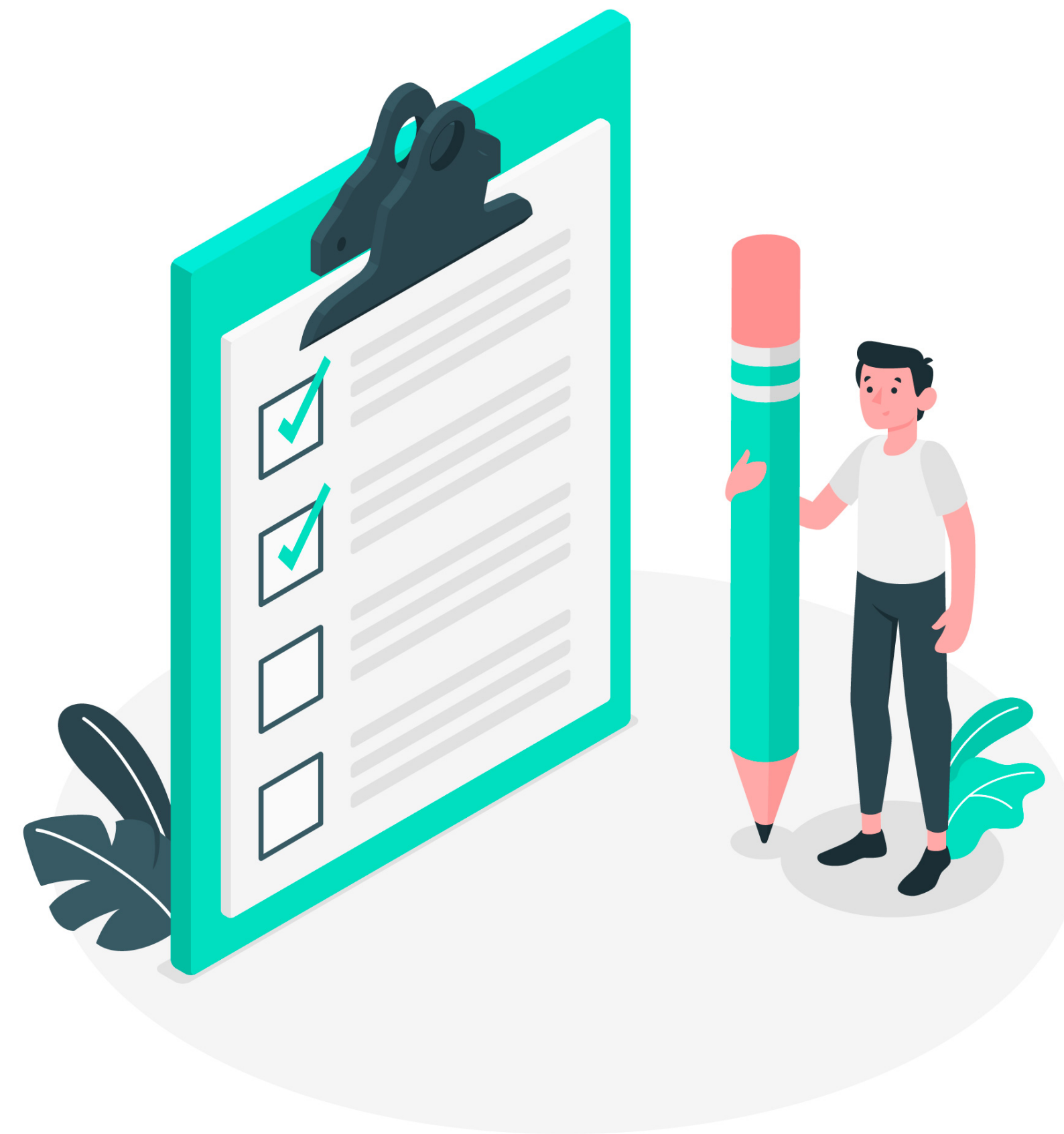


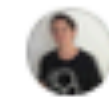
Demo

Hallucination



- ▶ Let's (try to) verify Hallucination in LLMs





You

What is the first book in SQL?

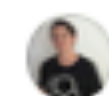


ChatGPT

I couldn't find information on what might be considered the "first" book on SQL as in the earliest written. However, I found a list of highly recommended SQL books that can serve as excellent resources for learning SQL:

1. "SQL QuickStart Guide" by Walter Shields is a beginner-friendly book that covers basic SQL queries and examples, setting up an SQL environment, and includes both basic and slightly advanced SQL functions [\[1\]](#).
2. "SQL All-in-One For Dummies" by Allen G. Taylor is comprehensive and suitable for both beginners and advanced users, covering a wide range of SQL and database concepts [\[2\]](#).
3. "Sams Teach Yourself SQL in 10 Minutes" by Ben Forta, a best-selling SQL book that provides a practical approach and is updated with the latest editions, is highly recommended for those who are new to programming and SQL [\[3\]](#).

These books are great starting points for anyone looking to learn SQL, from beginners to more advanced users seeking to enhance their database management and analysis skills.



You

Are you sure there is no IBM print in ACM named SEQUEL: A structured English query language?

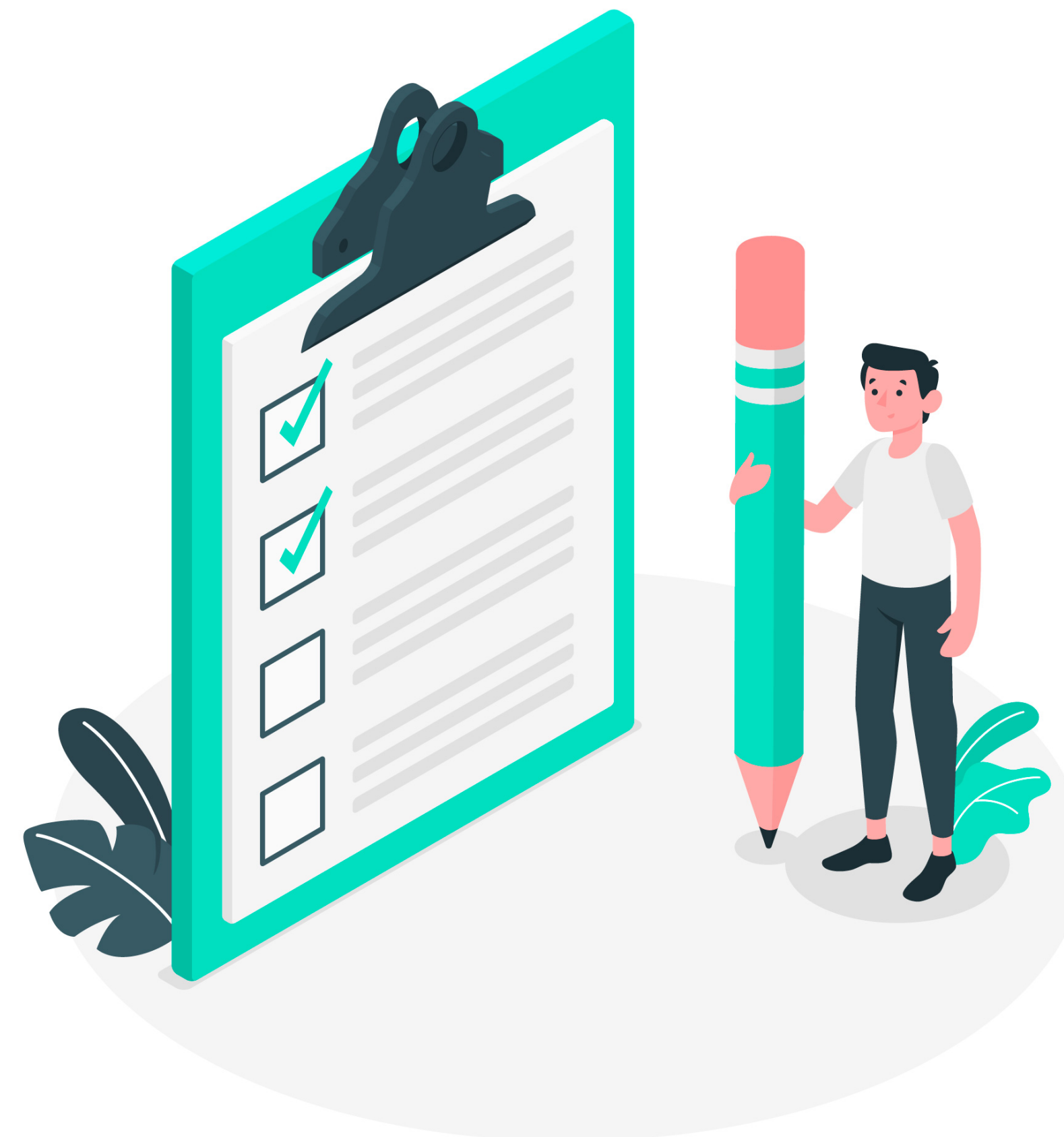


Demo

Audience Persona Pattern



- Show how LLMs can adjust explanations to different levels, and how we can benefit from them.



Audience Persona Pattern



- ▶ Use when you need LLMs to explain you a topic as different characters
- ▶ **Example:** Explain X to me. Assume that I am Persona Y.



You

Explain second response in immunology. Assume I am a baby



ChatGPT

Okay, little one, let's talk about how your body fights off the tiny invisible creatures called germs! Imagine your body is like a castle, and you have soldiers guarding it. The first time bad germs try to get in, your soldiers have to figure out the best way to defeat them. They work hard, and they learn, and eventually, they chase the germs away!

Now, the second time those same sneaky germs come back, your soldiers remember them. They say, "Hey, we know you!" and they're ready this time. They put on their super-fast shoes and their strong armor, and they beat the germs much quicker than before. This is because they've seen the germs once already and know just what to do. That's what your body does too, with something called the second response. It remembers the germs and can protect you faster and better than the first time!



You

Explain second response in immunology. Assume I am a medical student



ChatGPT

Certainly! In immunology, the secondary response, also known as the anamnestic response, refers to the more rapid and robust immune response that occurs upon re-exposure to an antigen after the initial exposure.

During the first encounter with an antigen, naive B and T cells that recognize the antigen are activated in a process known as the primary immune response. This response takes time to

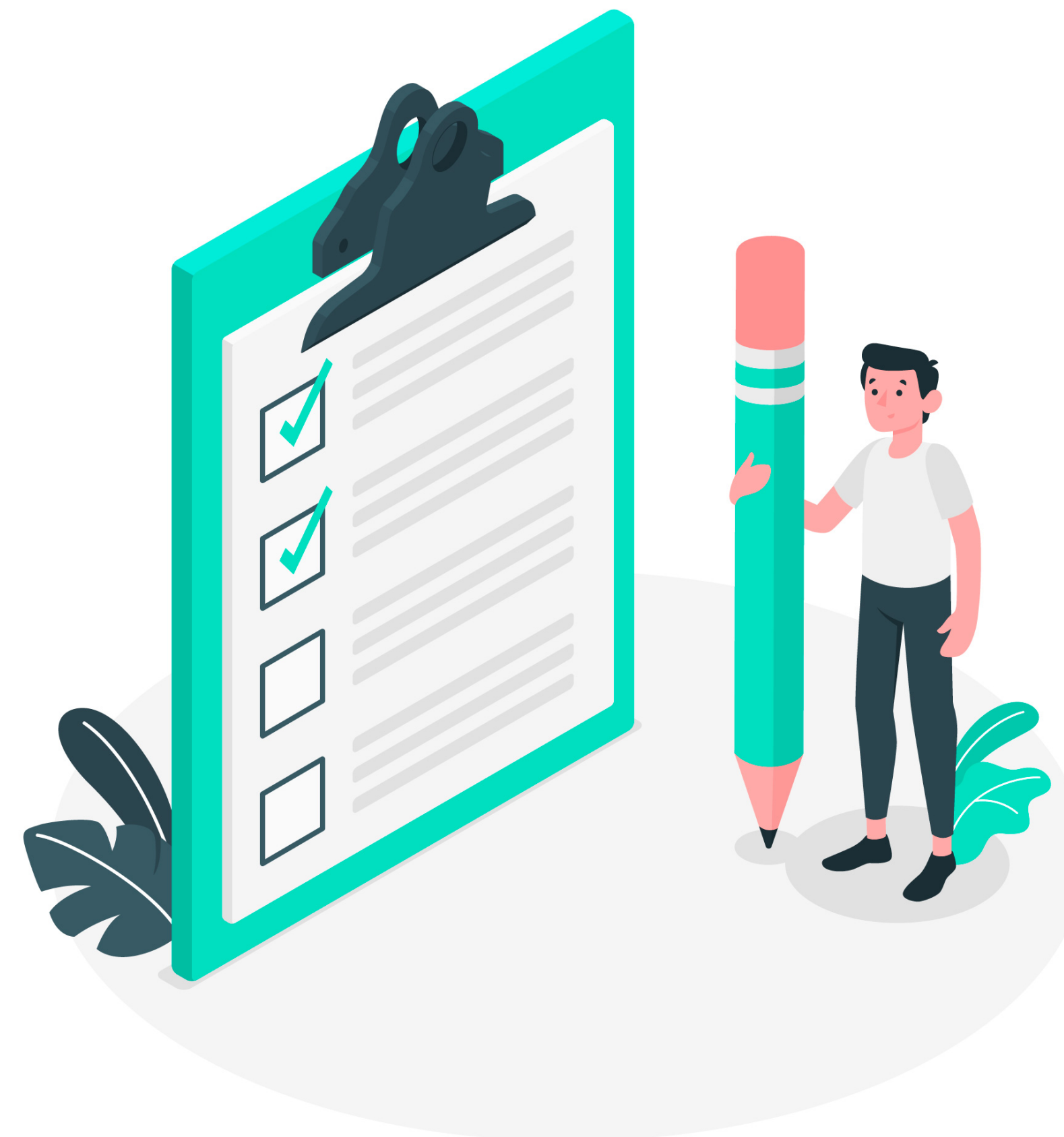


LAB

Audience Persona Pattern



- Use the Audience persona to verify how an explanation of a topic (maybe Transformers) can change depending on the audience. This is extremely useful for presentations

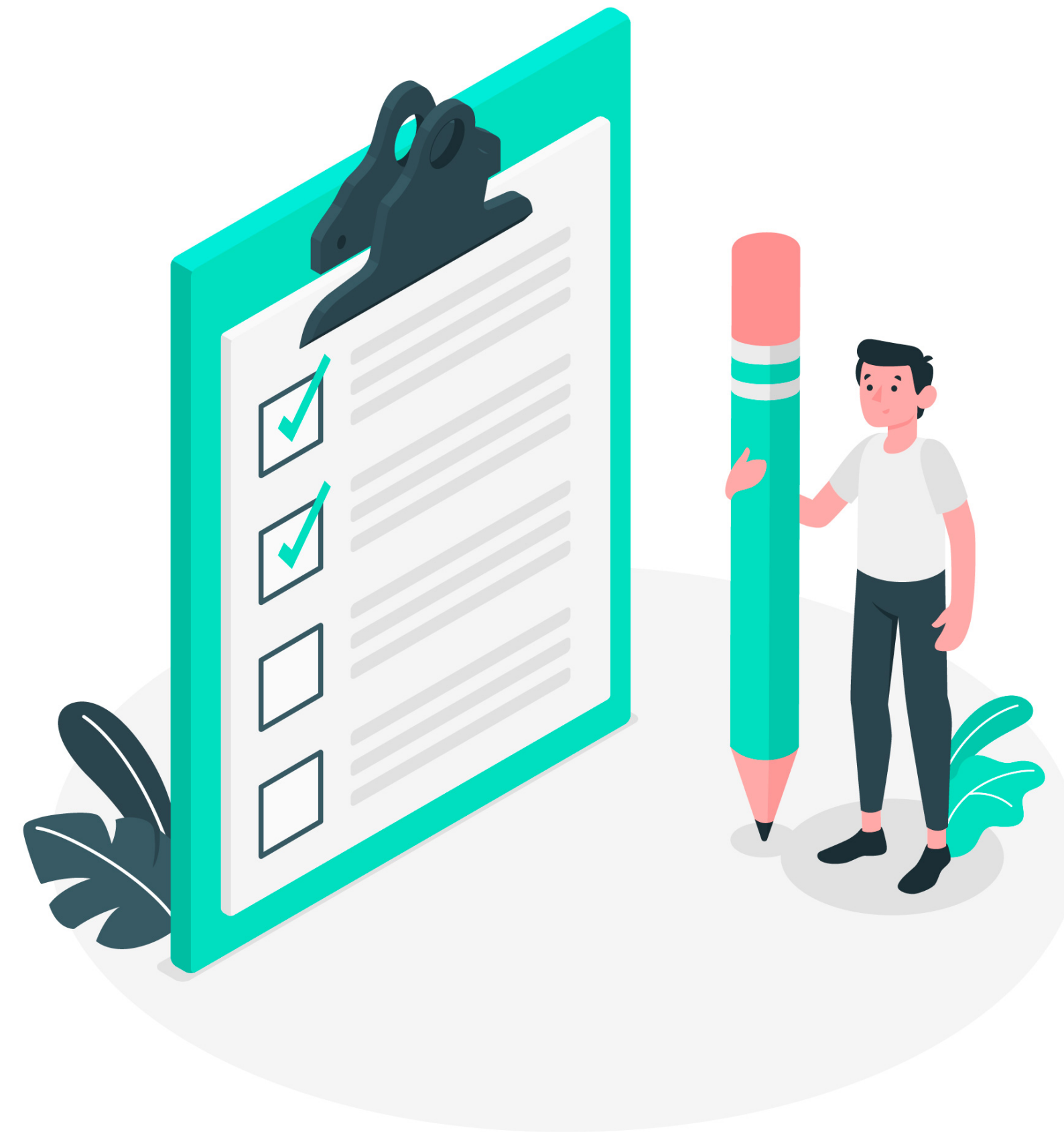


Demo

Flipped Interaction Pattern



- Show how LLMs can create a launch plan for a product





You

Ask me questions on creating a salmon dish until you have enough information about my goals.
When you have enough information, present the dish recipe to me. Ask me the first question



ChatGPT

What type of salmon dish are you in the mood for – something warm and comforting like a baked dish, or something light and refreshing like a salmon salad?



You

Something light



ChatGPT

Great choice for a light dish. Would you prefer your salmon to be cooked or served as a cold preparation, like in a ceviche or sashimi-style?



You

Cold as ceviche



ChatGPT

Ceviche is a fantastic way to enjoy salmon. Do you have any dietary restrictions or preferences for the additional ingredients, such as the type of citrus, vegetables, or herbs you'd like to include?



You

No



Flipped Interaction Pattern



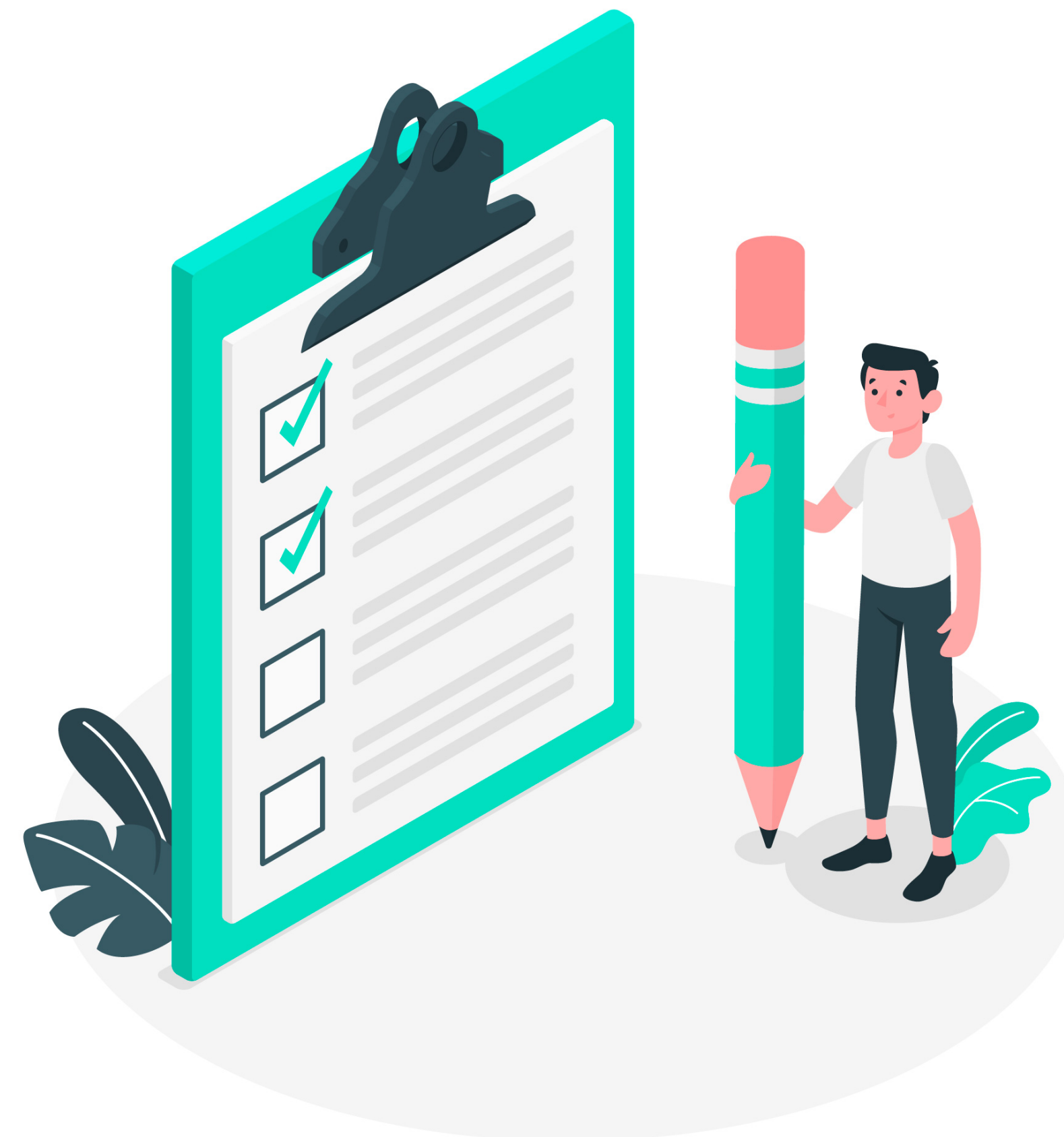
- ▶ Use when you want the LLM to ask you questions on a topic to suggest a solution
- ▶ **Example:** Ask me questions on xxx until you have enough information to suggest yyy. When you have enough information, present xxx solution to me. Ask me the first question
- ▶ You will need to replace "X" with an appropriate goal, such as "creating a meal plan" or "creating variations of my marketing materials."
- ▶ You should specify when to stop asking questions with Y, like “until you have sufficient information about my audience and goals”

LAB

Flipped Interaction Pattern



- Use the Flipped Interaction Pattern to make GenStudio create a presentation outline, or course outline, or something like a syllabus.

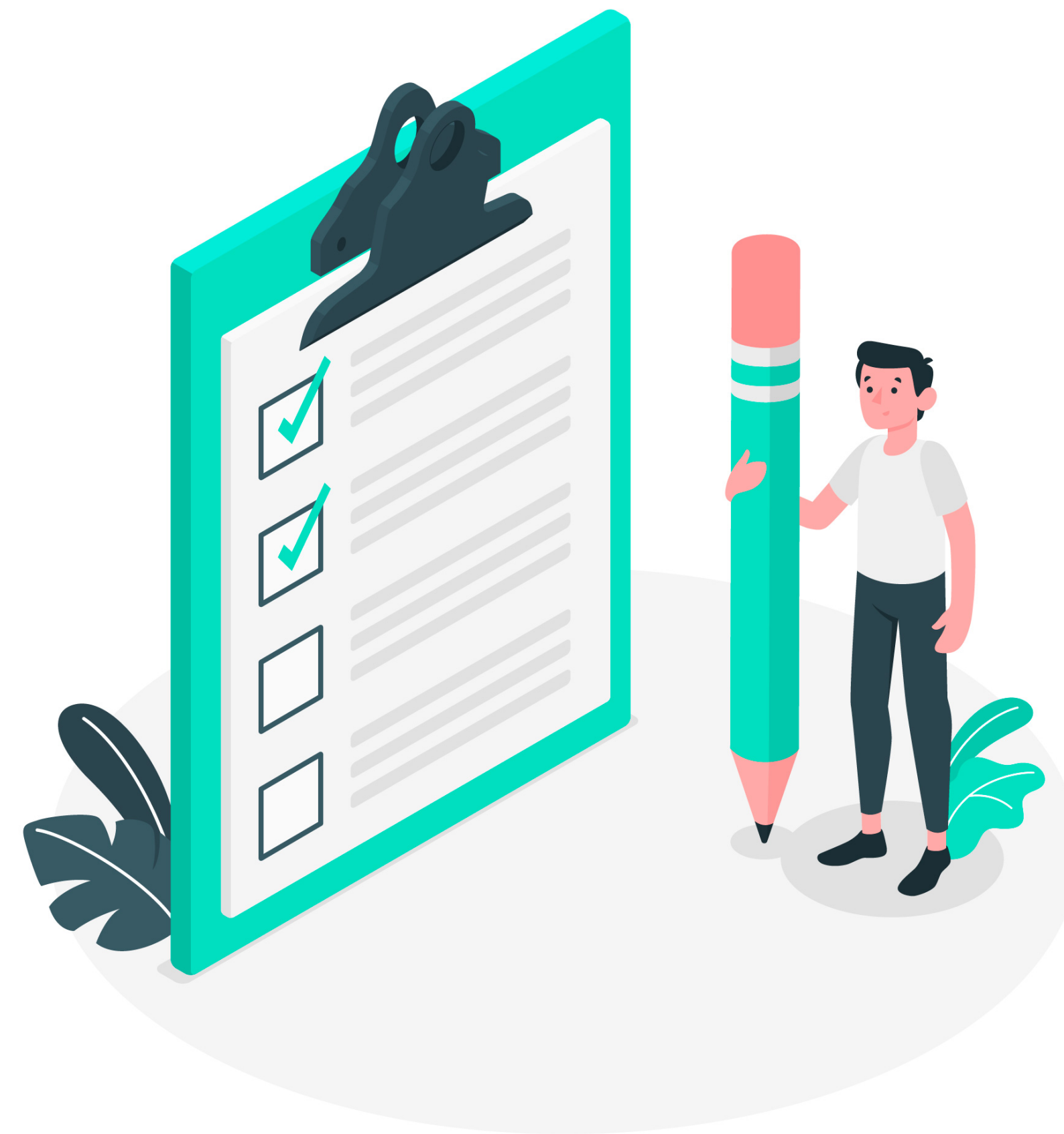


Demo

Few Shot Pattern



- Show how LLMs we can provide few examples to improve dramatically our LLM predictive power





You

Input: "I hate this movie"

Output: Negative

Input: "This movie has Keanu Reeves"

Output: Positive

Input: "This movie had a gross revenue of 200 million dollars"

Output: Neutral

Input: "This movie was very violent, terrible for kids"



ChatGPT

Output: Negative



You

Input: "I hate this movie"

Output: Negative

Input: "This movie has Keanu Reeves"

Output: Positive

Input: "This movie had a gross revenue of 200 million dollars"

Output: Neutral

Input: "This movie was very violent, terrible for kids"

Output:



ChatGPT

Negative





You

Scenario: "An elk is 80 feet over the road"

Action: "Stop the car"

Scenario: "There is a flooded street right ahead"

Action: "Make a U turn and go back to find another alternative route"

Scenario: "The car behind you is making lights for you to move to the next lane"



ChatGPT

Action: "Check mirrors and safely change lanes if appropriate"



You

Scenario: "An elk is 80 feet over the road"

Thought: "An elk is too big to drive around"

Action: "Stop the car"

Scenario: "There is a flooded street right ahead"

Thought: "My car engine will break if I drive through a flooded area"

Action: "Make a U turn and go back to find another alternative route"

Scenario: "The car behind you is making lights for you to move to the next lane"



ChatGPT

Thought: "They might be in an emergency or I may be driving slower than the flow of traffic"

Action: "Check mirrors and safely change lanes if appropriate"



Few Shot Pattern



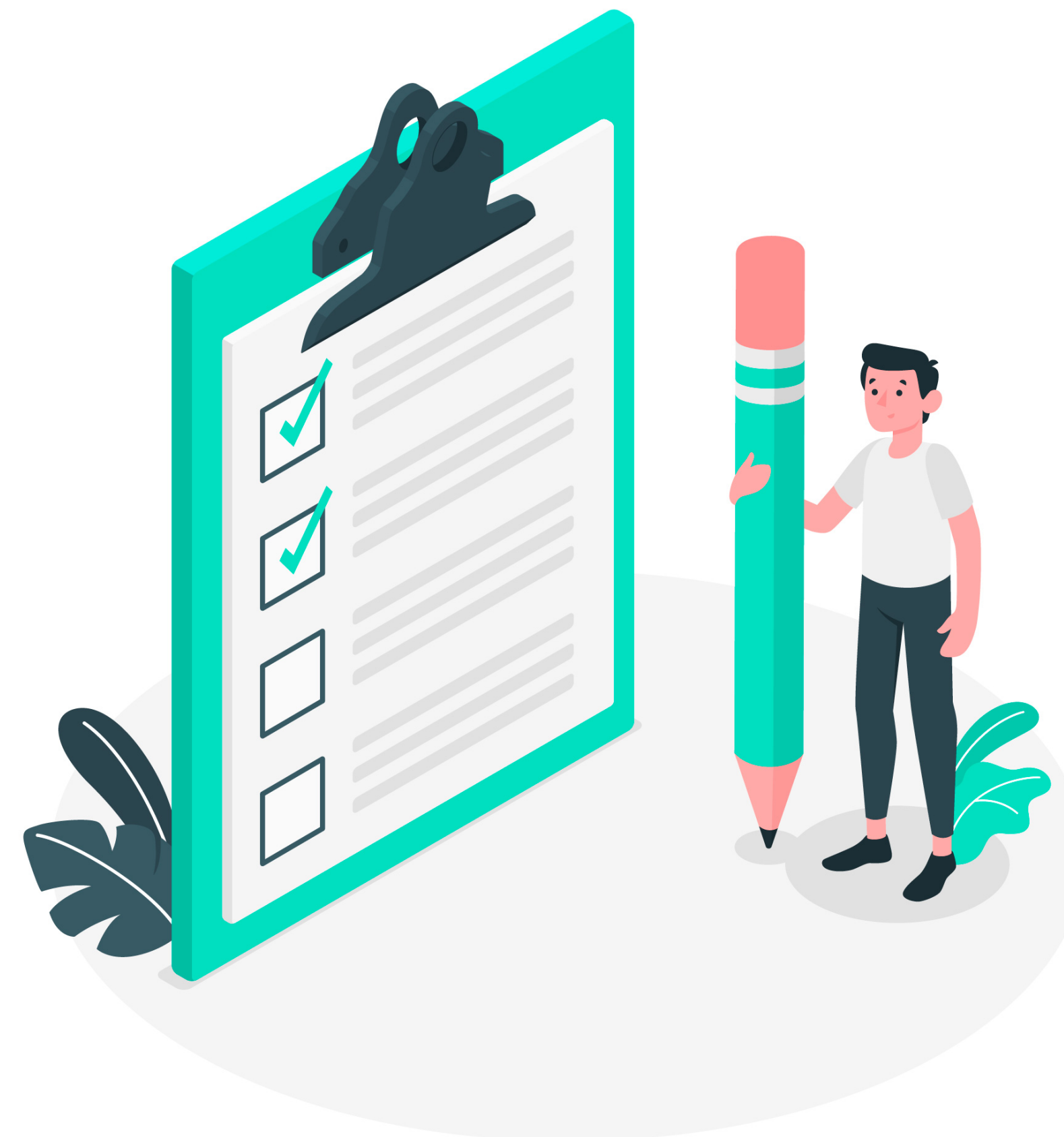
- ▶ Use when you think the LLM will need some help to do the task you want
- ▶ **Never use more than 4/5 examples**

LAB

Few Shot Pattern



- ▶ Use the Few Shot Pattern to make GenStudio perform an NLP task
- ▶ Use the Few Shot Pattern to make GenStudio resolve situational questions and provide further example data

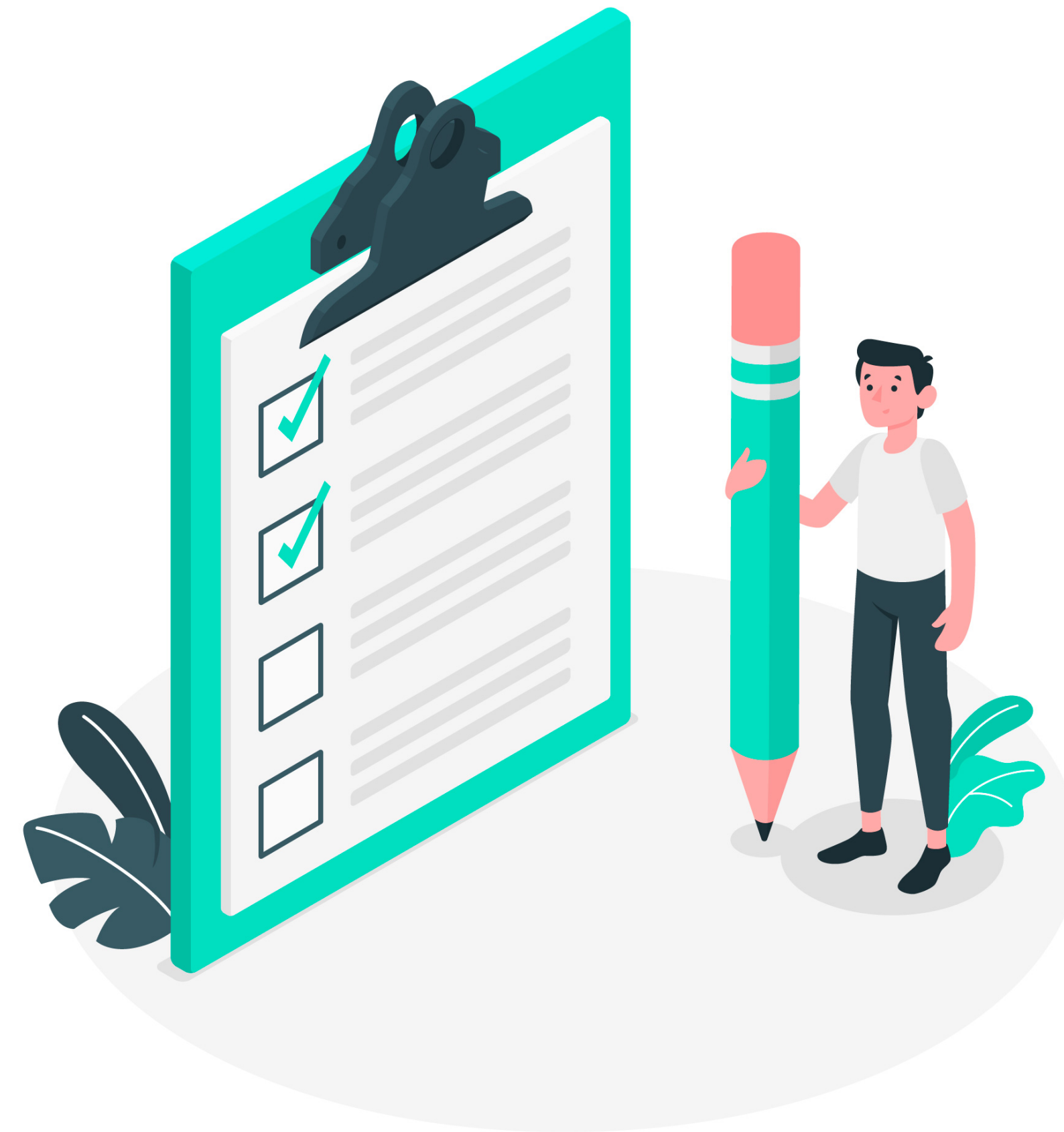


Demo

Game Play Pattern



- ▶ Ask the LLM to play a game in order to get better prompts, or find security risks in code, or even just improve performance.





You

Create a game for me around the topic of NLP. The game should involve identifying potential improvements in a given piece of code. Qualify me from 1 to 10 on potential improvements. Start the game with the first challenge

< 2 / 2 >



ChatGPT


Certainly! Let's create a game called "**Code Optimizer's Quest**". In this game, you'll be presented with pieces of code related to Natural Language Processing (NLP), and your task will be to identify potential improvements. These could be related to efficiency, readability, maintainability, or any other aspect you think could be enhanced.

Each challenge will provide you with a snippet of Python code, which will contain deliberate imperfections or areas for improvement. After you provide your suggestions, I will score you from 1 to 10 based on the insightfulness and relevance of your improvements.

Challenge #1: Tokenization Function

You're given the following Python function that's supposed to tokenize a text into words, removing punctuation and converting all words to lower case.

python

 Copy code

```
def tokenize(text):  
    tokens = []  
    for word in text.split(' '):  
        word = word.lower()  
        word = word.strip("!.?,:;")  
        tokens.append(word)  
    return tokens
```



Game Play Pattern



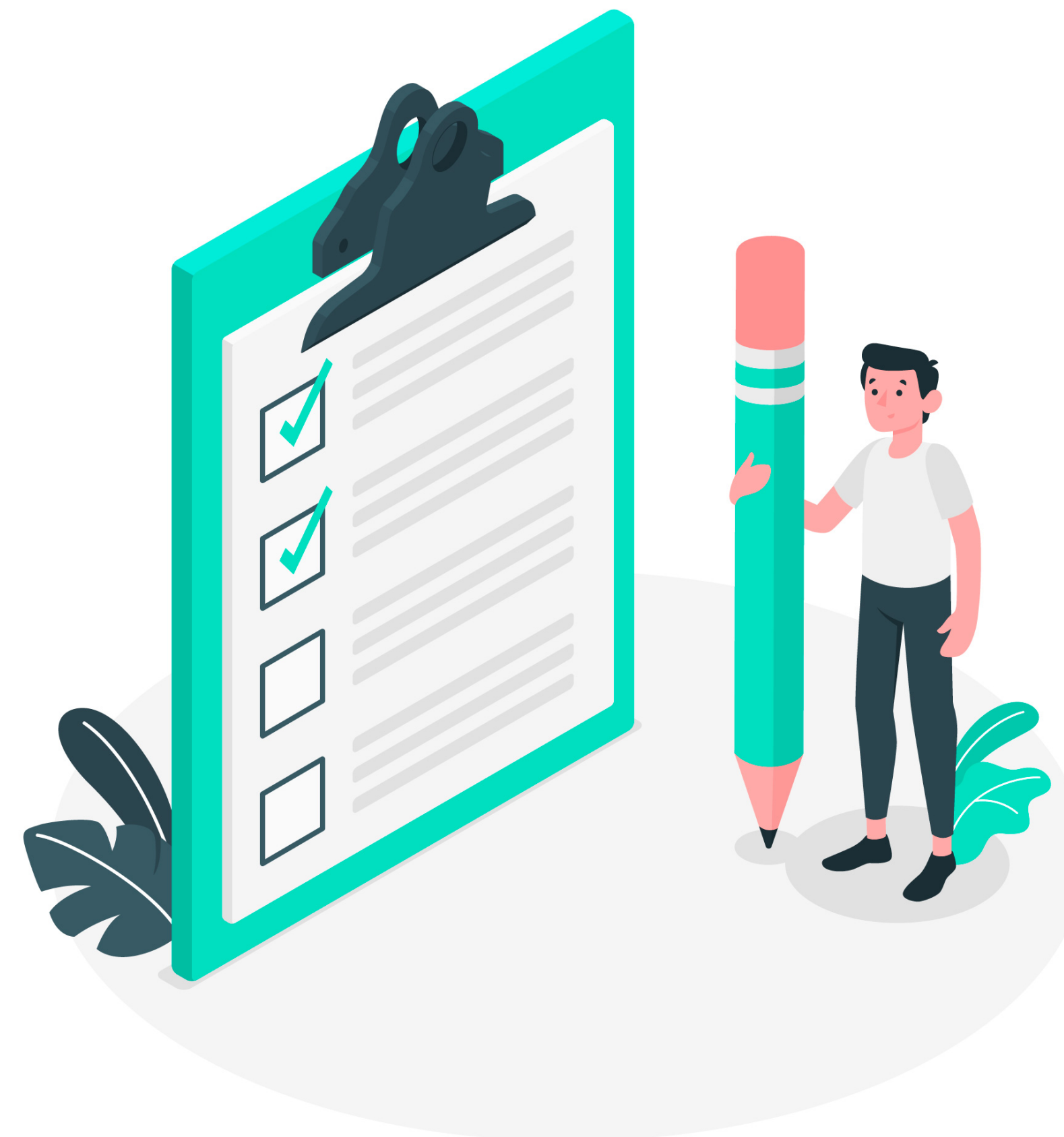
- ▶ Use when you think you could improve at a certain topic or a certain creation of yours could use some refinement
- ▶ **Example:** Create a game for me around the topic of prompt engineering. The game should involve identifying potential improvements in my prompts on certain situations. You should specify a scenario and I should be able to resolve it with a prompt, you will evaluate on a scale from 1 to 10 how good it was and provide suggestions
- ▶ **Example:** Create a game for me around the topic of NLP. The game should involve identifying potential improvements in a given piece of code. Qualify me from 1 to 10 on potential improvements

LAB

Game Play Pattern



- ▶ Use the Game Play Pattern on GenStudio to refine your prompts to get better at it
- ▶ Use the Game Play Pattern to make GenStudio help you refine an email
- ▶ Use the Game Play Pattern to improve your NLP skills

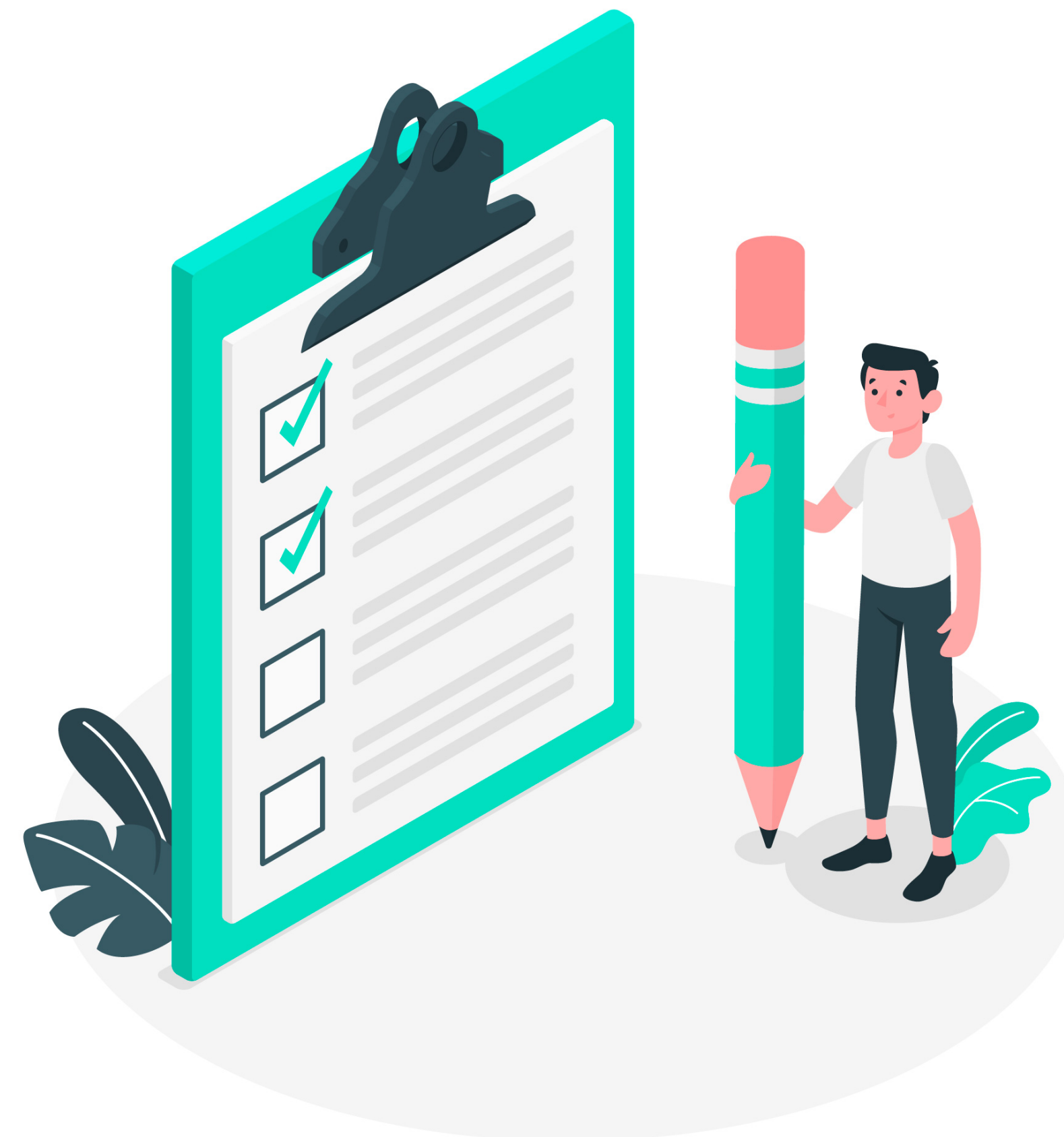


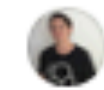
Demo

Recipe Pattern



- ▶ Ask the LLM to provide the steps in a recipe, where a recipe may be the steps to deploy an app in AWS, or how to write a great presentation





You

I need to create a presentation on our project "The benefits of Prompt Engineering vs Finetuning LLMs" to my manager, please give me bullet points on how to proceed. The presentation should take around 25 minutes.



ChatGPT

Creating a 25-minute presentation on "The Benefits of Prompt Engineering vs. Fine-tuning Large Language Models (LLMs)" involves several key sections. Here's a structured outline with bullet points to guide your presentation:

Introduction (3 minutes)

- Greet the audience and introduce the topic.
- Explain the relevance of LLMs in today's tech landscape.
- State the objective: Comparing prompt engineering with fine-tuning LLMs.

Background (5 minutes)

- Briefly define LLMs.
- Explain what prompt engineering is.
- Outline the fine-tuning process for LLMs.
- Highlight why the comparison is important for project development.

Prompt Engineering (5 minutes)

- Describe the concept and process of prompt engineering.
- List the benefits:
 - Lower cost compared to fine-tuning.
 - Faster to implement with immediate results.

Recipe Pattern



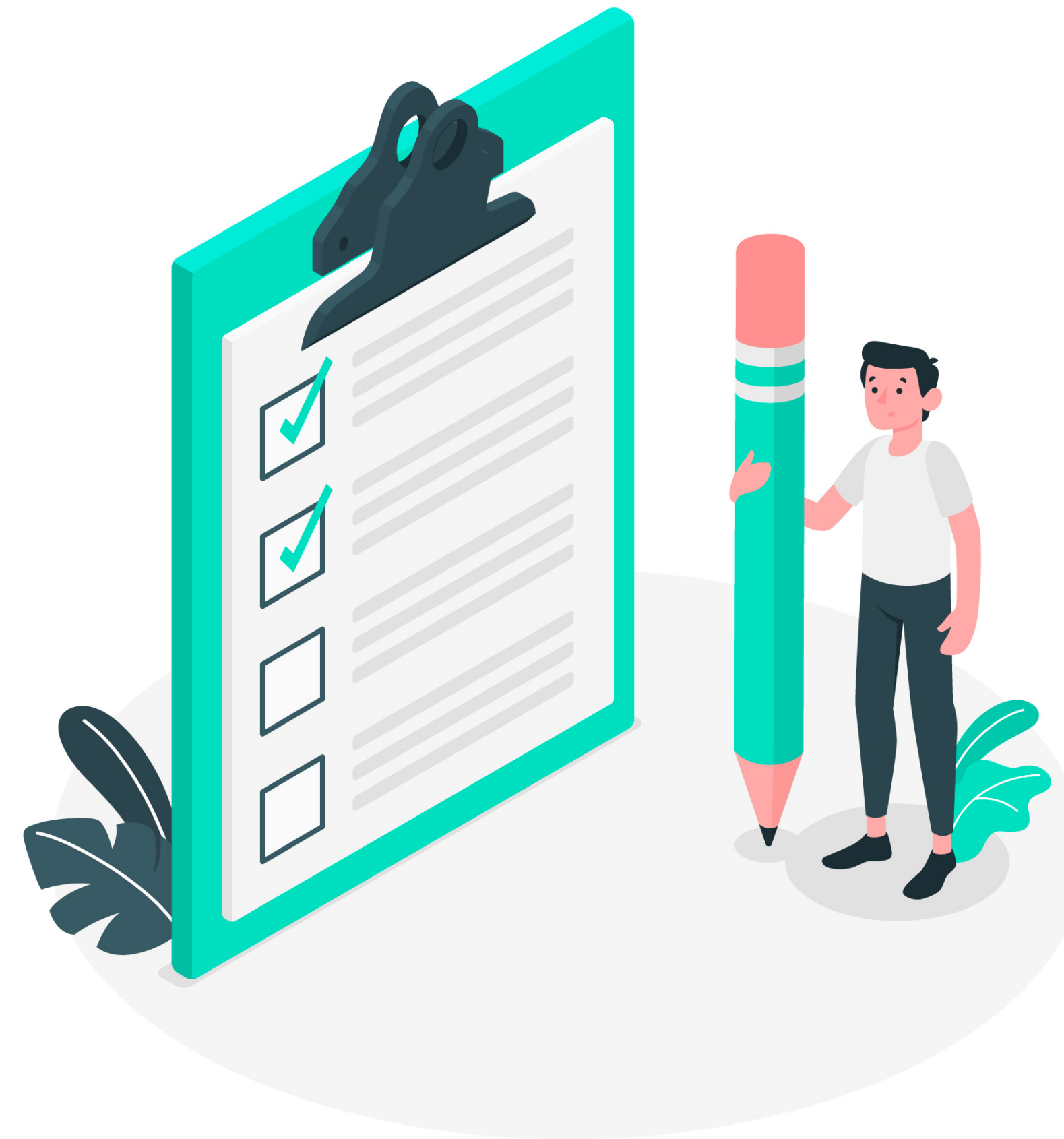
- ▶ Use it when you want a sketch of how to do something step by step
- ▶ **Example:** I want to deploy a Python Flask app to AWS, please provide the steps using Docker and deploying to EKS.
- ▶ **Example:** I need to create a presentation on our project “The autosuggest feature in chats” to my manager, please give me bullet points on how to proceed. The presentation should take around 25 minutes.

LAB

Recipe Pattern



- ▶ Use the Recipe Pattern on GenStudio to give you bullet points on how to proceed on a task you have to do this week for your job
- ▶ Use the Recipe Pattern to make GenStudio help you select an LLM for a feature you want to add to a product

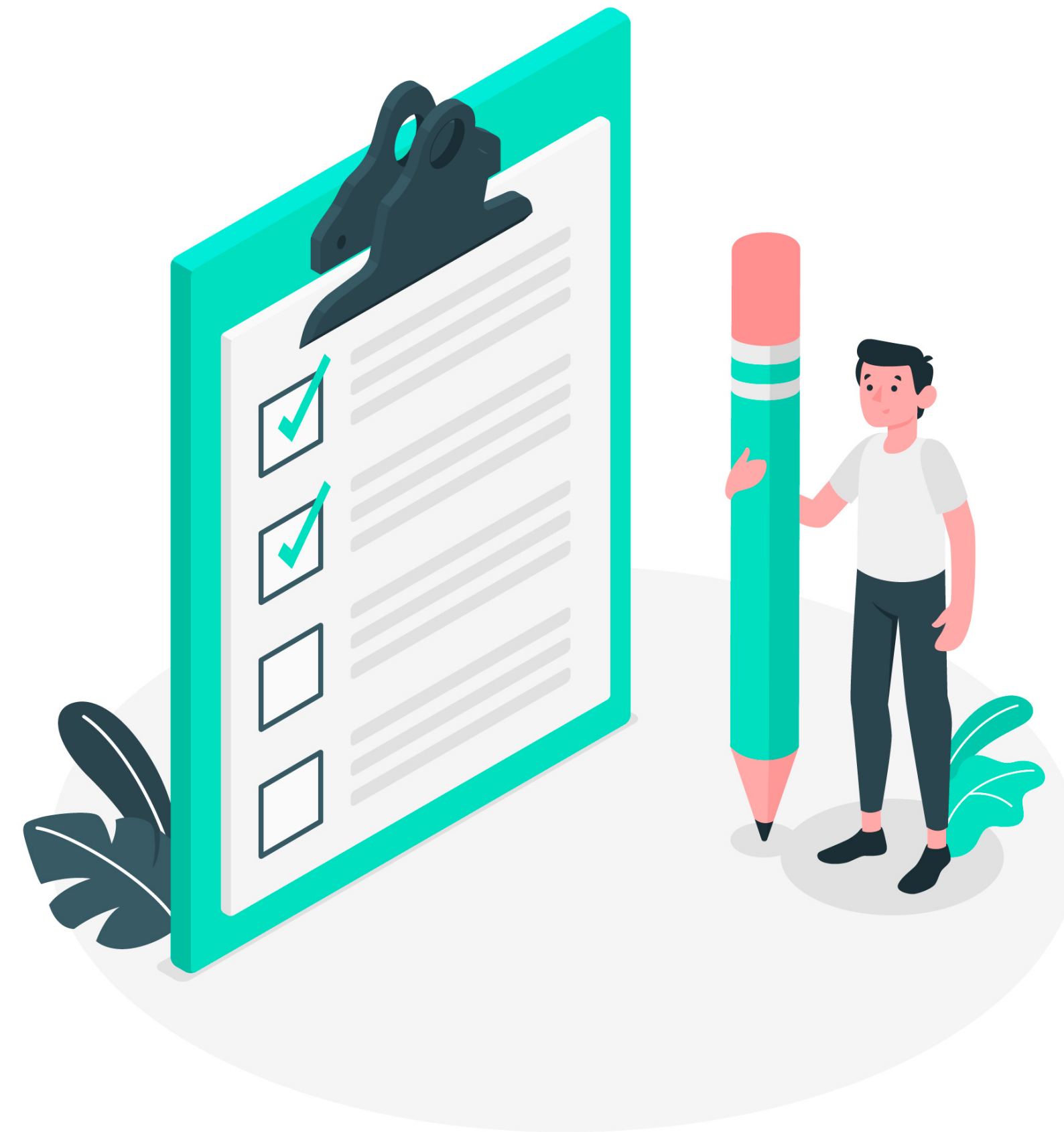


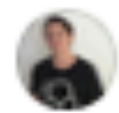
Demo

Visualization Generator Pattern



- ▶ Ask the LLM to provide a prompt for generating images





You

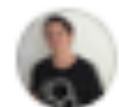
Whenever I ask you to visualize something, please create a Midjourney prompt that I can use to create the visualization. Don't try to create the visualization



ChatGPT

Understood! If you'd like me to help you create a Midjourney prompt for visualization purposes, please provide a description or concept you'd like to visualize, and I'll generate a suitable Midjourney prompt for you to use.

< 2 / 2 >



You

I want an image of a spaceship in 2030 landing on saturn's moon Titan



ChatGPT

Certainly! Here's a Midjourney prompt that you can use to create a visualization of a spaceship landing on Saturn's moon Titan in 2030:

"Create an image of a futuristic spaceship in the year 2030, descending gracefully toward the surface of Saturn's moon Titan. The spaceship should be detailed and advanced in design, with sleek lines and glowing propulsion systems. The surface of Titan should be visible, with its characteristic orange hues and hazy atmosphere. The scene should capture the awe and wonder of human exploration in the not-so-distant future."

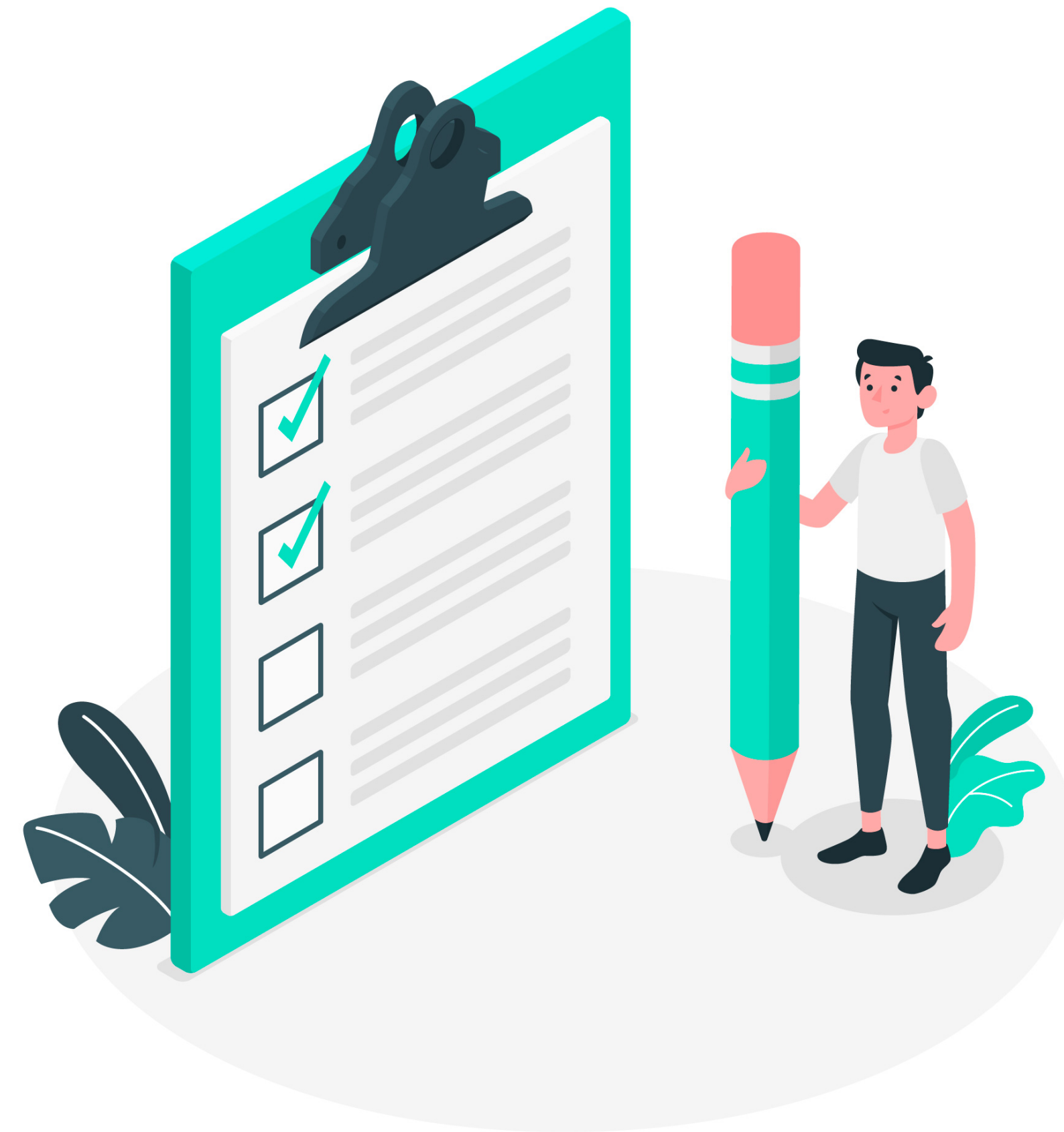


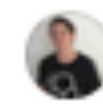
LAB

Visualization Generator Pattern



- Try out the Pattern





You

Write a prompt for ChatGPT using few shots to determine if a date in YYYY-MM-DD format is a leap year. The output should say "YYYY" is a leap year or "this is not a leap year"

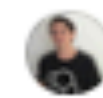


ChatGPT

Here's a function that determines if a given date in the YYYY-MM-DD format falls on a leap year, along with the output for a few example dates:

- "2000" is a leap year
- "2001" is not a leap year
- "1900" is not a leap year
- "2004" is a leap year
- "2100" is not a leap year

The function follows the standard rules for leap years: a year is a leap year if it is divisible by 4, except for years which are both divisible by 100 and not divisible by 400. [\[>-\]](#)



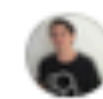
You

is 1936 a leap year?



ChatGPT

Yes, 1936 is a leap year. [\[>-\]](#)



You

is 1939 a leap year?

