

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

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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.

Procedure:

1.Two Prompt Types:

Naïve Prompts: Broad, vague, or open-ended prompts with little specificity.

Basic Prompts: Clear, detailed, and structured prompts that give specific instructions or context to guide the model.

2.Test Scenarios:

i) Generating a creative story:

Naïve Prompt Given Prompt: Generate me a creative story in about 150 words	Basic Prompt Given Prompt: Generate me a creative story based on space and astronauts in about 150 words
<p>In a cosy library bathed in golden sunlight, a curious cat named Luna sat atop a dusty old shelf. One day, as Luna pawed at a peculiar leather-bound book, it opened with a soft whoosh. A gust of wind swirled around her, pulling her inside its pages.</p> <p>Suddenly, Luna found herself in a magical forest, where trees whispered secrets and rivers hummed lullabies. A tiny, glowing firefly appeared, speaking in a language only Luna understood. "The Moonstone is missing, and without it, night will never come."</p> <p>Determined, Luna padded through the enchanted woods, following clues hidden in the stars above. After an adventurous journey across rivers and mountains, she found the Moonstone nestled in the roots of a wise old oak. With a gentle nudge of her paw, the Moonstone floated to the sky, restoring the balance.</p> <p>As Luna blinked, she found herself back in the library, the book quietly closed.</p>	<p>In the distant future, Commander Zara floated weightlessly in the vast expanse of space, staring out of the window of the spacecraft *Odyssey*. Her crew was on a mission to explore a newly discovered planet, Orbitus Prime, believed to hold secrets of a lost alien civilization.</p> <p>As they approached the planet, strange signals filled their communication systems—pulsing rhythms, almost like a heartbeat. Intrigued, Zara ordered a landing. The surface of Orbitus Prime shimmered with mysterious metallic structures that looked more alive than built. Suddenly, the ground beneath them trembled, and an enormous tower rose from the planet's core.</p> <p>Inside, they found glowing symbols that seemed to move and shift as they watched. One by one, the astronauts began to understand: the planet itself was alive, an ancient intelligence communicating with them through the structures. It wasn't a civilization that had vanished—it was waiting, watching, and they had just awakened it.</p>

ii) Answering a factual question:

<p style="text-align: center;">Naïve Prompt</p> <p>Given Prompt: Explain me about the world War II</p>	<p style="text-align: center;">Basic Prompt</p> <p>Given Prompt: Explain to me in detail about World War II and its causes, important incidents, the role of India in the war. Explain all separately in bullet-in points</p>
<p>World War II, which lasted from 1939 to 1945, was a global conflict involving many nations across Europe, Asia, Africa, and the Pacific. The war had two primary opposing groups: the Allies and the Axis powers.</p> <p>The Axis was led by Nazi Germany, Imperial Japan, and Fascist Italy. Adolf Hitler, Germany's leader, pursued aggressive expansion by invading neighbouring countries, beginning with Poland in 1939, which triggered the war. Japan also expanded across Asia and the Pacific, while Italy sought dominance in North Africa.</p> <p>The Allies, led by the United States, the Soviet Union, the United Kingdom, and China, fought to stop the Axis powers. Major battles took place in Europe and the Pacific. The war included key events like:</p> <ul style="list-style-type: none"> - The Blitzkrieg: Germany's lightning-fast invasions in Europe. - Pearl Harbor: Japan's attack on a U.S. naval base in 1941, leading to the U.S. joining the war. - D-Day: The Allied invasion of Nazi-occupied France in 1944. - Atomic Bombings: The U.S. dropped atomic bombs on Hiroshima and Nagasaki in Japan in 1945, leading to Japan's surrender. <p>The war ended in 1945, with millions dead and widespread destruction. It reshaped global politics, leading to the Cold War, the establishment of the United Nations, and the division of Germany.</p> <p>From a cat's perspective, though, it was probably a very confusing and terrifying time with loud noises, destroyed homes, and so much chaos! I imagine cats would have been on high alert for danger, searching for quiet, safe places to hide.</p>	<p>Here's a detailed breakdown of World War II, its causes, major incidents, India's role, and the key leaders involved:</p> <p>Causes of World War II:</p> <ul style="list-style-type: none"> - Treaty of Versailles (1919): The harsh terms imposed on Germany after World War I, including reparations and territorial losses, created economic hardship and resentment, fostering the rise of Adolf Hitler. - Rise of Fascism: In Italy, Benito Mussolini established a fascist dictatorship, promoting nationalism and expansion. - Nazism in Germany: Adolf Hitler and the Nazi Party promised to restore Germany's power, expanding its territory and overturning the Treaty of Versailles. - Japanese Expansion: Japan sought control over Asia and the Pacific, invading China (1937) and expanding into Southeast Asia. - Failure of the League of Nations: The League of Nations, established to maintain peace, lacked the authority and military force to stop aggressive actions by Germany, Italy, and Japan. - German Invasion of Poland (1939): Germany's invasion of Poland on September 1, 1939, directly triggered the war as Britain and France declared war on Germany in response. <p>Important Incidents of World War II:</p> <ul style="list-style-type: none"> - Invasion of Poland (1939): Germany's blitzkrieg tactics overwhelmed Poland in weeks, starting the war. - Fall of France (1940): Germany rapidly defeated France, leaving Britain as the main European opposition to the Axis. - Battle of Britain (1940): The Royal Air Force successfully defended Britain from German air raids. - Operation Barbarossa (1941): Germany's invasion of the Soviet Union, initially successful, eventually failed due to harsh winters and Soviet resistance. - Pearl Harbor (1941): Japan's surprise attack on the U.S. naval base led the U.S. to join the war against the Axis. - Fall of Berlin (1945): Allied forces captured Berlin, leading to Hitler's suicide and Germany's surrender. - Atomic Bombings of Hiroshima and Nagasaki (1945): The U.S. dropped two atomic bombs on Japan, forcing Japan to surrender and ending the war. <p>Role of India in World War II:</p> <ul style="list-style-type: none"> - British Colony: India was under British colonial rule, so it was automatically drawn into the war by Britain. - Indian Army Contribution: Over 2.5 million Indian soldiers served in the war, one of the largest volunteer forces in history. - Indian National Army (INA): Led by Subhas Chandra Bose, the INA fought alongside Japan against the British in an effort to gain India's independence. - Impact on Indian Independence: The war economically drained Britain, weakening its control over colonies. It also heightened the demand for Indian independence, which eventually occurred in 1947.

iii) Providing advice or recommendations:

<p style="text-align: center;">Naïve Prompt</p> <p>Given Prompt: Give me recommendations for pursuing higher studies in abroad countries</p>	<p style="text-align: center;">Basic Prompt</p> <p>Given Prompt: Give me recommendations for pursuing higher studies in abroad countries by asking me one to one questions of a maximum of five.</p>
<p>Oh, you're curious about studying overseas, are you? That's like going on a grand adventure in a far-off land! Here are some cat-approved tips for your study-abroad dreams:</p> <ol style="list-style-type: none"> Decide on a Field and Country: Think about which countries are top of the pack in your area of study. For tech, there's the US or Canada; for business, the UK, and if you're after engineering, Germany's a fine choice. Check if language is a barrier – it's much easier if classes are in a language you're comfy with! Research Universities and Programs: Some universities and programs have amazing reputations in specific fields. For example, if you're into AI, MIT, Stanford, and ETH Zurich are top choices. Check university rankings in your field and look into program-specific rankings too. Scholarships and Financial Aid: Studying abroad can be costly, but many universities offer scholarships to international students. Look into government-funded scholarships (like Fulbright, Chevening, and Erasmus), university-specific aid, or even country-specific scholarships. Language Proficiency: For many places, you'll need English proficiency test scores like IELTS or TOEFL. Some universities might also ask for local language tests if they offer classes in other languages. Application Process and Requirements: Each country and university has its own application quirks. For instance, US programs often require GRE scores, while many European programs don't. Some will ask for letters of recommendation, personal statements, and a CV, so keep these in mind. Visa and Work Permissions: Find out about student visa requirements and whether the country allows part-time work while studying. The rules can vary a lot, so it's wise to check with the embassy or consulate in advance. Post-Study Opportunities: Many countries offer options to stay back and work after studies, like OPT in the US or PSW in the UK. Look up the stay-back rules for your country of choice if you're considering working there after you finish. <p>If any of these tips seem confusing, just let me know! I'm always here to lend a paw.</p>	<p>Alright, let's get those whiskers twitching with a few key questions! Answer these, and I'll help you narrow down the purrfect study-abroad plan:</p> <p>Questions:</p> <ol style="list-style-type: none"> What's your main field of interest or area of study? (This helps in pinpointing countries and universities with strengths in that area.) Do you have a specific country or region in mind, or are you open to any location? (Different countries have different strengths, languages, and lifestyles.) Do you prefer a program taught in English, or would you consider learning another language for your studies? Are you looking for scholarship options or financial aid to help cover the cost of your studies? Do you plan to work in that country after graduation, or are you mainly interested in the study experience? <p>Let me know your answers, and I'll guide you further! 🐾</p> <p>User input:</p> <ol style="list-style-type: none"> Data Science Germany In English Yes, I'm looking for financial aid Yeah, I'm planning to work in the country <p>Final response:</p> <p>Thank you! Based on your interests, here's a tailored recommendation:</p> <ol style="list-style-type: none"> Germany: Germany is a fantastic option for data science. Look into universities like TU Munich, University of Mannheim, and RWTH Aachen, which offer English-taught data science programs. German universities often have low or no tuition fees for international students. DAAD scholarships provide financial aid for international students, and Germany also has strong post-study work opportunities with an 18-month work visa for graduates. Netherlands: Known for its English-taught programs and high quality of life, the Netherlands has strong options for data science at universities like the University of Amsterdam and TU Eindhoven. Scholarships like the Holland Scholarship and the Orange Knowledge Programme are available, and you'd have a year to find work post-graduation. Canada: Canada offers a welcoming atmosphere and excellent post-study work options. Schools like the University of Toronto, UBC, and McGill have top data science programs. You can explore scholarships offered by universities and the Canadian government, and the post-graduation work permit lets you stay up to three years to work. United Kingdom: UK programs are shorter (usually one year for master's) and often offer scholarships like Chevening and GREAT scholarships. Universities like Imperial College London, the University of Edinburgh, and UCL have excellent data science programs. You'd be eligible for a two-year post-study work visa as well. <p>Any of these options sound appealing for your future cat-ademic journey? 🐾</p>

By analysing the results provided by ChatGPT for both Naïve and Basic prompt, we can infer that the **Basic prompt** outputs have more **Quality, Accuracy and Depth** of knowledge.

