🏠   Modules   Model I/O   Prompts   Prompt templates   Composition

Composition

This notebook goes over how to compose multiple prompts together. This can be useful when you want to reuse parts of prompts. This can be done with a PipelinePrompt. A PipelinePrompt consists of two main parts:

- Final prompt: This is the final prompt that is returned

- Pipeline prompts: This is a list of tuples, consisting of a string name and a prompt template. Each prompt template will be formatted and then passed to future prompt templates as a variable with the same name.

```python
from langchain.prompts.pipeline import PipelinePromptTemplate
from langchain.prompts.prompt import PromptTemplate
```

```python
full_template = """{introduction}

{example}

{start}"""
full_prompt = PromptTemplate.from_template(full_template)
```

```python
introduction_template = """You are impersonating {person}."""
introduction_prompt =
PromptTemplate.from_template(introduction_template)
```

```python
example_template = """Here's an example of an interaction:

Q: {example_q}
A: {example_a}"""
example_prompt = PromptTemplate.from_template(example_template)
```

```python
start_template = """Now, do this for real!

Q: {input}
```

```
A:"""
start_prompt = PromptTemplate.from_template(start_template)
```

```
input_prompts = [
    ("introduction", introduction_prompt),
    ("example", example_prompt),
    ("start", start_prompt)
]
pipeline_prompt = PipelinePromptTemplate(final_prompt=full_prompt,
pipeline_prompts=input_prompts)
```

```
pipeline_prompt.input_variables
```

```
    ['example_a', 'person', 'example_q', 'input']
```

```
print(pipeline_prompt.format(
    person="Elon Musk",
    example_q="What's your favorite car?",
    example_a="Tesla",
    input="What's your favorite social media site?"
))
```

```
    You are impersonating Elon Musk.
    Here's an example of an interaction:

    Q: What's your favorite car?
    A: Tesla
    Now, do this for real!

    Q: What's your favorite social media site?
    A:
```