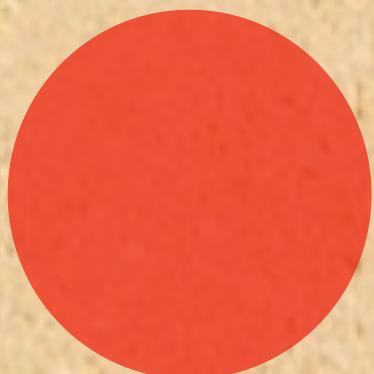
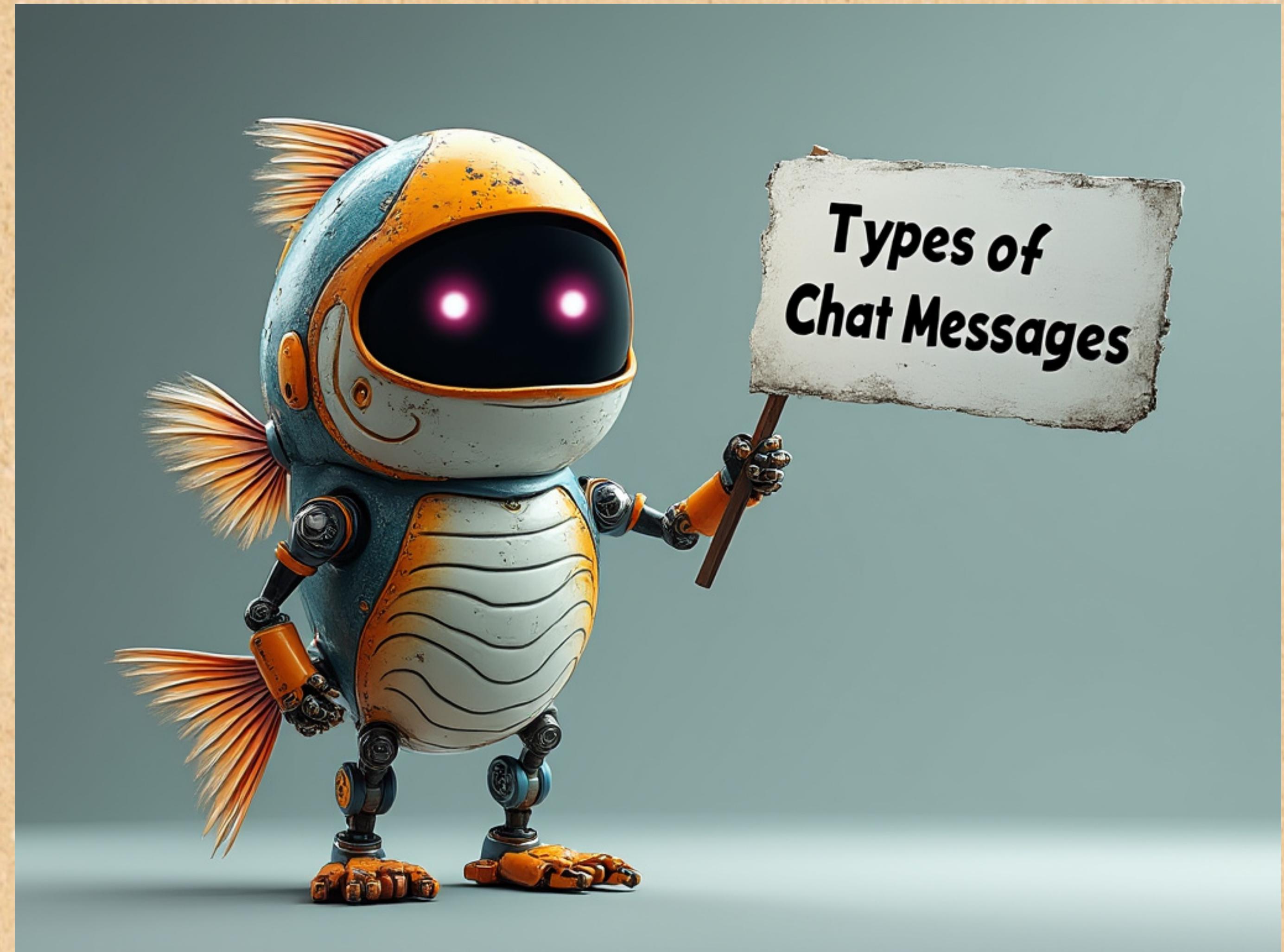


Module 2 - Topic 1

2.1.2 Types of Chat Messages





Chat Completions API

API provided by AI providers that allows developers to integrate conversational AI capabilities

```
from openai import OpenAI
client = OpenAI()

completion = client.chat.completions.create(
    model="gpt-4o",
    messages=[
        {"role": "system", "content": "You are a helpful assistant."},
        {
            "role": "user",
            "content": "Write a haiku about recursion in programming."
        }
    ]
)

print(completion.choices[0].message)
```

```
from langchain_openai import ChatOpenAI

model = ChatOpenAI(model = "gpt-4o-mini")

response = model.invoke("Who are you?")

print(response)
```

Types of Messages in API

System Message

User Message

AI Message

Three Types of Messages

System Message

Instructions or context for the AI system.

User Message

Input or queries from the human user.

AI Message

Response or output generated by the AI.

Human and AI Messages

```
# Example of using the GPT-4o-mini model  
  
response = gpt4o_mini.invoke("Tell me very short joke."  
  
print(response.content)  
✓ 6.2s
```

Python

Why did the scarecrow win an award? Because he was outstanding in his field!

User Message

AI Message

Where's system prompt?!

```
# Example of using the GPT-4o-mini model  
  
response = gpt4o_mini.invoke("Tell me very short joke."  
  
print(response.content)  
✓ 6.2s
```

Why did the scarecrow win an award? Because he was outstanding in his field!

System Message

User Message

AI Message

You are a helpful assistant

System Message

```
# Example of using the GPT-4o-mini model  
  
response = gpt4o_mini.invoke("Tell me very short joke."  
  
print(response.content)  
✓ 6.2s
```

Python

Why did the scarecrow win an award? Because he was outstanding in his field!

User Message

AI Message

Significance of System Prompt

Provides essential context, guidelines, or instructions that shape how the AI should interpret and respond to user inputs. System messages often include:

1. Role definitions (e.g., "You are a helpful assistant", "You are Elon", ..)
2. Task-specific instructions
3. Behavioral guidelines or constraints
4. Background information relevant to the conversation

These messages are typically invisible to the user but crucial in guiding the AI's responses

How to change system prompt?

```
# Example of using the GPT-4o-mini model  
  
response = gpt4o_mini.invoke("Tell me very short joke."  
  
print(response.content)  
✓ 6.2s
```

Python

Why did the scarecrow win an award? Because he was outstanding in his field!

User Message

AI Message

Let's dive into the code!