SYNONYM AWARE FAQ BOT

Extend the FAQ bot so that semantically similar queries map to the same answer using a synonym dictionary or keyword groups.

INTRODUCTION:

A Synonym Aware FAQ Bot is just another simple type of chatbot that can be used to answer frequently asked questions. It can be made flexible and friendly, compared to using a basic chatbot, by having the capability to understand a variety of terms that are used interchangeably.

OBJECTIVE:

- In order to develop a simple FAQ chatbot.
- Allows the chatbot to make out similar words.
- To connect various types of questions to the same type of answer.
- The purpose of it is to practice the basic concepts of Python.

TECHNOLOGY USED:

- Python – Programming language
- Dictionary (Python built-in) – To store FAQs and synonyms
- Basic String Functions – To process user input

IMPLEMENTATION:

- This utilizes groups of synonyms to comprehend varying words with similar meanings, making the chatbot smart.
- Enhances user experience: It responds accordingly to different types of questions.
- It reduces the dependency on exact keywords.
- Simple and extendable design to ensure ease of addition of new FAQs and synonym groups.

```python
faq_answers = {
    "password": "To reset your password, go to Settings and click on 'Reset Password'.",
    "account": "To create an account, click on 'Sign Up' and fill in your details.",
    "refund": "You can request a refund within 7 days of purchase.",
    "contact": "You can contact support at support@example.com."
}

synonym_groups = {
    "password": ["password", "reset", "forgot", "change"],
    "account": ["account", "register", "signup", "create"],
    "refund": ["refund", "return", "money"],
    "contact": ["contact", "support", "help"]
}

def get_answer(user_input):
    user_input = user_input.lower()
    for key in synonym_groups:
        for word in synonym_groups[key]:
            if word in user_input:
                return faq_answers[key]
    return "Sorry, I don't understand your question."

print("Welcome to Synonym Aware FAQ Bot!")
print("Type 'exit' to stop.\n")

while True:
    user_question = input("You: ")
    if user_question.lower() == "exit":
        print("Bot: Thank you! Goodbye!")
        break
    response = get_answer(user_question)
    print("Bot:", response)
```

Welcome to Synonym Aware FAQ Bot!
Type 'exit' to stop.

You: HOW ARE YOU?
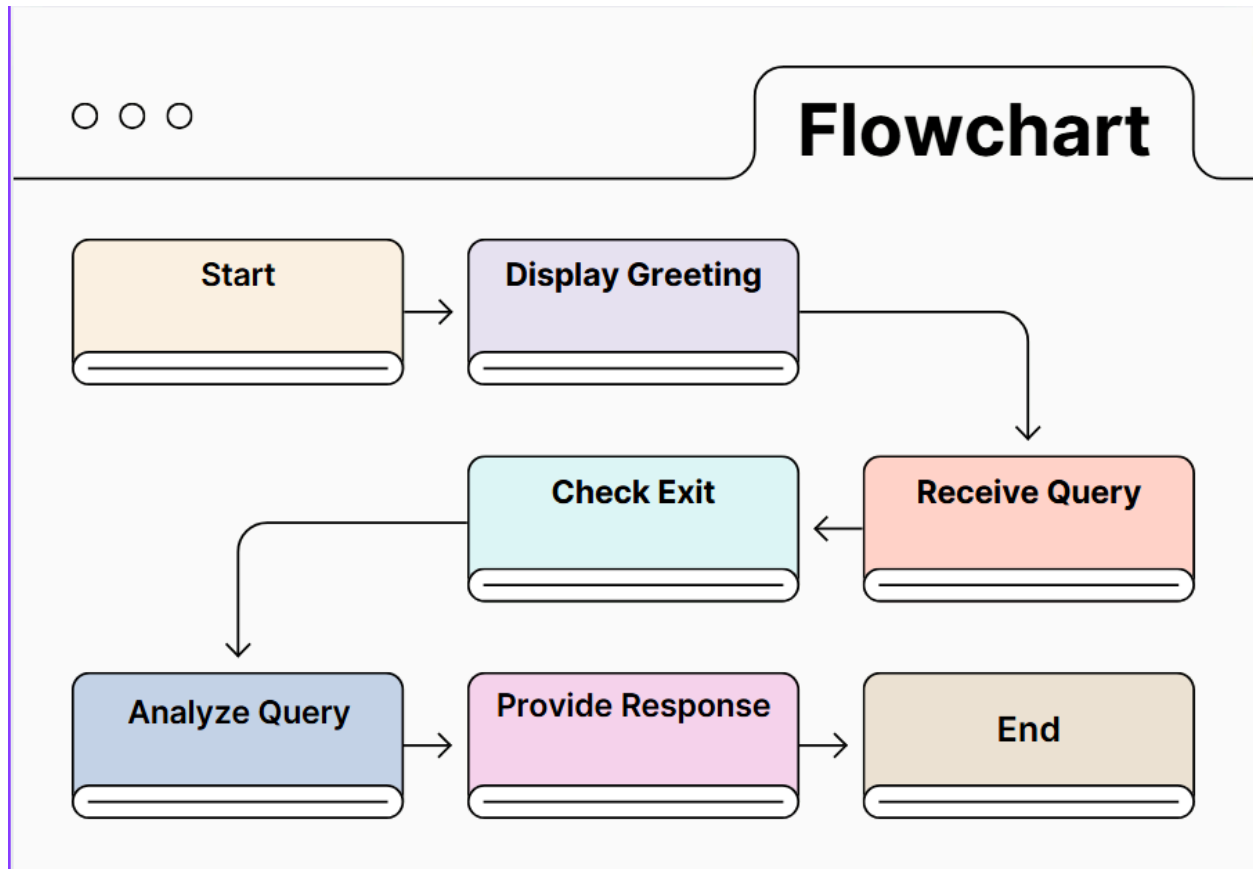Bot: Sorry, I don't understand your question.
You: CONTACT
Bot: You can contact support at support@example.com.
You: PASSWORD
Bot: To reset your password, go to Settings and click on 'Reset Password'.
You:

FLOWCHART:

OUTCOME:

- If user types "I forgot my password" → Bot shows password reset answer.
- If user types "How to register?" → Bot shows account creation answer.
- If user types "I want refund" → Bot shows refund policy.
- If user types "Help me" → Bot shows contact/support information.
- If user types unrelated question → Bot shows *"Sorry, I don't understand your question."*