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import random

def chatbot_response(user_input):
    user_input = user_input.lower()

    responses = {
        "hello": ["Hello! How can I help you today?", "Hi there!", "Greetings!"],
        "how are you": ["I'm good, and I'm here to assist you!", "I'm doing well, thank you. How can I help you?"],
        "who are you": ["I'm a chatbot. You can call me Lucas.", "You can call me Lucas, your virtual assistant."],
        "bye": ["Goodbye! If you have more questions in the future, feel free to come back.", "Farewell! Have a great day."],
        "tell me a joke": ["Sure, here's a joke: Why don't scientists trust atoms? Because they make up everything!", "Here's a joke: What",
        "random fact": ["Did you know that honey never spoils? Archaeologists have found pots of honey in ancient Egyptian tombs that are c",
        "what's the time": ["I'm sorry, I can't provide the current time. You can check the time on your device or ask a voice assistant fc",
        "how old are you": ["I don't have an age as I'm a computer program.", "I don't age, but I'm ready to answer your questions."],
        "what are galaxies": ["Galaxies are vast collections of stars, planetary systems, interstellar gas, dust, and dark matter bound tog",
        "types of galaxies": ["There are several types of galaxies, including spiral, elliptical, irregular, and lenticular. Each type has",
        "spiral galaxies": ["Spiral galaxies are characterized by their spiral arms. They often have a central bulge and can be further cla",
        "elliptical galaxies": ["Elliptical galaxies are shaped like ellipses and lack prominent spiral arms. They are often referred to by",
        "irregular galaxies": ["Irregular galaxies do not have a distinct, regular shape. They can be chaotic in appearance and often resul",
        "lenticular galaxies": ["Lenticular galaxies, often denoted as S0, have a disk-like structure but lack the prominent spiral arms of",
        "what's your favorite galaxy": ["I'm just a computer program, so I don't have a favorite galaxy. But I can provide information abou",
        "can you tell me a space fact": ["Sure, here's a space fact: The Milky Way galaxy is estimated to be about 100,000 light-years in d",
        "what's the largest galaxy": ["The largest known galaxy by size is IC 1101, which is about 50 times larger in diameter than our Mil",
        "how many galaxies are in the observable universe": ["The observable universe contains over 100 billion galaxies, each with billion",
        "what's the closest galaxy to the Milky Way": ["The Andromeda Galaxy (M31) is the closest spiral galaxy to the Milky Way and is exp",
        "what's the farthest galaxy from us": ["The farthest galaxy observed is GN-z11, which is about 13.4 billion light-years away from E",
        "can you describe the Milky Way": ["The Milky Way is a barred spiral galaxy that contains our solar system. It's estimated to be ab",
        "how do galaxies form": ["Galaxies form through gravitational interactions and the accumulation of gas, dust, and dark matter. Over",
        "tell me more about the universe": ["The universe is vast and contains everything that exists, including galaxies, stars, planets,",
        "what's the Big Bang": ["The Big Bang is the prevailing cosmological theory about the origin of the universe. It suggests that the",
        "do you believe in aliens": ["I'm just a computer program, so I don't have beliefs. The existence of extraterrestrial life is a top",
        "what's the meaning of life": ["The meaning of life is a profound philosophical question with various interpretations. It may vary",
    }

    if user_input in responses:
        return random.choice(responses[user_input])
    else:
        return "I'm sorry, I don't have information about that. Please ask a different question."

def main():
    print("Chatbot: Hello! How can I assist you today?")

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while True:
    user_input = input("You: ")
    if user_input.lower() == "exit":
        print("Chatbot: Goodbye! If you have more questions in the future, feel free to return.")
        break

    response = chatbot_response(user_input)
    print("Chatbot:", response)

if __name__ == "__main__":
    main()
```



Chatbot: Hello! How can I assist you today?

You: WHO ARE YOU

Chatbot: I'm a chatbot. You can call me Lucas.

You: WHAT ARE GALAXIES

Chatbot: Galaxies are vast collections of stars, planetary systems, interstellar gas, dust, and dark matter bound together by gravity.

You: IRREGULAR GALAXIES

Chatbot: Irregular galaxies are not well-defined in shape and can appear chaotic or disordered.

You: TELL ME A JOKE

Chatbot: Here's a joke: What do you get when you cross a snowman and a vampire? Frostbite!

You: EXIT

Chatbot: Goodbye! If you have more questions in the future, feel free to return.

