

# Gemini API Developer Competition

## PolyTalk AI ChatBot.

Designed and developed by **Suresh Kumar Thulasi Ram**

**PolyTalk AI** : is a cutting-edge AI-driven platform designed to provide multilingual communication and support. It offers real-time, intelligent, and context-aware responses in multiple languages, making it ideal for global audiences. Key features include:

**PolyTalk AI** : is a chatbot designed with a rule-based approach, specifically focused on **health symptoms**. It uses a predefined set of FAQ questions and answers, structured in a JSON format, to provide accurate and context-specific responses. PolyTalk AI strictly adheres to these health-related topics and provide that answer specifically; if a user asks about anything outside of this scope, the chatbot will default to providing generic answers.

Note: Rule based JSON Data available in the link for ready reference.

**Username:** google    **Password:** google@123

**Generic Questions** and **Rule-Based Questions** are two different approaches used in designing AI models, particularly in the context of chatbots, FAQs, and customer support systems.

### 1. Generic Questions:

- **Definition:** Generic questions are broad, open-ended, or common queries that can be asked in many different contexts. The answers to these questions are often not tied to specific rules or contexts and may require more general or flexible responses.
- **Examples:**
  - "What is the weather today?"
  - "How are you?"
  - "Tell me a joke."
- **Handling:** AI systems often use natural language processing (NLP) and machine learning models to handle generic questions. These systems may pull information from large databases, or even generate responses on the fly based on the context and intent of the question.

### 2. Rule-Based Questions:

- **Definition:** Rule-based questions are specific queries that are answered based on predefined rules or logic. These rules are often created manually and are designed to address particular scenarios or topics. The answers are consistent and based on the structure or content of the query.
- **Examples:**
  - "What are the office hours on Monday?" (Rule: Match the day with a specific time range)
  - "What is the return policy for electronics?" (Rule: Provide a predefined response based on the product category)

- "How do I reset my password?" (Rule: Trigger a specific, detailed response or procedure)
- **Handling:** Rule-based systems rely on if-then-else logic, regular expressions, or decision trees to match questions with appropriate responses. These systems are often used in environments where consistent, accurate answers are required, such as in technical support or customer service FAQs.

**PolyTalk AI** is a chatbot designed with a rule-based approach, specifically focused on health symptoms.

It uses a predefined set of FAQ questions and answers, structured in a JSON format, to provide accurate and context-specific responses. PolyTalk AI strictly adheres to these health-related topics; if a user asks about anything outside of this scope, the chatbot will default to providing generic answers.

## Special Features in PolyTalk AI ChatBot

1. **Multilingual Support:** Engage users in their **ANY** preferred language. (**All the FOREIGN Languages** for generic questions and answer)
2. **Customizable FAQs:** Tailored responses to **FAQ (RULE BASED Model)** specific queries in Six foreign languages **English, French, Spanish, Japanese, German** and **Italy** at present. *(This feature addresses the challenges of similar scripts and linguistic nuances across languages, ensuring accurate and context-aware responses. While still working through these complexities, the model is designed to adapt and improve as new challenges are identified and overcome.).*
3. **AI-Powered Responses:** Natural and conversational interactions.
4. **User-Friendly Interface:** Easy navigation and interaction.
5. **Real-Time Interaction:** Instant responses to user queries.
6. **PDF and Text Query Handling:** Extract and respond to content from uploaded PDFs.
7. **Image and Video Response:** Provide answers with visual and multimedia content.

**There are **four** types of the **Questions pattern** for the **RULE BASED FAQ Model**.**

- I. **Firstly Frequently Asked Questions (FAQ)** a rule based chatbot will give **Answer** when you COPY and paste or key in any of these questions in English, Spanish, French, Italy, Japanese and German Languages.
- II. **Secondly Key word Responses (KR)** a rule based chatbot will give **Answer** when you COPY and paste or key in any of these Keywords in English, Spanish, French, Italy, Japanese and German Languages.
- III. **Thirdly Common Phrases (KR)** a rule based chatbot will give **Answer** when you COPY and paste or key in any of these common phrases like hi , help etc., in English, Spanish, French, Italy, Japanese and German Languages.
- IV. **Finally exit commands (KR)** a rule based chatbot will give **exit note** when you COPY and paste or key in any of these exit commands like goodbye , bye etc., in English, Spanish, French, Italy, Japanese and German Languages.

## ## English

### \*\*FAQ Questions:\*\*

1. What are the symptoms of the flu?
2. What are the symptoms of COVID-19?
3. How can I treat a common cold at home?
4. What are the symptoms of strep throat?
5. How can I prevent seasonal allergies?
6. What are the symptoms of sinusitis (sinus infection)?

### \*\*Keyword Responses:\*\*

1. symptoms of the flu
2. symptoms of COVID-19
3. treat a common cold at home
4. symptoms of strep throat
5. prevent seasonal allergies
6. symptoms of sinusitis (sinus infection)

### \*\*Common Phrases:\*\*

1. thank you
2. hello
3. hi
4. help
5. help me
6. I need help

### \*\*Exit Commands:\*\*

1. quit
2. exit
3. goodbye
4. bye
5. later
6. stop

## ## Spanish

### \*\*FAQ Questions:\*\*

1. ¿Cuáles son los síntomas de la faringitis estreptocócica?
2. ¿Cómo puedo prevenir las alergias estacionales?
3. ¿Cuáles son los síntomas de la sinusitis (infección de los senos nasales)?
4. ¿Cómo puedo aliviar la acidez de estómago?
5. ¿Cuáles son los síntomas de una infección del tracto urinario (ITU)?
6. ¿Cómo puedo prevenir las infecciones de oído?

### \*\*Keyword Responses:\*\*

1. síntomas de la gripe
2. síntomas de COVID-19
3. tratar un resfriado común en casa
4. síntomas de la faringitis estreptocócica
5. prevenir las alergias estacionales
6. síntomas de la sinusitis (infección de los senos paranasales)

### \*\*Common Phrases:\*\*

1. gracias
2. hola
3. buenas
4. ayuda
5. ayúdame
6. necesito ayuda

### \*\*Exit Commands:\*\*

1. salir
2. salida
3. adiós
4. chau
5. hasta luego
6. detener

## ## French

### \*\*FAQ Questions:\*\*

1. Quels sont les symptômes de l'angine streptococcique ?
2. Comment puis-je prévenir les allergies saisonnières?
3. Quels sont les symptômes de la sinusite (infection des sinus) ?
4. Comment puis-je soulager les brûlures d'estomac ?
5. Quels sont les symptômes d'une infection des voies urinaires (IVU) ?
6. Comment puis-je prévenir les otites ?

### \*\*Keyword Responses:\*\*

1. symptômes de la grippe
2. symptômes de la COVID-19
3. traiter un rhume à la maison
4. symptômes de l'angine streptococcique
5. prévenir les allergies saisonnières
6. symptômes de la sinusite (infection des sinus)

### \*\*Common Phrases:\*\*

1. merci
2. bonjour
3. salut
4. j'ai besoin d'aide
5. aide-moi
6. aidez-moi

### \*\*Exit Commands:\*\*

1. quitter
2. sortie
3. au revoir
4. bye
5. à plus tard
6. stop



## ## Italian

### \*\*FAQ Questions:\*\*

1. Quali sono i sintomi della faringite streptococcica?
2. Come posso prevenire le allergie stagionali?
3. Quali sono i sintomi della sinusite (infezione dei seni paranasali)?
4. Come posso alleviare il bruciore di stomaco?
5. Quali sono i sintomi di un'infezione del tratto urinario (UTI)?
6. Come posso prevenire le infezioni dell'orecchio?

### \*\*Keyword Responses:\*\*

1. sintomi dell'influenza
2. sintomi del COVID-19
3. curare un comune raffreddore a casa
4. sintomi della faringite streptococcica
5. prevenire le allergie stagionali
6. sintomi della sinusite (infezione dei seni paranasali)

### \*\*Common Phrases:\*\*

1. grazie
2. ciao
3. salve
4. aiuto
5. aiutami
6. ho bisogno di aiuto

### \*\*Exit Commands:\*\*

1. uscire
2. fine
3. arrivederci
4. ciao
5. a presto
6. stop

## ## Japanese

### \*\*FAQ Questions:\*\*

1. インフルエンザの症状は何ですか？
2. COVID-19 の症状は何ですか？
3. 自宅で風邪を治療するにはどうすればよいですか？
4. 連鎖球菌性咽頭炎の症状は何ですか？
5. 季節性アレルギーの予防
6. 副鼻腔炎（鼻の感染症）の症状

### \*\*Keyword Responses:\*\*

1. インフルエンザの症状
2. COVID-19の症状
3. 家庭での風邪の治療
4. 溶連菌性咽頭炎の症状
5. 季節性アレルギーの予防
6. 副鼻腔炎（鼻の感染症）の症状

### \*\*Common Phrases:\*\*

1. ありがとう
2. こんにちは
3. 助けてください
4. 手伝ってほしい
5. 何か手伝いましょうか
6. どうしましたか

### \*\*Exit Commands:\*\*

1. 終了
2. 退出
3. さようなら
4. バイバイ
5. またね
6. stop

## **## German**

### **\*\*FAQ Questions:\*\***

1. Wie kann ich eine Erkältung zu Hause behandeln?
2. Was sind die Symptome einer Halsentzündung?
3. Wie kann ich saisonalen Allergien vorbeugen?
4. Was sind die Symptome einer Sinusitis (Nasennebenhöhlenentzündung)?
5. Wie kann ich Sodbrennen lindern?
6. Was sind die Symptome einer Harnwegsinfektion (HWI)?

### **\*\*Keyword Responses:\*\***

1. Symptome der Grippe
2. Symptome von COVID-19
3. Erkältung zu Hause behandeln
4. Symptome einer Streptokokken-Pharyngitis
5. Saisonale Allergien verhindern
6. Symptome einer Sinusitis (Nasennebenhöhlenentzündung)

### **\*\*Common Phrases:\*\***

1. danke
2. grüß dich
3. hallo
4. ich brauche hilfe
5. kannst du mir helfen
6. hilf mir

### **\*\*Exit Commands:\*\***

1. beenden
2. ausgang
3. auf Wiedersehen
4. tschüss
5. bis später
6. stop