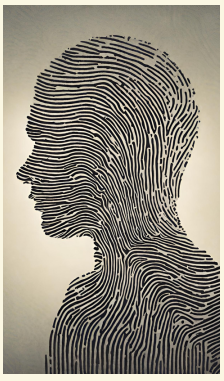# 5 PROMPT PATTERNS

White, et al., 2023

"A prompt is a set of instructions provided to an [large language model] LLM that programs the LLM by customizing it and/or enhancing or refining its capabilities...a prompt sets the context for the conversation and tells the LLM what information is important and what the desired output form and content should be" (White, et al., 2023).

1 PERSONA

Used for Output Customization

By assigning the LLM a persona, it can generate output a la a particular role (e.g., subject-matter expert).

2 FACT CHECK LIST

Used for Error Identification

This pattern ensures that the LLM produces a list of facts that are included in the output. This list helps the user see what facts/assumptions the output is based on.
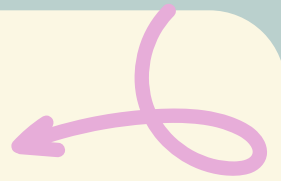
3 REFLECTION

Used for Error Identification

This pattern is used to ask the LLM to explain the rationale behind its response. This additional information helps the user have a better assessment of the validity of the output.

4 QUESTION REFINEMENT

Used for Prompt Improvement

This pattern is used to help the user create better questions.

5 FLIPPED INTERACTION

Used for Interaction

This pattern is used to flip the interaction flow where the LLM asks the user questions.

AI ASSISTS, HUMANS DECIDE

5 PROMPT EXAMPLES

1 PERSONA

Prompt Pattern:
Act as persona X
Provide outputs that persona X would create (White, et al., 2022)

Example:
Act as a mentor of qualitative research. Pay close attention to the major pitfalls that novice qualitative researchers make (e.g., misalignment of research problems, research questions and methods; bias, interviewing skills, etc.). Provide outputs that a mentor with deep expertise in qualitative research would create.

2 FACT CHECK LIST

Prompt Pattern:
Generate a set of facts that are contained in the output. The set of facts should be inserted in a specific point in the output.
The set of facts should be the fundamental facts that could undermine the veracity of the output if any of them are incorrect (White, et al., 2022)

Example:
From now on, when you generate an answer, create a set of facts that the answer depends on and that should be fact-checked. List this set of facts at the end of your output. Include facts in a manner that takes into consideration how the Arabic culture might interpret these research/interview questions.

3 REFLECTION

Prompt Pattern:
Whenever you generate an answer
Explain the reasoning and assumptions behind your answer
(Optional) ...so that I can improve my question (White, et al., 2022)

Example:
Whenever you generate an answer, please explain the reasoning and assumptions behind your selection of research methods. If possible, use specific examples or evidence to support your answer of what research method is the best selection for the research goal and questions. Moreover, please address any potential ambiguities or limitations in your answer, to provide a more complete and accurate response.

4 QUESTION REFINEMENT

Prompt Pattern:
Within scope X, suggest a better version of the question to use instead.
(Optional) prompt me if I would like to use the better version instead (White, et al., 2022).

Example:
From now on, whenever I ask a question about qualitative research, suggest a better version of the question to use that incorporates information specific to interpretative phenomenological analysis and ask me if I would like to use your question instead.

5 FLIPPED INTERACTION

Prompt Pattern:
I would like you to ask me questions to achieve X.
You should ask questions until this condition is met or to achieve this goal (alternatively, forever)
(Optional) ask me the questions one at a time, two at a time, etc. (White, et al., 2022).

Example:
I would like you to ask me questions to achieve an appropriate interview protocol for a research project.
You should ask questions until this condition is met or to achieve this goal (alternatively, forever)
(Optional) Ask me the questions one at a time, two at a time, etc.