

# Prompt Engineering Quiz

**Greetings from Magyk Inc !**

We're glad you're applying to intern with us. As we have very few internship positions for a prompt engineer and several applicants, we would like to know more about your interest in learning about prompt engineering.

Please submit a response either to **Option 1 (Visual Prompt Engineering)** or **Option 2 (Telegram or Discord Bot)**. If you want to submit both Options, that is accepted as well though not necessary.

How to submit: Put all your submission materials in a single Google Drive folder. Share the folder with mode "anyone with the link can read". Email [vishy@magyk.ai](mailto:vishy@magyk.ai) with the link to your folder prior to the end of April 12th, 2024 - IST.

## Option 1 – Visual Prompt Engineering

Most prompt engineers play with a lot of cool emerging AI tools. As part of this quiz, we want you to get a flavor for this, by using **any FREE Generative AI tools** you know or using a directory like <https://www.futurepedia.io/> to discover tools to solve the problems. These problems do not have correct or wrong answers, we are interested to learn about your thought process and problem solving techniques.

If you work on Option 1 – you have to answer at least one out of Problem 1, Problem 2 and Problem 3. Answering 2 or 3 will be scored higher but quality is important not just quantity.

### Problem 1.

Create and Submit a Vector Icon Set, consisting of 5 icons, for Magyk Inc, an AI startup building tools for content marketing professionals to write text and generate images for blogs and social media posts.

Document and explain:

- What and why you chose to create Icons for.
- AI tool used.
- Prompts for everything.

Icons should look part of a set.

## Problem 2.



Generate an image like the one shown above, using any of the AI image generation tools, replacing the image of the Woman with the Image of a Bearded Man. Document your entire process including the prompts and share the output produced as well as process/prompts.

## Problem 3.

Imagine you are creating an “Image Prompt Generator”, The non tech savvy user is going to give one line of text as an Input, which can be anything under the sun. *e.g A labrador retriever sunning herself on the beach or 6 technology professionals in Bangalore brainstorming a cyber security product*

Write pseudocode that converts this Input into 4 different prompts that can be fed into an AI image generator (you can pick any existing AI image tool) to create 4 substantially different images but all of which represent the Input given by the user.

Explain your thought process, as well - in addition to the above pseudocode.

Bonus: Give an example input, give the 4 prompts your pseudocode would generate from the input and also the images you got from those 4 prompts.

## Option 2 - Telegram or Discord Bot

### Build a Personality-Driven Weather Bot for Discord/Telegram

Develop a Discord or Telegram bot that delivers real-time weather updates for any given city with a unique twist: personality! This bot should not only inform but also entertain, enlighten, and engage its audience in a memorable way.

**Language Choice:** Opt for the programming language you feel most comfortable with.

#### Requirements:

##### Bot Personality:

- Your bot should have a distinct personality, visible in its text responses. Whether through humor, sarcasm, optimism, or any other identifiable trait, your bot should stand out as a character on its own.
- Push the envelope on creativity. Beyond basic weather reporting, how can your bot amuse, surprise, or educate its audience?

##### Functionality:

- Implement a specific command structure (e.g., `!weather <City Name>`) for the bot to fetch and provide current weather information for the specified city.
- Use the OpenWeatherMap API for weather data retrieval, ensuring accurate and timely weather updates.
- Additionally, integrate <https://openrouter.ai> for leveraging an LLM AI within your bot. This could be for generating responses, handling queries, or adding another layer of interaction.
- Ensure the bot handles errors and invalid inputs creatively, aligning with its unique personality.

##### Mandatory Use of ChatGPT:

- Utilizing ChatGPT for coding help, researching APIs (including OpenWeatherMap and OpenRouter.ai), debugging, and code iteration is a critical part of this assignment. This requirement is aimed at evaluating your proficiency in leveraging AI tools for development.
- Please only use the free version (i.e. ChatGPT 3.5)
- Provide shared URLs of your ChatGPT chat transcripts as part of your submission. These should document your journey from the initial stages of development to any troubleshooting and refining, highlighting how ChatGPT contributed to the process.

##### Documentation and Submission:

- Along with your final code, include a README.md file detailing anything that you want us to know.
- The README should contain clear setup and running instructions for your code
- It is crucial to include in your README the shared URLs of chat transcripts with ChatGPT, providing insight into your use of AI tools throughout the development.

**Bonus Challenges:**

- Add extra features or commands that further showcase the bot's personality, such as random weather facts or crafting jokes about the current weather.
- Implement an interactive element where the bot engages in conversations with users about the weather or related topics, demonstrating its interactive capabilities.

**Resources:**

- For bot creation guidance, refer to the Discord Developer Portal or Telegram API page.
- Access weather data through the OpenWeatherMap API.
- Explore <https://openrouter.ai> for integrating an LLM AI into your bot.
- Use [OpenAI's ChatGPT platform](#) for development assistance and remember to share your chat transcripts.

We're looking forward to seeing how you harness both your coding abilities and the capabilities of AI tools to create a truly unique and engaging weather bot. Good luck!