

Chat Assistant Creation

Objective: Build an interactive chat module where users can ask AI-driven questions related to sustainability, city governance, and smart living powered by IBM Watsonx Granite LLM.

Define Backend Route:

1. Create chat_router.py in the app/api/ directory.
2. Endpoint /chat/ask accepts a prompt string as input.
3. Calls the ask_granite() function from granite_llm.py to generate the response.

```
app > services > chat_assistant.py > ...
1  from app.services.granite_llm import ask_granite
2
3  def ask_city_assistant(prompt: str) -> str:
4      system_message = (
5          "You are a helpful assistant who answers detailed questions related to smart cities, "
6          "sustainability, green infrastructure, and pollution reduction. Provide clear, complete, and structured responses."
7      )
8      full_prompt = f"<system>: {system_message}\n<user>: {prompt}\n<assistant>:"
9      return ask_granite(full_prompt)
10
```



Chat with Smart City Assistant

Ask anything about sustainability, smart policies, green infrastructure, or city planning!

Your question

Send

You: how to reduce air pollution?

Assistant: Use public transportation more often.

You: how to reduce air pollution. give 5 ways?

Assistant: 1. Use public transportation more often

You: how to reduce air pollution. give "5" ways?

Assistant: 1. Plant more trees 2. Use public transport 3. Walk or cycle more 4. Buy an electric car