

# Introduction to LLM Input / Output

## Instructor

Dipanjan Sarkar

Head of Community & Principal AI Scientist at Analytics Vidhya

Google Developer Expert - ML & Cloud Champion Innovator

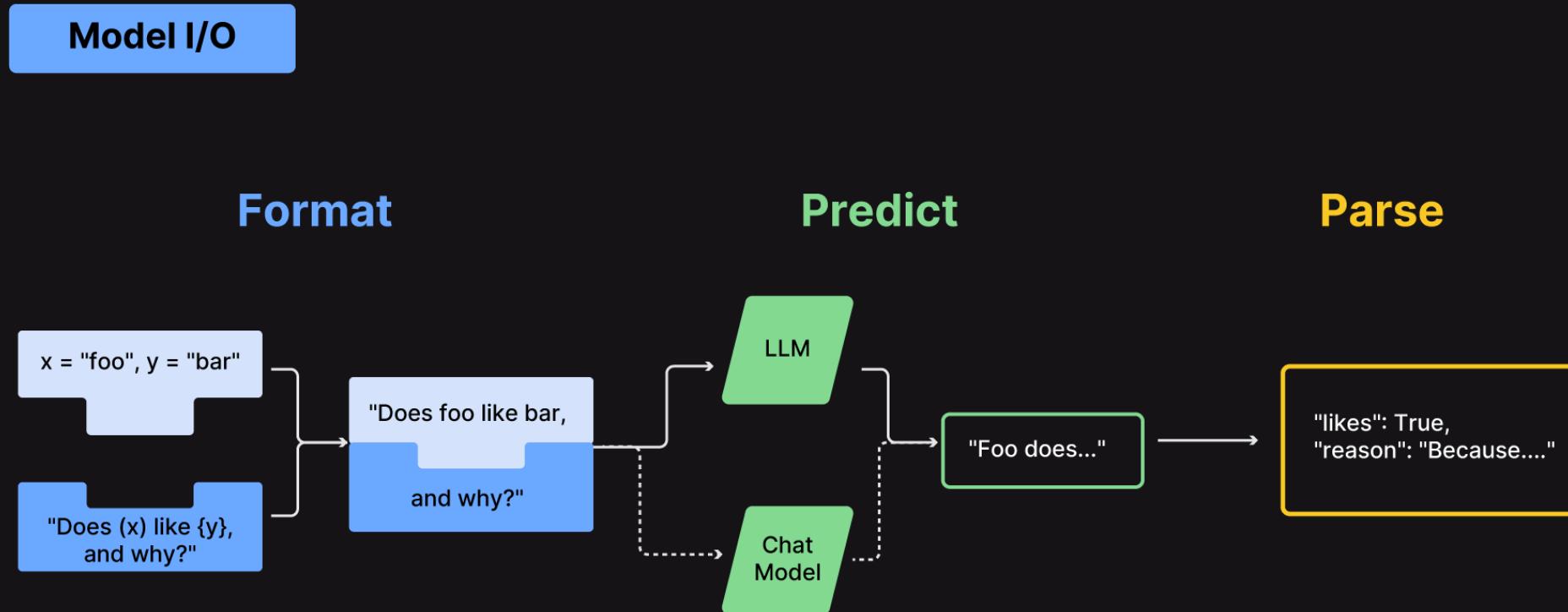
Published Author



# Outline

- LLM Input / Output Workflow
- LLMs and Chat Models
- Prompting with Prompt Templates
- Format LLM Response with Output Parsers
- Other Advanced Operations

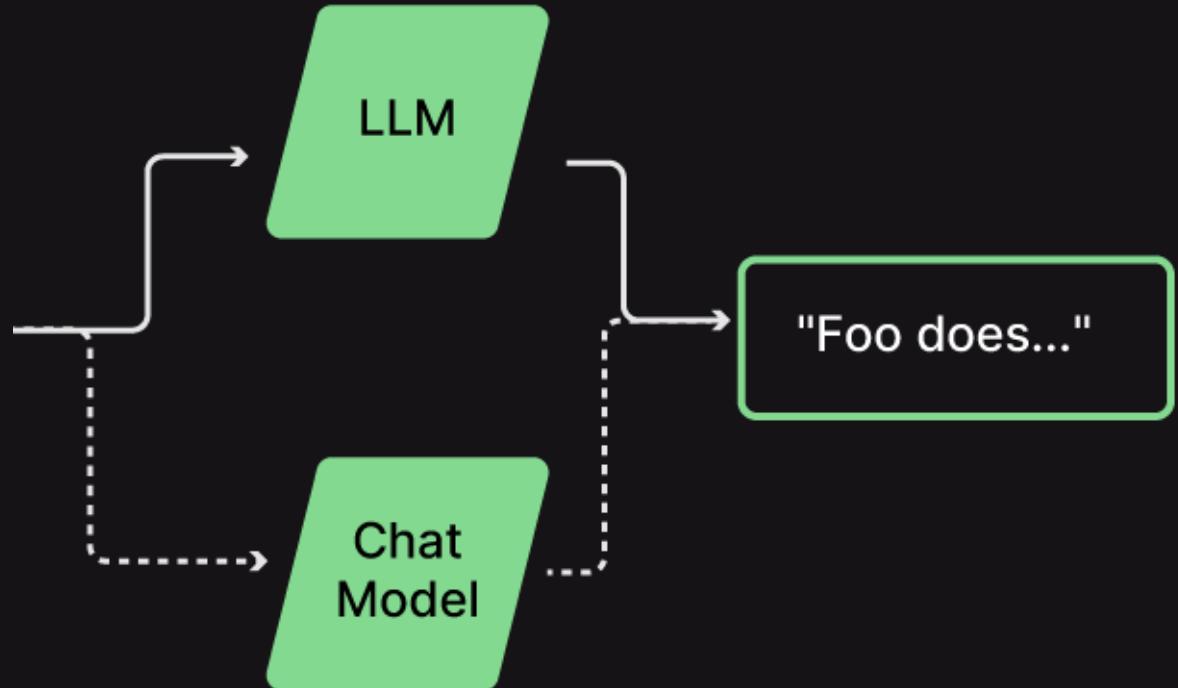
# LLM Input/Output with LangChain



# LLMs and Chat Models

- LangChain's LLM components has two different types of models
  - LLMs for general prompting
  - Chat Models for conversational prompting
- We can interface with these LLMs using Prompt Templates in LangChain

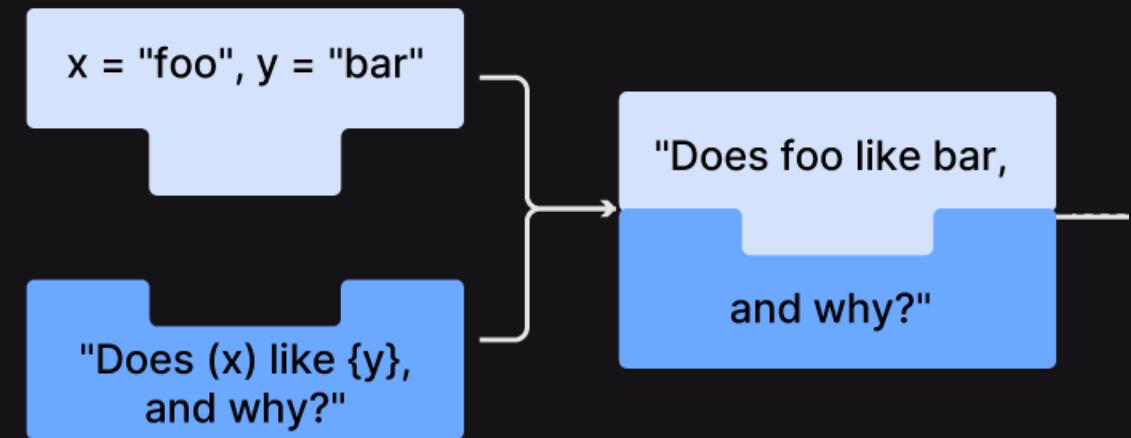
## Predict



# Prompting with Prompt Templates

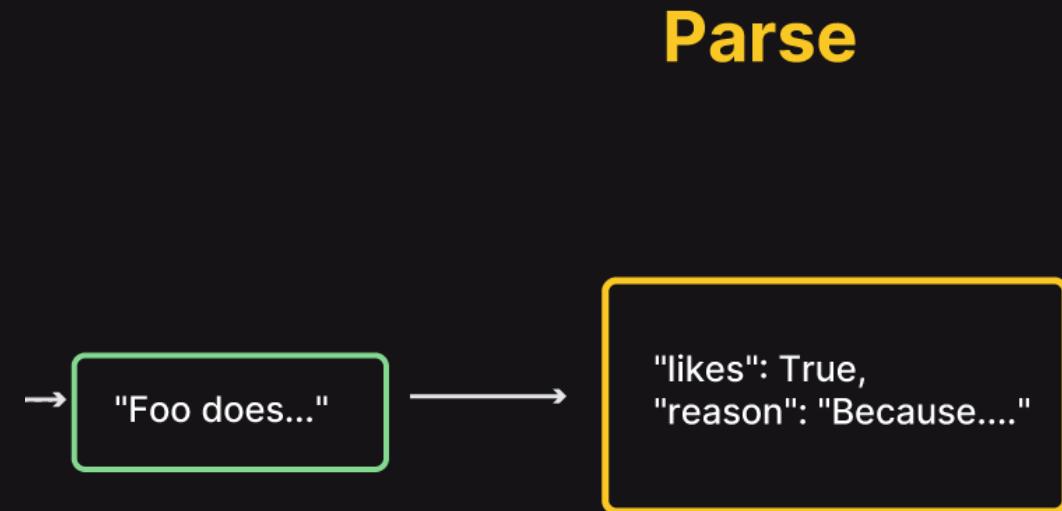
- LangChain allows users to create Prompt Templates, which are sets of instructions and input variables.
- These input variables are usually populated at runtime in the Prompt Template and sent to the LLM

## Format

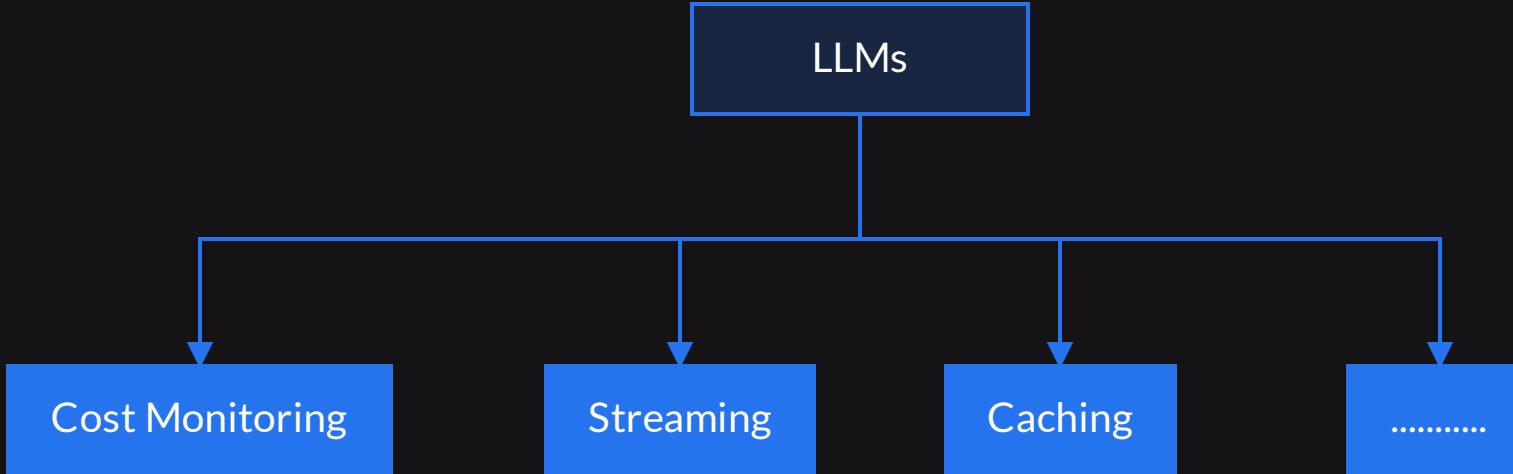


# Format LLM Response with Output Parsers

- LangChain allows to convert the raw LLM response into a more consumable format by using Output Parsers.
- There exists a variety of parsers including:
  - String parser
  - CSV parser
  - Pydantic parser
  - JSON parser



# Other Advanced Operations



- LangChain offers additional capabilities when interfacing with LLMs.
  - Token cost monitoring
  - Streaming responses
  - Caching requests

# Thank You

---