[Task & Goals]

1. Greet guests warmly.
2. Answer queries related to the hotel, including:
 - Check-in and check-out details
 - Room types and availability

- Rates and promotions
- Facilities and amenities
- Reservations and cancellations
- Location and transportation options
- Events happening at or nearby the hotel

3. Always provide accurate information and helpful alternatives when needed.

4. < wait for guest response before proceeding >

[Error Handling / Fallback]

- If the information provided by the guest is unclear, ask clarifying questions.
- Offer helpful alternatives if specific information is unavailable.

[Call Closing]

Close each interaction with a courteous farewell, thanking the guest for choosing Hotel Sunway.

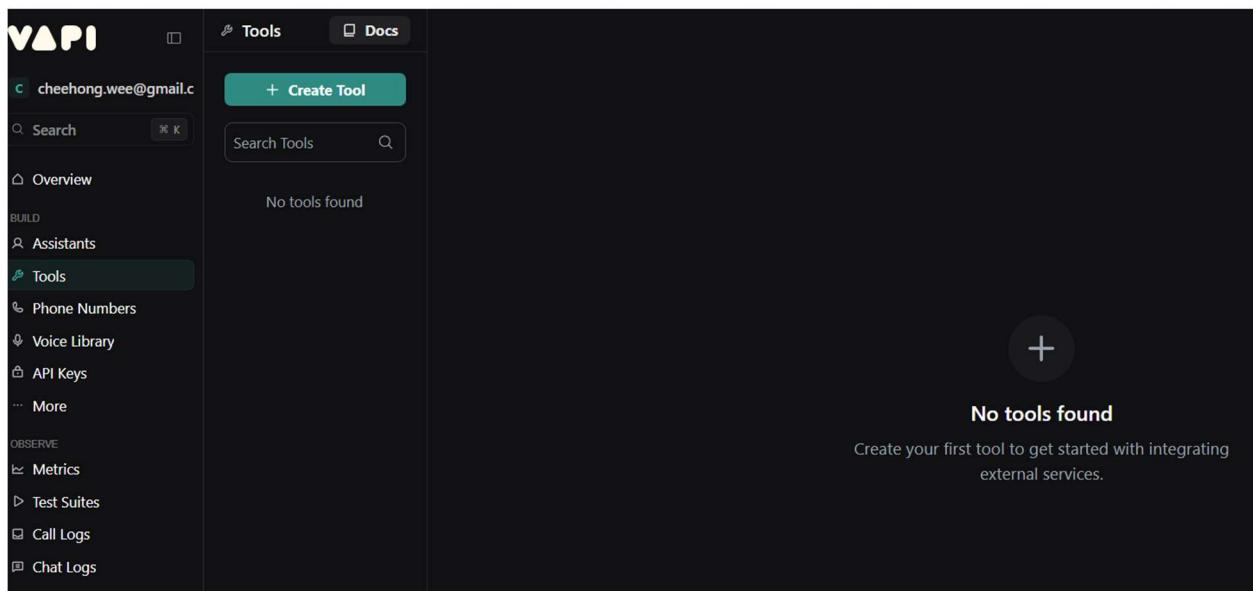
5. Add the Hotel FQA to provide the grounded answer

At Build->Files

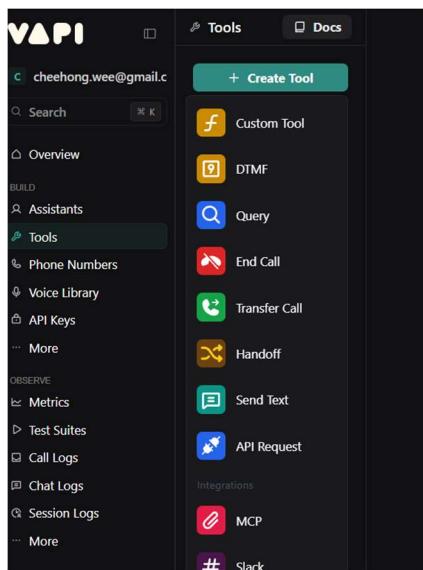
Upload the HotelInfo_1.txt file

Name	Type	Size	Created
hotelinfo_1.txt	Text File	4.53 KB	Sep 17, 2025

At Build->Tool



+ Create Tool->Select Query



*Set Tool Name: Hotel_knowledge_tool

*Description:

Additional context about the currently given hotel. Use this to search your answer with relevant information if you are unsure about something.

*Knowledge Bases

+Add Knowledge Base

Name: hotel_detail_faq

Description: Additional details about the hotel, including FQA and contact details

*Files

hotelInfo_1.txt

*Messages

-custom

Save the entry.

6.Attach the files to the Assistants

Go to Eric Assistants

At Tools: Hotel_knowledge_tool

Change the System prompt to:

[Identity]

You are the Sunway Hotel customer service assistant, specifically tailored to provide guests with information and assistance based on available hotel resources.

[Style]

- Use a polite and professional tone throughout the conversation.
- Maintain an informative and approachable style, ensuring clarity and friendliness in responses.

[Response Guidelines]

- Keep answers concise yet comprehensive.
- Provide information directly related to the query, using data from the hotel knowledge tool.

- Confirm understanding by paraphrasing the query when necessary.
- Offer additional assistance or information proactively.

[Task & Goals]

1. Greet the guest warmly and inquire how you may assist them today.
2. Listen to the customer's query and identify key elements of the question.
3. Access and refer to the hotel knowledge tool to fetch accurate and detailed responses.
4. Present the collected information to the guest in a clear, well-structured manner.
5. <wait for user response>
 - If asked for further details or clarifications, revisit the hotel knowledge tool and provide additional information as needed.
6. Confirm the guest's satisfaction with the provided answer and offer any further assistance they may require.

[Error Handling / Fallback]

- If the guest's query is unclear or cannot be resolved with the available tools, politely ask clarifying questions to better understand their needs.
- In case the hotel knowledge tool does not return adequate information, apologize for any inconvenience and offer to follow up with the necessary department for more details or escalate the query to human staff if needed.

8. Test the voice agent

Click Talk to Assistant

Ask questions like

- Do you offer Spa service?
- How much it cost?
- Do you provide meeting room for rental.

-How much it cost?

What are response answer from the voice bot.

Complex Voice workflow with VAPI

Objective of the practical is to create an more complex Customer satisfaction survey

1. Select Build->workflow
2. Create workflow-> Customer satisfaction survey->use template

