

## 2a. The system prompt is contained in the Agent class as instructions? Why you can also set it as callable?

### Explanation of System Prompt in the Agent Class:

In many AI agent frameworks, the system prompt is a set of instructions that defines the behavior, role, or context of the agent (e.g., "You are a helpful AI assistant"). It's typically stored as a property or attribute within an Agent class to provide consistent guidance across interactions.

 **Yes, the system prompt is stored in the Agent class.**

- The Agent class has a variable (like instructions) where we store the **system prompt**.

The Agent class is like the “brain” of your program. It holds important things that don’t change often. The system prompt lives inside the Agent class because:

- It’s like the agent’s personality. For example, if the agent is a “weather expert,” the system prompt says, “You are a weather expert, What’s the weather in Paris?.”
- It stays the same for every question the agent gets, so it makes sense to keep it in the Agent class.

### **What’s a Callable, and Why Use It?**

A *callable* is just a fancy word for something you can “run” like a function. In simple terms, it’s like a button you press to

get something new each time. For example, a function in Python is a callable because you can call it to do something.

Instead of a fixed system prompt like “You are a helpful bot.,” you can use a callable to make the prompt *change* based on something, like the time or the user’s name.

### Example in Simple Words:

- **Fixed Prompt:** You write, “You are a helpful bot” in the Agent class, and it always stays the same.
- **Callable Prompt:** You give the Agent a function that says, “Make a new prompt every time.”
- When a class is **callable**, it means we can use it like a function: `agent("Your prompt")`.

The Agent class is made callable using a special method `__call__`.

Inside this method, it automatically uses the stored **system prompt** and adds the **user's input**, then sends it to the AI model.

### Summary:

- System prompt = stored in Agent class.
- Making Agent callable = allows us to use the agent easily like a function.
- Agent has instructions: “You are a helpful bot.”
- You ask it something: “What’s 2 + 2?”
- It sends both the instruction and your message to the AI.
- The AI replies: “2 + 2 is 4.”

