# Exercise 2-1: Conversation Memory

## Objective

Understand how conversation memory works in an AI agent and observe context window limitations.

## Prerequisites

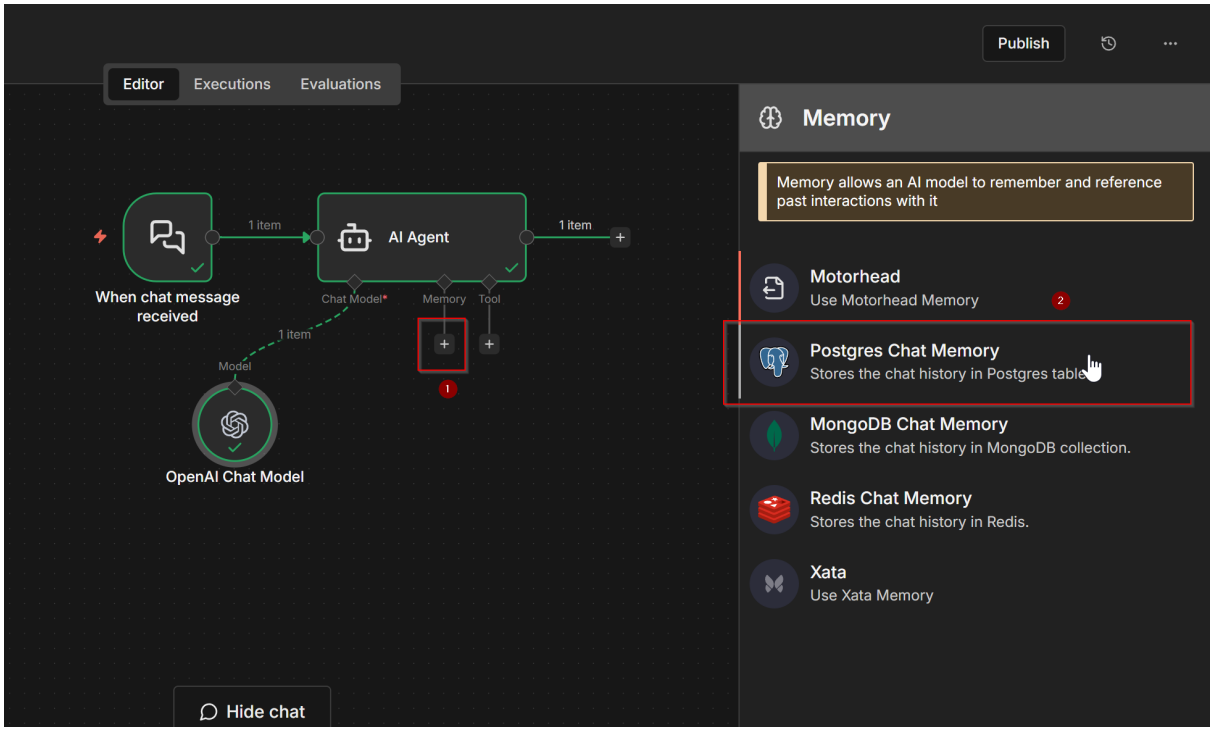
- **Exercise 1-1** completed (working Chat Trigger + AI Agent + OpenAI Chat Model workflow)

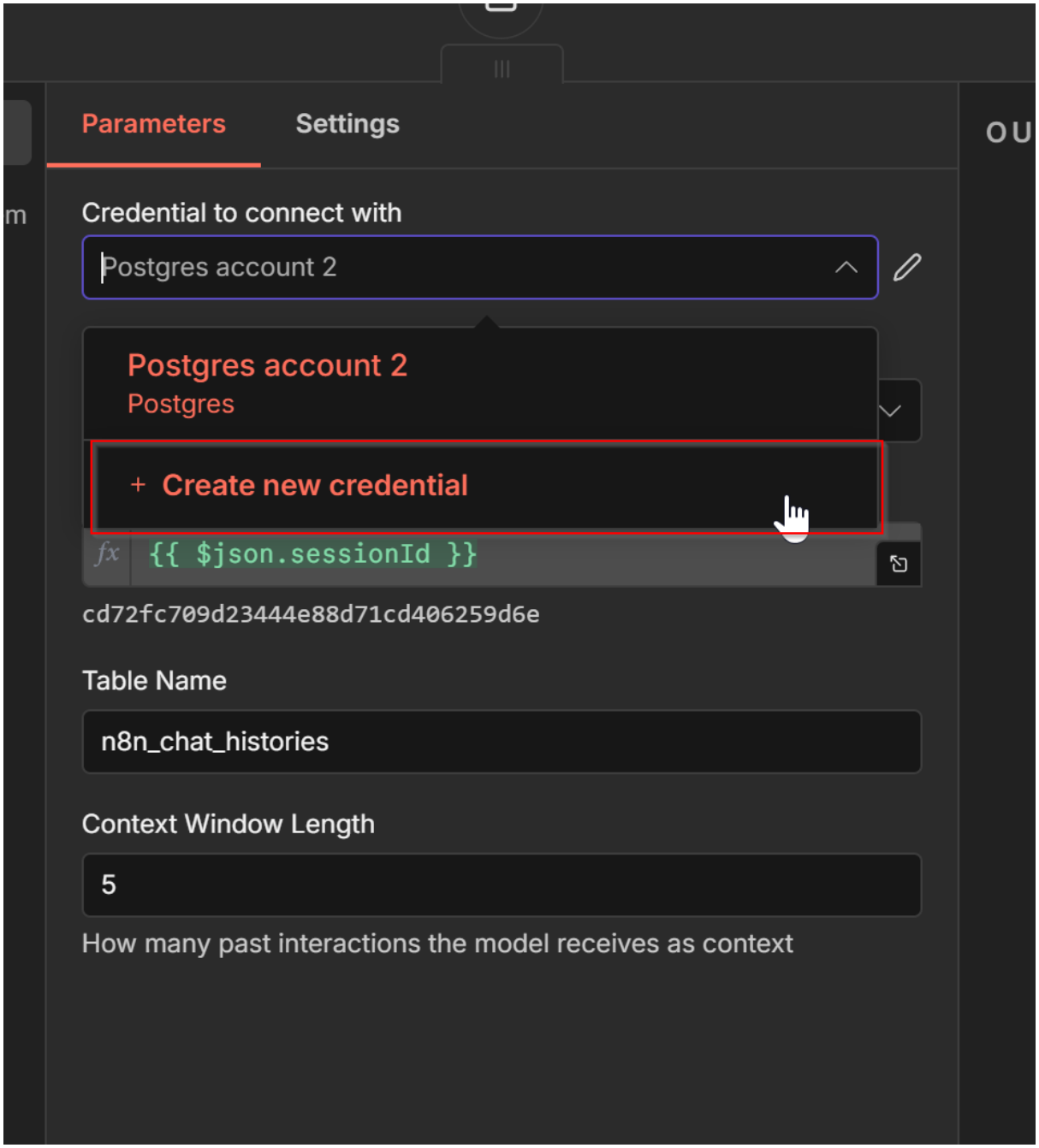
## n8n Nodes

- **Postgres Chat Memory** – stores conversation history

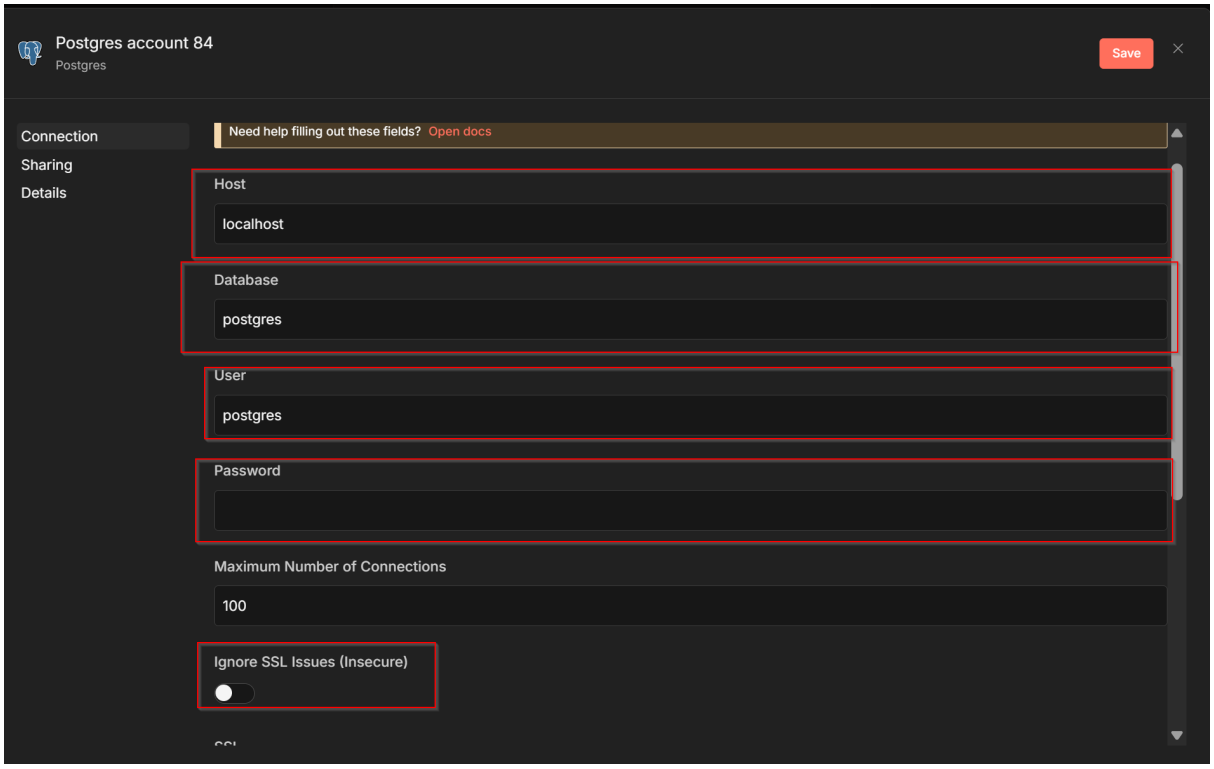
## Setup

1. Open your workflow from Exercise 1-1
2. Add a **Postgres Chat Memory** node
3. Connect it to the **AI Agent** node (as memory)


Publish
Editor
Executions
Evaluations
When chat message received
1 item
AI Agent
1 item
Chat Model*
Memory
Tool
1 item
Model
OpenAI Chat Model
Hide chat
Memory
Memory allows an AI model to remember and reference past interactions with it
Motorhead
Use Motorhead Memory
2
Postgres Chat Memory
Stores the chat history in Postgres table
MongoDB Chat Memory
Stores the chat history in MongoDB collection.
Redis Chat Memory
Stores the chat history in Redis.
Xata
Use Xata Memory




1. Follow the set of credentials provided in the homepage of the course module and insert them into the highlighted area accordingly.




# Demo Prompts

## Part 1: Memory Test

Run these two prompts in sequence:

1. “My name is John”
2. “What’s my name?”

The bot should remember your name from the previous message.

## Part 2: Multi-Turn Conversation

Click the **reset icon** (↩) in the chat widget to clear history, then run this full sequence **in order**:

1. “I’m a public officer at MOH. My team of 15 processes about 500 healthcare forms per day. Answer briefly.”
2. “What kind of digital tools could help improve our productivity?”
3. “That sounds interesting. Are there any risks with using AI for healthcare documents?”

4. “What about data privacy regulations in Singapore for healthcare?”
5. “Can you explain what Robotic Process Automation is?”
6. “What is the difference between RPA and AI?”
7. “How many people are in my team?”

### About the Reset Icon (↩)

The reset icon in the chat widget clears the current conversation history. Use this to:

- Start fresh between tests
- Test memory behavior from a clean state
- Simulate a new user session

## Your Task

### Observe

1. After step 7, does the bot remember the team size (15) from step 1?
2. If it doesn’t, why not? (Hint: context window limitation)
3. Look at the full prompt being sent at step 7 – notice how the conversation history is included

### Experiment

1. Reset the chat (

) and start a fresh conversation
2. Try a shorter sequence (3-4 messages) where you mention a fact early on
3. Does the bot remember it this time?

## What to Submit

1. The bot’s response to step 7 – did it remember the team size?
2. Your observation about when memory starts to fail
3. A brief explanation of why this happens