

TELeR: A General Taxonomy of LLM Prompts for Benchmarking Complex Tasks





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Summary

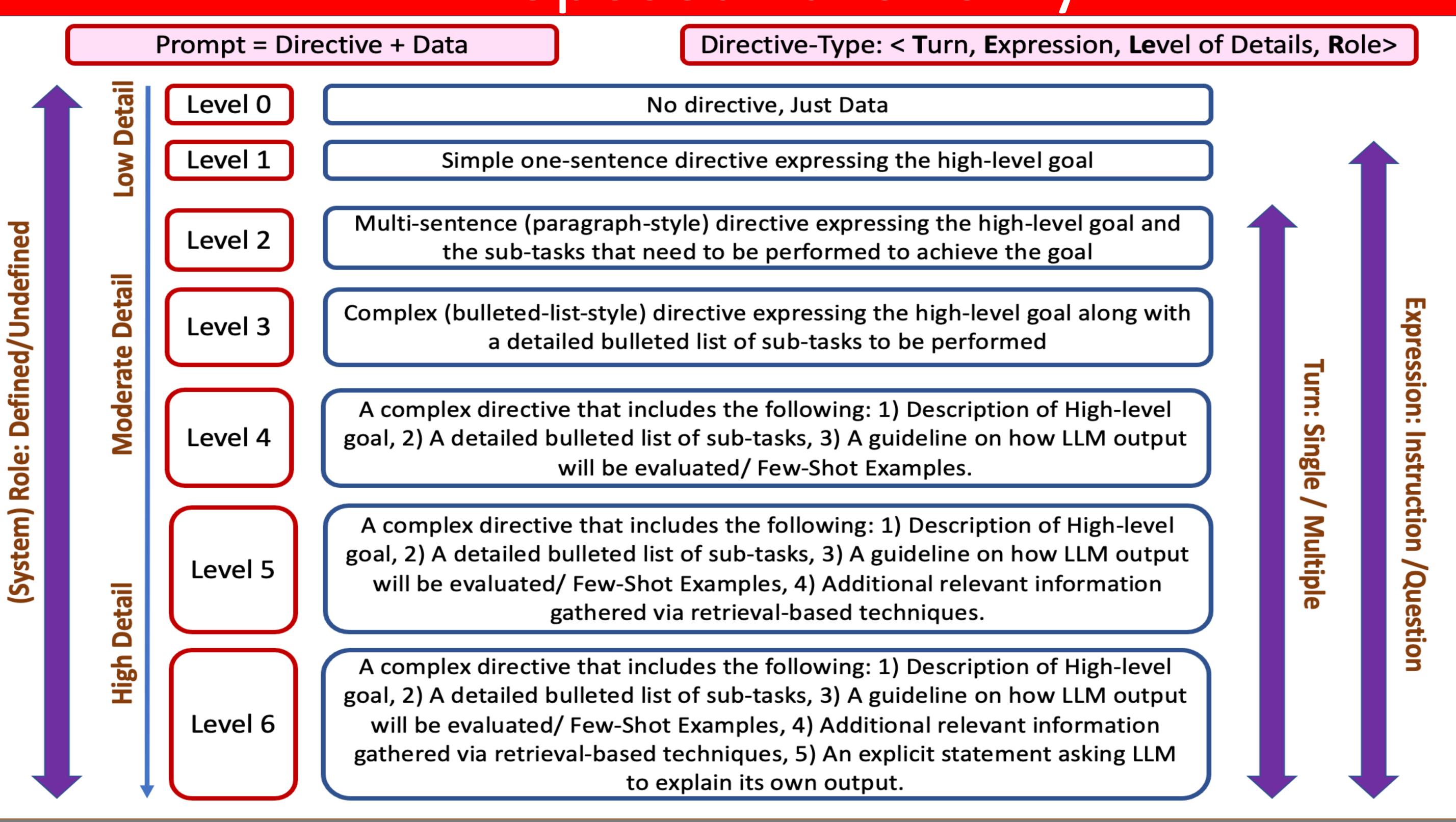
We proposed TELeR (Turn, Expression, Level of Details, Role)

- A general Taxonomy can be used to design prompts for complex task.
- Enabling meaningful comparisons across different prompt designs.
- Draw more accurate conclusion about LLM's performance.

Motivation

- Quality of prompts greatly influence the performance of LLMs.
- Studies with diverse prompts for illdefined complex tasks are still rare.
- Different prompt types/styles are used and different degrees of details provided in prompts.
- Apple-to-apple comparison not made in prompts comparison
- Goal: Establishing a common standard through this taxonomy for accurate conclusion about LLM's performance.

Proposed Taxonomy



Use case Study

Meta-Review Generation

- Meta reviewing is a complex task involves summarizing expert reviews from multiple reviewers.
- We assume three comments (R₁, R₂, R₃) as data for this task.
- We only provide prompt with Level 3, 4 due to the space.

Level 3 Prompt: Prepare a meta-review by answering the following questions from the reviewer comments (provided after the questions).

- 1. Based on the reviewer's comments, what are the core contributions made by the authors?
- 2. What are the common strengths of this work, as mentioned by multiple reviewers?
- 3. What are the common weaknesses of this work, as highlighted by multiple reviewers?
- 4. What suggestions would you provide for improving this paper?
- 5. What are the missing references mentioned by the individual reviews?

The review texts are below: $\langle R_1, R_2, R_3 \rangle$

Level 4 Prompt: "Level 3 Prompt" + "A good output should be coherent, highlight major strengths/issues mentioned by multiple reviewers, be less than 400 words in length, and finally, the response should be in English only".



