EXP 2: Comparative Analysis of Naïve Prompting versus Basic Prompting Using ChatGPT Across Various Test Scenarios

Aim:

To test how ChatGPT responds to naïve prompts (broad or unstructured) versus basic prompts (clearer and more refined) across multiple scenarios, analyzing the quality, accuracy, and depth of the generated responses.

Baseline prompt: Tell me about the floods in Chennai during the rainy season and how they affect people.

Prompt pattern: Persona Prompt

Prompt: "You are a local journalist in Chennai. Write an article about the challenges faced by people affected by floods during the rainy season. Include personal stories and insights from the community."

Response:

As the monsoon clouds gather over Chennai, anticipation mingles with dread. The annual rains, while a vital source of water for the region, also bring with them a harrowing reality for countless families. This year, as the first drops fall, communities brace themselves for the inevitable floods that have come to define the rainy season.

In the low-lying areas of North Chennai, families prepare for the worst. Sarita, a mother of three, recalls last year's floods that submerged her home. "We lost everything," she says, her eyes welling with tears. "Our furniture, our clothes, even our schoolbooks. The water came in so fast, we barely had time to escape." The local government's promises of improved drainage systems have yet to materialize, leaving residents vulnerable each season.

The impact of these floods extends beyond physical loss. Children, like Sarita's son, Ravi, struggle to catch up on missed school days after the waters recede. "It's hard to concentrate when you're worried about your home," he admits. Many families lack the resources to recover fully, relying on local NGOs for assistance. Organizations like "Chennai for Change" have stepped in, providing essentials like food, clean water, and temporary shelter.

Community leaders have also stepped up. Rajesh, a local activist, shares his perspective: "We've seen neighbors come together to support one another, but it's never enough. We need long-term solutions, not just temporary aid." He advocates for better urban planning and infrastructure development, stressing the need for a collective effort from the government and citizens.

As the rains continue, the uncertainty looms. While the community shows resilience in the face of adversity, the underlying challenges remain. The stories of Sarita, Ravi, and countless others highlight the urgent need for sustainable solutions to ensure that Chennai's floods don't drown the hopes of its residents.

Prompt pattern: Few short prompt

Prompt:

1. Immediate Impact of the Floods on Families in Chennai:

Floods in Chennai displace families, forcing them to evacuate their homes. Many lose belongings, face disrupted education and work, and struggle with access to basic necessities like food and clean water. The psychological effects, including anxiety and fear, can linger long after the waters recede.

2. Long-Term Effects of Flooding on the Community:

Long-term effects of flooding include economic hardship due to loss of homes and jobs, educational setbacks for children, and weakened community ties. Recurring floods can lead to increased frustration with local authorities and environmental degradation, making recovery more difficult.

3. How Local Organizations Help:

Local organizations provide immediate relief by distributing food, clean water, and medical care to flood victims. They also support long-term recovery through rebuilding efforts, vocational training, and advocacy for better infrastructure, helping communities become more resilient to future disasters.

Response:

1. Describe the immediate impact of the floods on families in Chennai.

The immediate impact of floods on families in Chennai includes displacement, as many are forced to evacuate their homes. Families often lose essential belongings, and their daily routines are disrupted. Access to food, clean water, and medical care becomes challenging, leading to increased health risks. The psychological stress from such emergencies can result in anxiety, trauma, and a sense of instability.

2. What are some long-term effects of flooding on the community?

Long-term effects of flooding on communities in Chennai include economic struggles due to loss of property and income. Educational disruptions for children can lead to

[&]quot;Describe the immediate impact of the floods on families in Chennai."

[&]quot;What are some long-term effects of flooding on the community?"

[&]quot;How do local organizations help those affected by floods during the rainy season?"

lower literacy rates and missed opportunities. Community ties may weaken as families are separated or forced to relocate. Additionally, recurring floods can cause frustration with local governance, especially if infrastructure improvements are lacking, exacerbating feelings of helplessness and vulnerability.

3. How do local organizations help those affected by floods during the rainy season? Local organizations assist flood-affected families by providing immediate relief, such as food, clean water, and medical assistance. They set up temporary shelters and offer counselling services to help individuals cope with trauma. For long-term recovery, these organizations engage in rebuilding efforts, provide vocational training, and advocate for improved infrastructure to enhance community resilience against future floods.

Prompt pattern: Interview Pattern Prompt

Prompt:

"Conduct an interview with a flood survivor in Chennai. Ask them about their experiences during the flooding, how it affected their life, and what support they received from the community."

Response1: "Can you describe your experience during the recent floods in Chennai? What was the situation like as the waters began to rise?"

Prompt1: The experience was terrifying. It started raining heavily in the evening, and within a couple of hours, the streets were completely submerged. We watched in disbelief as the water seeped into our home. We had to act quickly, grabbing only essential items before evacuating to a nearby shelter. It felt chaotic and overwhelming.

Response2: "How did the flooding impact your daily life and that of your family in the immediate aftermath?"

Prompt2: The flooding turned our lives upside down. We lost most of our belongings, including clothes and furniture. My children missed weeks of school, which affected their education and emotional well-being. My wife and I struggled to maintain a sense of normalcy amidst the chaos, and the financial burden of replacing lost items added to our stress.

Response3: "What support did you receive from the community or local organizations during and after the flooding?"

Prompt3: The community really came together during this time. Local NGOs provided us with food, water, and medical supplies. Neighbours helped each other out, sharing what little we had. It was heartwarming to see everyone working together, despite their own losses. This support was crucial for our recovery.

Response4: "In your opinion, what are some long-term effects of the floods on your community?"

Prompt4: The long-term effects are significant. Many families, like mine, face ongoing economic struggles as we try to recover. The emotional trauma lingers, and children's education has been disrupted. The repeated flooding has eroded trust in local authorities to provide adequate infrastructure, leading to frustration and a sense of helplessness within the community.

Response5: "What measures do you think should be taken to better prepare for future flooding in Chennai?"

Prompt5: I believe we need a comprehensive plan to improve drainage systems and infrastructure to manage heavy rains effectively. Community awareness programs about flood preparedness can also make a difference. Lastly, we need to push for stronger support from local government and NGOs to ensure that vulnerable families are protected and supported in times of crisis.

Prompt Type Prompt Response

Title: The Struggle Beneath the Rains: Stories from Chennai's Flood-Affected **Communities** You are a local journalist in As the monsoon clouds gather over Chennai. Write an article Chennai, anticipation mingles with dread. about the challenges faced by The annual rains bring challenges for Persona people affected by floods countless families. Sarita, a mother of **Prompt** during the rainy season. three, recalls last year's floods that *Include personal stories and* submerged her home. The local insights from the community. government's promises of improved drainage systems have yet to materialize. Community leaders stress the need for long-term solutions, highlighting resilience amid adversity. Floods in Chennai displace families, forcing them to Describe the evacuate their homes. Many lose belongings, face Zero immediate impact disrupted education and work, and struggle with Short of the floods on access to basic necessities like food and clean water. **Prompt** families in The psychological effects, including anxiety and fear, Chennai. can linger long after the waters recede.

What are some longterm effects of flooding on the community?

Long-term effects of flooding include economic hardship due to loss of homes and jobs, educational setbacks for children, and weakened community ties. Recurring floods can lead to increased frustration with local authorities and environmental degradation, making recovery more difficult.

How do local organizations help those affected by floods during the rainy season?

Local organizations provide immediate relief by distributing food, clean water, and medical care to flood victims. They also support long-term recovery through rebuilding efforts, vocational training, and advocacy for better infrastructure, helping communities become more resilient to future disasters.

Interview Pattern Prompt

Conduct an interview with a during the flooding, how it affected their life, and what support they received from the community.

My name is Sanjay, and I live in Chennai with my family. The experience was terrifying. We had to act quickly as the waters rose, grabbing only essentials. The flood survivor in Chennai. Ask flooding turned our lives upside down, them about their experiences with many belongings lost and children missing school. The community came together, providing support through NGOs and sharing resources. Long-term effects include economic struggles and disrupted education. We need better drainage systems and community awareness for future floods.

Conclusion

The comparative analysis of Naïve Prompting versus Basic Prompting using ChatGPT across various test scenarios reveals significant insights into the effectiveness of prompt structure in generating quality responses.

Naïve prompts, characterized by their broad and vague nature, often resulted in less focused and less informative responses. While they provided a starting point for engagement, the outputs lacked depth and specificity, making them less effective for users seeking comprehensive information.

In contrast, Basic Prompts, which included clear, detailed, and structured instructions, consistently yielded higher-quality responses. These prompts directed the model to generate more accurate, relevant, and insightful content, demonstrating the

importance of clarity and context in prompting. The analysis also highlighted that structured prompts not only improved response quality but also facilitated more meaningful interactions with the model.

Through the selected scenario of individuals affected by floods in Chennai, it became evident that while Naïve Prompts might elicit general information, Basic Prompts encouraged nuanced discussions and a deeper understanding of complex issues. The findings underscore the necessity for users to consider prompt formulation carefully, as the clarity and specificity of prompts significantly influence the outputs generated by ChatGPT.

In conclusion, the study reinforces the idea that effective prompting is a critical component of leveraging AI language models for optimal results. By adopting well-structured prompts, users can enhance the relevance and accuracy of the information received, ultimately leading to a more productive interaction with AI systems.