

# Interactive Session: Prompting for creative requirements from ChatGPT

Andrea Herrmann<sup>1,\*</sup> and Luisa Mich<sup>2,\*</sup>

<sup>1</sup> Herrmann & Ehrlich, Stuttgart, Germany

<sup>2</sup> Department of Industrial Engineering, University of Trento, Italy

## Abstract

Context and motivation: Large Language Models (LLMs) are increasingly used for creating requirements for software systems. Question/problem: However, there are few scientific studies that analyze the quality of the requirements created by an LLM and that use a systematic stepwise creativity technique. Therefore, we plan a series of experiments about this topic. The interactive session proposed here is part of this series and investigates the influence of the prompts on the quality of the requirements. Principal ideas: This interactive session is at the same time (a) a tutorial for the participants where they learn about two creativity techniques based on EPMCreate combining different users' viewpoints, and (b) a qualitative scientific experiment. Contribution: Based on a preliminary, explorative experiment with ChatGPT and as a preparation of a subsequent experiment, the goal of this interactive session is to analyze the influence of different prompts on the quality of the output of LLM supported EPMCreate derived techniques.

## Keywords

Creativity, Requirements Engineering, LLM, ChatGPT, EPMCreate

## 1. Context and Motivation

LLMs are increasingly used for creating requirements for software systems. EPMCreate (Elementary Pragmatic Model Creativity technique) is a systematic method for guiding humans through the participatory process of generating user-centered requirements for a software system. It does so by identifying and combining different user perspectives on the software and generating requirements from these perspectives. Software systems development usually has to consider different kinds of users. A User centered design (UCD) process has to first identify the users and their respective requirements. EPMCreate allows to pairwise combine users' viewpoints according to a 16-step process. The steps are defined according to the Boolean logic functions in two variables.

We plan a series of experiments where an LLM uses two different versions of EPMCreate, including different subsets of its steps, to generate software requirements: ROSEPMCreate (Redundant, Odd Step EPMCreate) and POEPMCreate (Power-Only EPMCreate) [1], [2]. We propose here an interactive session as part of this experiment series. This experiment analyzes the influence of different prompts on the quality of the requirements generated by the LLM. This quality is measured with respect to the following criteria:

- The requirement belongs to the correct user perspective, as it was defined by the method's step [1].
- The ratio of delighter requirements according to the Kano categories [3].

---

Joint Proceedings of REFSQ-2026 Workshops, Doctoral Symposium, Posters & Tools Track, and Education and Training Track. Co-located with REFSQ 2026. Poznan, Poland, March 23-26, 2026

<sup>1\*</sup> Corresponding author.

✉ herrmann@herrmann-ehrich.de (A. Herrmann); [luisa.mich@unitn.it](mailto:luisa.mich@unitn.it) (L. Mich)

🔗 [0000-0002-4234-8422](https://orcid.org/0000-0002-4234-8422) (A. Herrmann); [0000-0002-0018-6883](https://orcid.org/0000-0002-0018-6883) (L. Mich)

## 2. The experiment series

In previous experiments, we have applied ROSEPMCreate and POEPMCreate, which are 4-step variants of the EPMCreate method, together with students [1], [2]. The next steps would be to repeat the same experiment with ChatGPT and to compare the results of both experiments. In this interactive session, we try different prompts and compare how these influence the requirements quality. Like this, we find out which prompts would be best for the subsequent experiment with ChatGPT.

## 3. Agenda of the interactive session

The agenda of the interactive session is:

1. Short tutorial about ROSEPMCreate and POEPMCreate for user-centered requirement creation. (20 minutes)
2. Presentation of the case study. (5 minutes)
3. Experiment where the participants create their own prompts for applying ChatGPT for one or more steps of the method. (Half of the participants use ROSEPMCreate and the others use POEPMCreate). Then, they copy their prompt and the ChatGPT output in an online questionnaire for documentation. (20 minutes)
4. Then, they discuss qualitatively the ChatGPT output in this online questionnaire: Is this requirement adequate, necessary, unambiguous, complete, understandable, verifiable, consistent with the others and consistent with the case description? (A quantitative evaluation like number of ideas, Kano category and fit to the step's user perspective will be done afterwards by us.) (20 minutes)
5. Joint discussion about experiences made, ideas and proposals. (20 minutes)

## Declaration on Generative AI

The author(s) have not employed any Generative AI tools.

## References

- [1] A. Herrmann, L. Mich, D. M. Berry, Two Experiments Comparing Two Four-Step EPMcreate-Based Creativity Techniques for Requirements Elicitation, CreaRE Workshop at REFSQ 2019 Conference (2019)
- [2] A. Herrmann, L. Mich, D.M. Berry, Creativity Techniques for Requirements Elicitation: Comparing Four-Step EPMcreate-Based Processes, IEEE 7th International Workshop on Empirical Requirements Engineering (EmpiRE) at RE Conference (2018) 1-7
- [3] N. Kano, N. Seraku, F. Takahashi, S. Tsuji, Attractive Quality and Must-be Quality, in: Quality – The Journal of the Japanese Society for Quality Control 14(2) (1984) 147-156