

Output Parsers

Instructor

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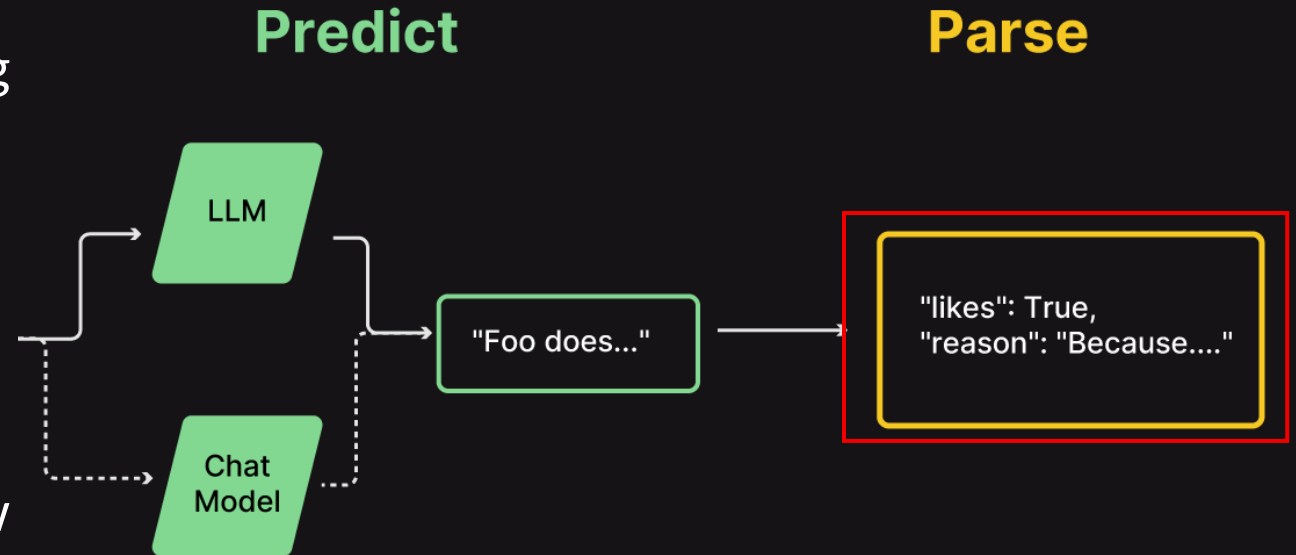


Outline

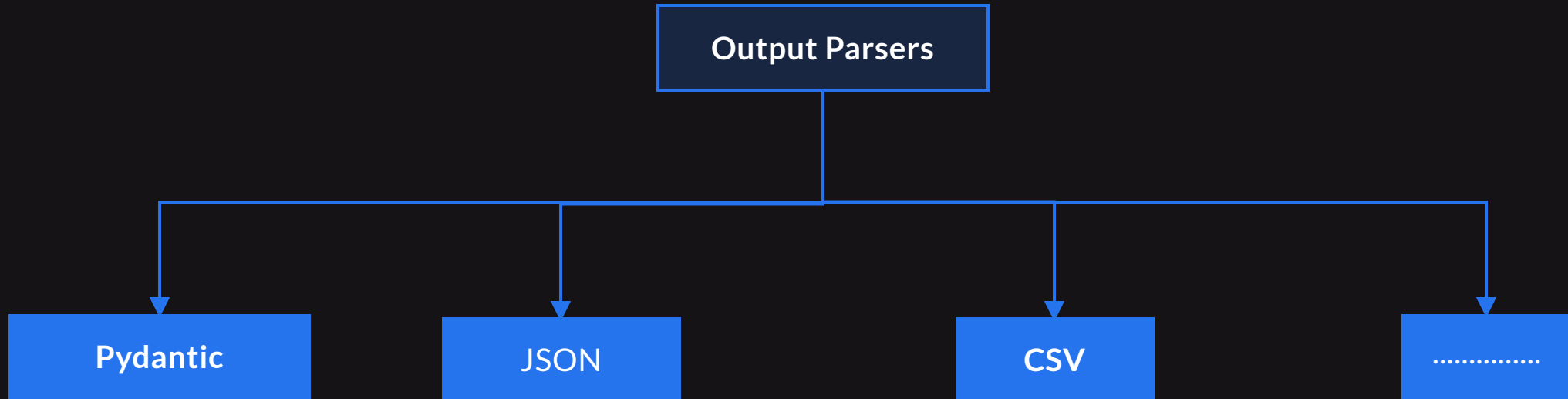
- What is an Output Parser?
- Types of Output Parsers In LangChain
- Popular Built-in Output Parsers in LangChain

What is an Output Parser?

- Output parsers are responsible for taking the output of an LLM and transforming it to a more consumable format
- Very useful when we want to get structured or semi-structured outputs to store them or use them in some workflow



Types of Output Parsers In LangChain



- LangChain enables you to have access to a variety of output parsers to format LLM responses:
 - [PydanticOutputParser](#): Uses the Pydantic library to build a data class to format data into structured fields
 - [JsonOutputParser](#): Formats output into a well-defined JSON structure
 - [CommaSeparatedListOutputParser](#): Formats output to return a list of comma-separated items

Popular Built-in Output Parsers in LangChain

Parser Type	Description
<u>JSON</u>	Returns a JSON object as specified. You specify a Pydantic model and it will return JSON for that model. Probably the most reliable output parser for getting structured data
<u>XML</u>	Returns a dictionary of tags. Use when XML output is needed. Use with models that are good at writing XML (like Anthropic Claude)
<u>CSV</u>	Returns a list of comma separated values
<u>Pydantic</u>	Takes a user defined Pydantic model and returns data in that format
<u>YAML</u>	Takes a user defined Pydantic model and returns data in that format. Uses YAML to encode it.

Thank You
