RULEBOT

Rule Logic Documentation – *RuleBot 2.0*

Overview:

RuleBot 2.0 is a simple **rule-based chatbot** that interacts with users through predefined input-response patterns using basic **conditional logic (if-elif-else)**. It runs in a **console-based interface** and provides appropriate responses based on user input.

Rule Structure:

Each user input is processed by:

1. **Lowercasing** the input using user_input.lower()
2. **Stripping whitespace** using .strip()
3. Comparing the cleaned input against a **set of predefined phrases** using if-elif-else conditions
4. Returning a relevant response if a match is found, or a default fallback message if not

---

Conversation Flow Rules:

User Input (Examples)	**Bot Response**
"hello", "hi", "hey"	Friendly greeting
"how are you?", "how r u"	Bot’s status
"what is your name?", "who are you?"	Introduces RuleBot 2.0
"goodbye", "it was nice chatting with you"	Polite farewell

User Input (Examples)	**Bot Response**
"thanks!", "thank you"	Gratitude response
"what can you do?", "help"	Lists bot abilities
"what's the time?", "current time"	Displays current time using time.strftime()
"what day is it?", "today's date"	Displays current date
"what are you?", "what do you do?"	Describes itself as a digital assistant
"what is ai?", "define ai"	Explains artificial intelligence
"tell me a fact"	Shares a fun fact
"i'm bored"	Suggests an activity
"tell me a joke", "make me laugh"	Tells a joke
"good morning"	Morning greeting
"good night"	Nighttime farewell
"i feel sad", "i'm sad"	Provides empathetic support
Any other input	Default: "Could you please rephrase your question?"

Console-Based Interaction:

- The chatbot greets the user at launch:
  Bot: 👋 Welcome! I'm RuleBot 2.0.
- It runs an infinite loop, accepting user input until the user types "bye", "goodbye", or "see you" to exit the program.

Additional Notes:

- The bot uses Python's built-in time module to return dynamic responses for date and time.

- The input list for each condition uses **variation in phrasing** to simulate natural interaction.
- The logic can be easily extended by adding more elif conditions or organizing rules using dictionaries or NLP techniques for smarter handling.