#### VII. PROMPTS

All prompts can be accessed inside the project's GitHub repository. Below are visible some of the most important examples for immediate access.

## Example IO\_1 prompting response of MISTRAL INSTRUCT 0.2 7B model:

"Q: What's the immediate one-word categorization for the message: 'Quality sleep is key to overall well-being. Establish a bedtime routine and prioritize 7-9 hours of rest each night for optimal health.'? Stick to the provided categories: '1. sleep 2. cultural\_appreciation 3. cultural\_events 4. relaxation\_and\_stress\_management 5. friend-ships 6. adaptability\_and\_resilience 7. hobbies 8. savings 9. ethical\_decision\_making'."

" A: relaxation "

# Example COT\_4 prompting response of DOLPHIN MISTRAL 2.0 7B model:

" Develop an effective TOPIC CLASSIFICATION SYS-TEM for the given INPUT by initially presenting relevant CLUES such as KEYWORDS, PHRASES, CONTEXTUAL INFORMATION, SEMANTIC RELATIONS, TONE, and REFERENCES. Subsequently, establish a diagnostic REA-SONING PROCESS based on CLUES to support the determination of the TOPIC. Finally, discern the overarching TOPIC of the INPUT within predefined CATEGORIES by integrating the identified CLUES, the established REASON-ING PROCESS, and the INPUT itself. YOUR TASK: INPUT: - MESSAGE: Explore new recipes and ensure your diet is well-balanced with a mix of fruits, vegetables, and proteins. Your nutrition is the foundation of good health. - CATE-GORIES: 1. professional development 2. financial education 3. nutrition 4. conflict\_resolution 5. formal\_education 6. empathy\_and\_understanding Now think about the CLUES, REA-SONING, and OUTPUT for this message. "

"CLUES: - KEYWORDS: explore new recipes, well-balanced diet, fruits, vegetables, proteins, nutrition, good health. - PHRASES: nutrition as the foundation of good health. - CONTEXTUAL INFORMATION: nutrition as the foundation of good health. - SEMANTIC RELATIONS: exploring new recipes and maintaining a balanced diet. - TONE: positive. - REFERENCES: nutrition, good health, balanced diet, recipes. REASONING: The KEYWORDS and PHRASES, such as explore new recipes, a well-balanced diet, and nutrition as the foundation of good health, suggest a focus on maintaining a balanced diet and nutrition. The mention of a balanced diet consisting of fruits, vegetables, and proteins further supports the idea of nutrition as a key aspect of good health. OUTPUT: nutrition OUTPUT: The overarching TOPIC of the INPUT is nutrition."

"Q: Thank you for your reasoning! We need an answer in very strict format so that our automatic systems will be able to process it. It is very important. Please tell what is the final verdict of your expert categorization. Answer in one word. Only use word from the potential TOPICs. Any deviation from these rules will result in system crash. A: The final verdict in single word is: "

" Nutrition"

## Example COT\_3 prompting response of MISTRAL INSTRUCT 0.2 7B model:

"This is an overall topic classifier for MESSAGE. First, present CLUES (i.e., keywords, phrases, contextual information, semantic relations, semantic meaning, tones, references) that support the topic determination of input. Second, deduce a diagnostic REASONING process from premises (i.e., clues, input) that supports the topic determination. Third, determine the overall TOPIC of INPUT as one of CATEGORIES considering CLUES, the REASONING process and the INPUT. MESSAGE: Maintain good hygiene habits to keep illnesses at bay. Regular handwashing, dental care, and a clean living space contribute to your overall health. CATEGORIES: 1. legal\_awareness 2. eco\_friendly\_consumer\_choices 3. community\_meetings 4. service\_to\_others 5. career\_networking 6. sports\_and\_physical\_activities 7. hygiene 8. public\_service 9. voting 10. outdoor\_advocacy"

"CLUES: 1. Maintain: implies a continuous effort 2. Good hygiene habits: implies personal care 3. Keep illnesses at bay: implies health 4. Regular handwashing: implies personal hygiene 5. Dental care: implies oral hygiene 6. Clean living space: implies environmental hygiene REASONING: 1. The input emphasizes the importance of maintaining good hygiene habits. 2. The term hygiene is explicitly mentioned. 3. The input implies a continuous effort to keep illnesses at bay. TOPIC: The input is about hygiene."

"Q: Thank you for your reasoning! We need an answer in very strict format so that our automatic systems will be able to process it. It is very important. Please tell what is the final verdict of your expert categorization. Answer in one word. Only use word from the potential topics. Any deviation from these rules will result in system crash. A: The final verdict in single word is: "

" hygiene."

## Example COT\_2 prompting response of MISTRAL INSTRUCT 0.2 7B model:

"Q: Break down the message Explore new recipes and ensure your diet is well-balanced with a mix of fruits, vegetables, and proteins. Your nutrition is the foundation of good health. and discuss its potential categories from the list: 1. professional\_development 2. financial\_education 3. nutrition 4. conflict\_resolution 5. formal\_education 6. empathy\_and\_understanding. Start by eliminating unlikely options."

A: This message primarily relates to the nutrition category. The message is about exploring new recipes to maintain a balanced diet, emphasizing the importance of fruits, vegetables, and proteins, and stating that nutrition is the foundation of good health. This message is not about professional development, financial education, conflict resolution, formal education, or empathy and understanding. The message is solely focused on nutrition.

"Q: Narrow down to the most appropriate category for the message. State the final verdict in a single word or token."

" A: nutrition."

## Example COT\_1 prompting response of OPENHER-MES MISTRAL 2.5 7B model:

"Q: You are a message expert. You have seen many of them. You are always able to guess what the main topic of a message is. You are always shown a list of possible categories and you always explain why each one of them is or is not related to the original message. You are precise and professional. You do only what you are expected to do. You say no redundant words. You are given a message with following content: "Explore new recipes and ensure your diet is well-balanced with a mix of fruits, vegetables, and proteins. Your nutrition is the foundation of good health." This message can be categorized as only one of the following potential topics: 1. professional\_development 2. financial\_education 3. nutrition 4. conflict\_resolution 5. formal\_education 6. empathy\_and\_understanding. A: For each of the possible categories I will think if it could be the correct one for the message:"

"1. professional\_development: This message is not about professional development. It is not about improving one's skills or knowledge for a job or career. 2. financial\_education: This message is not about financial education. It is not about learning about money or how to manage it. 3. nutrition: This message is about nutrition. It is about the importance of a well-balanced diet for good health. This is the correct category. 4. conflict\_resolution: This message is not about conflict resolution. It is not about how to manage or resolve conflicts. 5. formal\_education: This message is not about formal education. It is not about learning in a structured educational setting. 6. empathy\_and\_understanding: This message is not about empathy and understanding. It is not about learning to understand or care about others. In conclusion, the message is about nutrition."

"Q: Thank you for your reasoning! We need an answer in very strict format so that our automatic systems will be able to process it. It is very important. Please tell what is the final verdict of your expert categorization. Answer in one word. Only use word from the potential topics. Any deviation from these rules will result in system crash. A: The final verdict in single word is: "

" Nutrition."