# Project 2: Crafting the Perfect Prompt

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**Objective:** Hone your prompt engineering skills by designing effective instructions.

#### Tasks:

- Create three different prompts for the same task (e.g., summarizing an article or generating a story).
  - Write one generic prompt.
  - Write one detailed prompt with context.
  - o Write one highly specific prompt with clear instructions and boundaries.
- Test your prompts using an LLM and compare the outputs.
  - o Which prompt gave the most accurate or useful result?
  - O What changes improved performance?
- Refine your prompts based on feedback from the model.

Task: Generating a Story

For this project, I used ChatGPT to test the task of generating a story. I designed three different prompts to generate a story. Each prompt varies in specificity and structure, as shown below:

# **Prompt 1: Generic Prompt**

"Write a story."

## Output:

Here's a story for you:

#### The Archivist's Code

Elias had spent his life surrounded by books, but none had ever spoken back to him. That changed when he found the *Codex Murmuris*.

The old manuscript sat forgotten in the university archives, its spine cracked, its pages brittle. Elias, a junior archivist with an insatiable curiosity, ran his fingers over the strange symbols etched into the cover. They looked ancient—older than Latin, older than Greek. His breath caught as the ink shimmered, shifting under his touch.

He turned the first page.

"Who seeks knowledge beyond their bounds?"

The words weren't written. They were whispered.

Elias recoiled, his heart hammering. He glanced around the dimly lit archive. Silence. Dust motes floated lazily in the air.

He swallowed and turned another page. The symbols rearranged themselves, forming words he could understand.

"The key is given to those who listen."

A strange pull gripped him, an urge to *understand*. He flipped through more pages, absorbing the cryptic passages. They spoke of hidden places, of doors unseen by ordinary eyes. He didn't realize how long he had been reading until the clock chimed three in the morning.

That's when he heard the scraping.

It came from behind a bookshelf—a sound like stone grinding against stone. Elias hesitated, then followed the noise. As he reached the shelf, a gust of cold air brushed against his neck. The books shifted, revealing a narrow passage lined with flickering torches.

He should have run.

Instead, he stepped forward.

The archive closed behind him.

And the book whispered, "Welcome, Archivist. Your path begins now."

As we can see, the response was vague and generic, lacking any form of build-up or direction. The story was random and inconsistent in tone and plot development.

#### **Prompt 2: Detailed Prompt with Context**

"Write a short fantasy story about a young adventurer discovering a hidden power. Include a challenge they must overcome."

## **Output:**

In a small village nestled between towering mountains, there lived a young adventurer named Elara. She had always dreamed of exploring the world beyond her home, but the villagers spoke of dangers that lurked in the wilds. They warned her to stay close to the village's safety, but Elara's heart yearned for something more than the peaceful, simple life she knew.

One day, while wandering the forest near the village, Elara discovered a moss-covered stone arch, half-buried in the earth. Curious, she brushed away the vines and dirt, revealing intricate runes carved into its surface. As her fingers traced the markings, a pulse of energy surged through her, and the air around her seemed to hum with power. Elara stepped back in surprise, but the runes glowed brighter, calling to her.

Suddenly, a deep voice echoed in her mind. You have awakened the Lost Veil. A power long forgotten. But to claim it, you must first face the trials that lie ahead.

Before Elara could respond, the ground beneath her trembled, and a thick fog rolled in, obscuring her vision. In the distance, she saw the faint outline of a towering creature. Its eyes glowed like molten amber, and it snarled as it approached her. This was the first of the trials, she realized—a test of courage.

The beast lunged, and Elara's heart raced. But instead of fleeing, she focused on the energy that still buzzed within her. She closed her eyes and imagined herself connecting to the earth beneath her feet. Slowly, the power within her began to awaken, like a fire igniting from a spark.

With a sudden surge of strength, Elara raised her hand, and the ground beneath the creature cracked open, sending tendrils of stone spiraling upward, trapping the beast in place. The creature roared in frustration, but Elara stood firm. She had overcome the first challenge.

The fog began to clear, and the runes on the arch shimmered in approval. But the voice spoke again. One trial remains. Conquer the fear that holds you back, and you shall claim the Lost Veil's power.

Elara took a deep breath, her mind flooding with doubts. Was she truly ready? Could she trust herself with such power? The fear of failure gnawed at her, but she remembered why she had set out on this journey in the first place: to discover what lay beyond her village, to find her true strength.

With newfound resolve, she stepped forward. The arch pulsed one final time, and a rush of energy enveloped her, filling her with an overwhelming sense of clarity and purpose. The power of the Lost Veil was hers now, not because she had defeated the trials, but because she had faced the fear that once held her back.

Elara left the forest that day not just as an adventurer, but as someone who had unlocked the true potential within herself, ready to face whatever challenges awaited her on the road ahead.

The response was more engaging, with a structured plot and character development. However, the pacing was uneven, and some details felt underdeveloped.

# **Prompt 3: Highly Specific Prompt with Clear Instructions**

"Write a 300-word fantasy story about a young warrior who discovers they have the ability to control fire. They must learn to harness their power to defeat a shadow creature attacking their village. The story should have a clear beginning, middle, and end, with a moment of self-doubt before they triumph."

## Output:

In the village of Eldervale, young Kaelen had always dreamed of being a warrior. His father, a veteran of countless battles, had trained him well. But when a dark shadow appeared, consuming everything in its path, Kaelen's strength seemed futile. The creature, known as the Shadowwraith, had already taken two neighboring villages, and Eldervale was next.

One fateful night, as the wraith descended upon the village, Kaelen took up his sword, ready to defend his home. But as he approached the shadow, he froze in fear. The creature's dark tendrils reached for him, and in that moment, something strange happened. Kaelen's hand began to burn with an intense heat. Fire erupted from his palm, spiraling toward the wraith. The creature screeched in agony, retreating into the darkness.

Confused and frightened, Kaelen stumbled back. *How could this be?* He had never wielded magic before.

The fire was uncontrollable, wild. He could feel its heat searing his skin, and doubt gnawed at him. What if it burned out of control? What if he couldn't stop it?

The wraith returned, more powerful than ever. Kaelen's heart raced as he prepared for another attack, but his self-doubt made his fire flicker weakly. The shadow lunged, and Kaelen's sword seemed useless against it. Then, in a moment of clarity, Kaelen understood. The fire within him wasn't just a weapon; it was a part of him, a force to be embraced, not feared.

With newfound resolve, Kaelen raised his hand, allowing the flames to burn with purpose. The fire roared to life, stronger than before, and in one final surge, Kaelen hurled it at the wraith. The creature shrieked as the flames consumed it, turning to ash. Eldervale was saved, and Kaelen had found the strength within himself to control the fire and protect his home.

This produced the most compelling and structured story. The character's journey was well-paced, with emotional depth and a clear resolution. The challenge and self-doubt element made the story more engaging. The story is also exactly 300 words, as per the instructions provided to the LLM.

#### **Comparison and Analysis**

- The generic prompt led to a vague, unstructured response.
- The detailed prompt improved plot direction but lacked refinement.
- The highly specific prompt resulted in a well-structured, engaging story with clear character growth.

# **Refinement and Improvements**

- Adding a word limit ensured concise storytelling.
- Providing specific plot elements (character ability, conflict, emotional arc) improved depth.
- Including clear story structure guidelines (beginning, middle, end) enhanced readability.

#### **Final Conclusion**

The more specific and structured the prompt, the better the story quality. A well-crafted prompt gives the LLM clear direction, leading to more engaging and coherent results.