LLM Chain

Contents

- Single Input
- Multiple Inputs
- From string

This notebook showcases a simple LLM chain.

```python
from langchain import PromptTemplate, OpenAI, LLMChain
```

Single Input

First, lets go over an example using a single input

```python
template = """Question: {question}

Answer: Let's think step by step."""
prompt = PromptTemplate(template=template, input_variables=["question"])
llm_chain = LLMChain(prompt=prompt, llm=OpenAI(temperature=0), verbose=True)

question = "What NFL team won the Super Bowl in the year Justin Beiber was born?"

llm_chain.predict(question=question)
```

```
> Entering new LLMChain chain...
Prompt after formatting:
Question: What NFL team won the Super Bowl in the year Justin Beiber was born?

Answer: Let's think step by step.

> Finished LLMChain chain.
```

Skip to main content

```
' Justin Bieber was born in 1994, so the NFL team that won the Super Bowl in 1994
was the Dallas Cowboys.'
```

Multiple Inputs

Now lets go over an example using multiple inputs.

```python
template = """Write a {adjective} poem about {subject}."""
prompt = PromptTemplate(template=template, input_variables=["adjective",
"subject"])
llm_chain = LLMChain(prompt=prompt, llm=OpenAI(temperature=0), verbose=True)

llm_chain.predict(adjective="sad", subject="ducks")
```

```
> Entering new LLMChain chain...
Prompt after formatting:
Write a sad poem about ducks.

> Finished LLMChain chain.
```

```
"\n\nThe ducks swim in the pond,\nTheir feathers so soft and warm,\nBut they can't
help but feel so forlorn.\n\nTheir quacks echo in the air,\nBut no one is there to
hear,\nFor they have no one to share.\n\nThe ducks paddle around in
circles,\nTheir heads hung low in despair,\nFor they have no one to care.\n\nThe
ducks look up to the sky,\nBut no one is there to see,\nFor they have no one to
be.\n\nThe ducks drift away in the night,\nTheir hearts filled with sorrow and
pain,\nFor they have no one to gain."
```

From string

You can also construct an LLMChain from a string template directly.

```python
template = """Write a {adjective} poem about {subject}."""
llm_chain = LLMChain.from_string(llm=OpenAI(temperature=0), template=template)
```

```python
llm_chain.predict(adjective="sad", subject="ducks")
```

Skip to main content

"\n\nThe ducks swim in the pond,\nTheir feathers so soft and warm,\nBut they can't help but feel so forlorn.\n\nTheir quacks echo in the air,\nBut no one is there to hear,\nFor they have no one to share.\n\nThe ducks paddle around in circles,\nTheir heads hung low in despair,\nFor they have no one to care.\n\nThe ducks look up to the sky,\nBut no one is there to see,\nFor they have no one to be.\n\nThe ducks drift away in the night,\nTheir hearts filled with sorrow and pain,\nFor they have no one to gain."