

Capstone Project: AI-Powered Text Completion

When testing different prompts across creativity levels, I noticed that the model's tone and response depth changed significantly depending on the task. For more factual or structured prompts, lower creativity settings worked best. For example, when I used a creativity level of 0 to continue the story "There was a bear and...", the model produced a logical and detailed narrative about a bear searching for honey. It stayed on topic and made sense, but felt a bit predictable. Similarly, when I asked it to explain photosynthesis like I'm five at 0.2, the output was accurate, clear, and simple, suitable for an educational setting. I also tested a summarization task twice using the same article about harvesting apples, once at 0.3 and once at 0.9. The 0.3 response was very factual and concise, while the 0.9 version was longer, more descriptive, and slightly more conversational in tone, showing how creativity can affect the level of detail and language style even in factual outputs.

On the more creative side, using a prompt like "Continue this song: 'There are various things and I only...'" with a creativity level of 1 produced a playful and poetic set of lyrics. It was imaginative and rhythmically structured, but also showed slight repetition. Another instructional prompt, "Explain hypotenuse like I'm five" at creativity 0.8, was a great example of how higher creativity can enhance engagement; the model used visual metaphors (like ramps and triangle shapes) to make the concept more relatable. Overall, the model handled narrative, educational, and summarization tasks well when the creativity level matched the prompt type. It sometimes struggled with logical reasoning or staying concise at higher settings, especially in more open-ended tasks. To improve the application, I would add a simple length and repetition filter to catch overly long or looping responses, especially at high creativity levels. I'd also include a toggle for "informational prompts" that triggers a secondary fact-checking pass using a basic web search or predefined reference data, to reduce the chance of inaccuracies in educational outputs.

Creativity level 0:

Continue this story "there was a bear and"

Cohere Text Completion App

Type your prompt below (type 'exit' to quit):

Set creativity level (0-1, default is 0.5): 1

You: continue this song "there are various things and I only "

AI: I only did my homework once,
I only did my homework once.
My teacher was so surprised,
she nearly fell off her chair.
She couldn't believe her own eyes,
she smiled a crooked little smile,
and all at once the class smiled too.

What else can I generate? I can write lyrics continuing this song or start from scratch on a completely new song with you.

You: exit

Exiting. Goodbye!

Creativity level 1:

Continue this song "there are various things and I only"

Cohere Text Completion App

Type your prompt below (type 'exit' to quit):

Set creativity level (0-1, default is 0.5): 0

You: continue this story "there was a bear and"

AI: Sure, I can continue the story. Let's go with:

There was a bear and it was hungry. He was roaming around the forest looking for food, sniffing here and scratching there. He had a particular craving for honey and he knew that bees and their honey pots were usually hidden deep inside a tree trunk. Being a smart bear, he decided to look for a tree that was scratched and clawed on the bark, indicating that another bear had already found the hive and extracted the honey. He had a big meal coming his way.

However, after hours of searching, he hadn't found a single scratched tree. The bear was becoming increasingly frustrated and had almost given up when he stumbled upon a tree with hints of honey dripping down its bark. He knew that this could be a trap set up by a much bigger bear, one that was looking for a meal and not just a snack. Regardless, his hunger got the best of him and he decided to take the risk. He climbed the tree swiftly, hoping that he wouldn't get attacked from behind in the process. Luckily, he made it to the top and found the hive. With one swift move, he ripped the hive open and poured the honey into his mouth. It was sweet, delicious, and worth the risk. Satisfied, the bear climbed back down the tree and went to take a nap in a nearby cave he had dug out months prior.

You: exit

Exiting. Goodbye!

Creativity level 0.80:

Explain photosynthesis like I'm five

Cohere Text Completion App

Type your prompt below (type 'exit' to quit):

Set creativity level (0-1, default is 0.5): 0.2

You: explain photosynthesis like im five

AI: Photosynthesis is like making a magic tree house food recipe that feeds and nourishes the plant, and is essential for life on Earth. Just like you need food to grow and thrive, plants need energy to grow roots, stems, leaves, and blooms.

The recipe for this process to occur is simple: Plants need sunlight, water from the soil, and carbon dioxide gas from the air. Through a process called photosynthesis, plants convert sunlight into energy, which is stored in the plant as glucose. This glucose is the fuel that builds and grows plants, and allows them to bloom and reproduce.

In this process, plants also release oxygen into the air, which is vital for animals to breathe and stay alive. So next time you look at a plant, remember how important they are! They're like nature's superheroes, feeding, and breathing for humans and more.

Creativity level 0.2

Explain hypotenuse like I'm five

Cohere Text Completion App
Type your prompt below (type 'exit' to quit):
Set creativity level (0-1, default is 0.5): 0.80

You: explain hypotenuse like i am five

AI: A hypotenuse is the longest side of a triangle, which is a shape with three sides. It's like the longest road that connects three different places. Imagine you have a triangle with sides of lengths 5 units and 7 units, the hypotenuse would be 13 units long (which is the longest of the three sides). Hypotenuse is a helpful word to know when you start learning about right triangles and trigonometry! You can imagine a right triangle like a ramp, where the hypotenuse is the long, slanted part at the top. The other two sides are more vertical and meet at the right angle.

Did this example help illustrate what a hypotenuse is? Let me know if you'd like me to explain more about triangles or anything else you're curious about!

Creativity level 0.3:

Summarize this...

Cohere Text Completion App
Type your prompt below (type 'exit' to quit):
Set creativity level (0-1, default is 0.5): 0.3

You: summarize this How to Harvest, Store and Process Apples 30 September 2016, written by Benedict Vanheems gb flag Apples on a tree Ah, the season of mists and mellow fruitfulness! If you're lucky enough to have an apple tree groaning with fruit, you'll want to make the most of this seasonal abundance. Read on to find out exactly when and how to pick apples, and the best ways to store and process them. Play Knowing When to Harvest Apples You've been waiting all season and finally the moment of truth has arrived: sweet and crunchy apples ready for picking! But how do you know they are ready to harvest? Nature offers us some clues. Apples are ready when the skin color deepens. Fruits at the sides and top of the tree usually ripen first because they receive more sunlight. Ripe fruits should easily come away from the tree, while the presence of windfalls is a sure sign you can start harvesting. If in doubt, a simple taste test should confirm whether your apples are fit to pick! How to Pick an Apple The best way to pick an apple is to cup it in the palm of your hand, lift it up then give it a gentle twist until it comes away. Each apple should detach complete with its stalk. Always handle apples carefully to avoid bruising the delicate flesh and never tug an apple from the tree or you could damage the fruiting spurs or cause apples nearby to drop. Take care when picking apples from higher up. Use a stepladder and avoid overreaching or you could lose your balance. Remember, not all apples are ready at the same time, so pick regularly as individual clusters ripen.

AI: Here is a summary of the provided text:

The text discusses when and how to harvest, store, and process apples. It describes how to know when apples are ready to harvest. It also explains how to properly pick the apples off the tree without bruising them. Finally, it offers some tips for storing and processing apples after they have been harvested.

The text provides guidance for anyone looking to make the most out of an apple harvest, ensuring that the fruits are picked and treated properly to make them shelf-stable and ready for use in various culinary, beverage, or craft pursuits.

Creativity level 0.9:

Summarize this...

Cohere Text Completion App
Type your prompt below (type 'exit' to quit):
Set creativity level (0-1, default is 0.5): 0.9

You: summarize this How to Harvest, Store and Process Apples 30 September 2016, written by Benedict Vanheems gb flag Apples on a tree Ah, the season of mists and mellow fruitfulness! If you're lucky enough to have an apple tree groaning with fruit, you'll want to make the most of this seasonal abundance. Read on to find out exactly when and how to pick apples, and the best ways to store and process them. Play Knowing When to Harvest Apples You've been waiting all season and finally the moment of truth has arrived: sweet and crunchy apples ready for picking! But how do you know they are ready to harvest? Nature offers us some clues. Apples are ready when the skin color deepens. Fruits at the sides and top of the tree usually ripen first because they receive more sunlight. Ripe fruits should easily come away from the tree, while the presence of windfalls is a sure sign you can start harvesting. If in doubt, a simple taste test should confirm whether your apples are fit to pick! How to Pick an Apple The best way to pick an apple is to cup it in the palm of your hand, lift it up then give it a gentle twist until it comes away. Each apple should detach complete with its stalk. Always handle apples carefully to avoid bruising the delicate flesh and never tug an apple from the tree or you could damage the fruiting spurs or cause apples nearby to drop. Take care when picking apples from higher up. Use a stepladder and avoid overreaching or you could lose your balance. Remember, not all apples are ready at the same time, so pick regularly as individual clusters ripen.

AI: Here is a summary of the text:

The text provides guidance on how to harvest, store and process apples. It suggests ways to determine whether apples are ready for harvesting. The best way to pick apples is by cupping them in the palm of your hand and gently twisting until they come away. Apples should be handled with care to avoid bruising and it is recommended to pick them regularly as they ripen.

Nature provides some clues to indicate that apples are ready for harvesting. The color of the apple skin deepens as they ripen and ripe apples should easily come away from the tree. Windfalls are a sure sign that harvesting can commence. If unsure, a taste test can confirm whether apples are fit for picking.

Harvested apples should be handled with care to avoid bruising. When storing apples, handle them carefully to minimize damage and use a well-ventilated container. They can be stored in the fridge or in a cool, dry, dark place.

The text also highlights the importance of picking apples regularly as individual clusters ripen, especially those at the top and sides of the tree which usually ripen first.

Overall the text provides valuable insights on how to make the most of the apple harvest and ensure that they are handled and stored correctly.