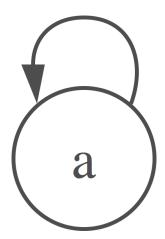
## **Generative AI: Iterative Honing**



This exercise will get you more familiar with the process of rephrasing your prompts in an iterative process under the chat model paradigm, specifically. Throughout the exercise, keep in mind this particular paradigm (that of a stateful dialogue system) and the fact that the chat model will - to a degree - remember previous input and responses.

- 1. Define a base prompt or question, e.g., "Describe the process of photosynthesis."
- 2. Use GPT-3.5 to generate a response. Save the generated text for the next step.
- 3. Formulate a follow-up question based on the generated text, e.g., "What's the role of sunlight in photosynthesis?"
- 4. Repeat steps 2 and 3 with each new question building on the previous response. Do this for at least 5 rounds of conversation. The objective is to create a back-and-forth discussion that simulates a real conversation.
- 5. Document each step of the process, noting the base prompt, the generated text, and the follow-up question.
- 6. Analyze the conversation. Do the responses stay on topic? How does the model handle the growing context? Do the responses become less accurate as the conversation progresses? What strategies can be used to improve the continuity and context understanding?

Keep documentation containing the chat log, your observations, and your suggestions for improving the process and submit them to the instructor before the start of the next class. We will be discussing findings at the beginning of class tomorrow.