

Cognizant Gen AI Externship Assignment Report: AI-Powered Text Completion
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Evaluate and Analyze the Outputs

Settings: max_tokens = 100, temperature = 0.9

Prompt 1:

Prompt: “What are the benefits of a vegetarian diet?”

Response: “A vegetarian diet can offer several health benefits, including: - **Reduced risk of heart disease:** Plant-based diets are typically lower in saturated fat and cholesterol, which can help lower blood pressure and cholesterol levels. - **Lower risk of Type 2 diabetes:** Studies have shown a link between vegetarian diets and a reduced risk of developing Type 2 diabetes. - **Improved weight management:** Plant-based foods are often higher in fiber and lower in calories, which can help with weight control. - **Reduced cancer risk:** A diet rich in fruits, vegetables, and whole grains is associated with a lower risk of certain types of cancer. It's important to ensure a well-planned vegetarian diet to get all essential nutrients like Vitamin B12, iron, and protein.”

Prompt 2:

Prompt: “Tell me a joke”

Response: “Why did the scarecrow win an award? Because he was outstanding in his field!”

Prompt 3:

Prompt: “Help me with a brief explanation of what makes a water bottle the best water bottle.”

Response: “The best water bottle balances several key factors for your needs. - **Insulation:** Double-walled, vacuum-insulated stainless steel keeps drinks cold for 24+ hours or hot for 12 hours. - **Material:** BPA-free plastic is lightweight and durable, while glass offers a clean taste and is eco-friendly. Stainless steel is a top choice for durability and temperature retention. - **Lid and Spout:** A leak-proof lid is non-negotiable. Look for features like a wide mouth for easy cleaning and ice, a straw lid for sipping, or a chug lid for hydration. - **Portability:** Consider the size, weight, and a comfortable carrying handle. - **Durability and cleaning:** A bottle that can withstand drops and is easy to clean.”

Prompt 4:

Prompt: "Describe success in 4 words"

Response: "Achieving goals, finding fulfillment."

Prompt 5:

Prompt: "What is the definition of an API?"

Response: "An API, or Application Programming Interface, is a set of rules and protocols that allows different software applications to communicate and exchange data with each other. It acts as a middleman, enabling a client application to request a service from a server application without needing to know the server's internal workings. Think of it like a waiter at a restaurant. You, the customer (client), tell the waiter (API) what you want, and the waiter takes your order to the kitchen (server) and brings back your food (the data or service)."

When using a max_tokens value of 100 and setting the temperature to 0.9, the API does well to provide concise and helpful summaries of the information being asked. There are some biases as most of the answers describe positive factors of a certain subject and might not evaluate the entire picture. Changing the settings, similar to the Transformers assignment, increases accuracy the most when there is a smaller max_token and a larger temperature. In this case, max_tokens of 100 and temperature of 0.9 worked well.

Reflection on Limitations

The model performs well when there is less information to output and the temperature is higher. It also is able to be more effective when talking about one subject rather than multiple at once in order to focus. Improvements can be made by continuing to train the model and ask for a diverse range of topics to expand the API's capabilities.