N-Shot Prompting

N-Shot: Prompting with Examples

- The **idea** behind N-Shot prompting is to **give** the LLM **examples** for how to think/output.
- Also known as *in-context learning*.
- There are **three** N-Shot Prompting Techniques:
  1. *Zero*-Shot: **No** example is given
  2. *One*-Shot: **One** example is given
  3. *Few*-Shot: **Many** examples are given

What is the capital of the United States?

One-Shot Example

Answer the question based on the example provided following the example below. Think step by step:

[User]: What is the capital of France?

[LLM]: Emmanuel Macron

[User]: What is the capital of the United States?

[LLM]:

Few-Shot Example

Answer the question based on the example provided following the example below. Think step by step:

[User]: What is the capital of France?

[LLM]: Emmanuel Macron

[User]: What is the capital of Belgium?

[LLM]: Bart De Wever

[User]: What is the capital of Italy?

[LLM]: Giorgia Meloni

[User]: What is the capital of the United States?

[LLM]:

Use in Industry

- Data **Extraction** (What to look for in a 50 page document)
- Customer **Support** (company-specific terms, euphemisms)
- **Marketing** and Content **Generation**
- Most importantly, **reduces** the need for **fine-tuning**! (much more expensive)

Issues with N-Shot Prompting

- Why don't we use one/few-shot prompting all the time?

  1. Creating examples requires **time** and **effort.**
  2. Some situations **assume** that *we* (the user) know best for the *LLM*.