

a guide to chatgpt

This document provides a comprehensive guide to ChatGPT, detailing its functionalities, capabilities, and user access levels. It covers the introduction to Generative AI and Large Language Models (LLMs), and offers step-by-step instructions for beginners on how to use the free version of ChatGPT. Additionally, it outlines the different models available, recent updates, effective prompting techniques, and examples to showcase ChatGPT's diverse capabilities.

A Comprehensive Guide to ChatGPT's Functionalities, Capabilities, and User Access Levels

What is Generative AI, Large Language Models and ChatGPT

Generative AI is a type of artificial intelligence that can create new content, like text, images, or music, based on what it has learned. It works by using patterns from huge amounts of data to predict what should come next. For example, if you ask a generative AI to write a story, it will use what it knows about stories and language to create one for you. One common type of generative AI is a large language model (LLM), which is trained on massive amounts of text from books, websites, and other sources. It can answer questions, write essays, or even chat like a human!

LLMs work by looking at the words or phrases you give them and using their training to predict the best possible response. They can help in many ways, like writing emails, translating languages, or summarizing long articles. In education, LLMs can help students by explaining difficult topics, and in business, they can assist by creating reports or generating ideas. The more data an AI model has, the better it gets at understanding and producing high-quality content.

ChatGPT is a powerful tool that uses artificial intelligence to generate human-like text based on the prompts you give it. It's built on a large language model (LLM) that has learned from a vast amount of text data. This allows ChatGPT to understand and respond to a wide variety of questions, provide helpful explanations, and even engage in conversations. You can ask ChatGPT to help with writing, brainstorming ideas, learning new topics, or even creating fun stories. It’s designed to make complex tasks easier and more efficient, whether you're looking for answers, creativity, or assistance with everyday tasks.

Instructions for Beginners:

Here are step-by-step instructions on how to use ChatGPT for novices with the free version:

**Step 1: Sign Up or Log In**

1. **Visit the ChatGPT website**: Go to [chat.openai.com](https://chat.openai.com).
2. **Sign Up or Log In**: If you don’t have an account, click on “Sign Up” and create one by providing an email address and creating a password. If you already have an account, click on “Log In” and enter your credentials.

**Step 2: Accessing ChatGPT**

1. **Select the Free Version**: Once logged in, you will automatically have access to the free version of ChatGPT.
2. **Start a Conversation**: You’ll see a text box at the bottom of the screen where you can type your questions or requests.

**Step 3: Entering a Prompt**

1. **Think of Your Request**: What do you need help with? This could be a question, a request for information, or something you’d like ChatGPT to do, like writing a short story or summarizing an article.
2. **Type Your Prompt**: In the text box, type your question or task clearly. For example:
	* “What are the causes of climate change?”
	* “Can you help me write a short story about a dragon?”

**Step 4: ChatGPT Responds**

1. **Read the Response**: Once you send your prompt by pressing "Enter" or clicking the send button, ChatGPT will generate a response based on what it knows.
2. **Clarify if Needed**: If the answer isn't exactly what you're looking for, you can ask follow-up questions or clarify your prompt. For example, you can say, “Can you explain it in simpler terms?” or “Can you give more examples?”

**Step 5: Experiment and Refine Your Prompts**

1. **Experiment with Different Prompts**: Don’t be afraid to try different kinds of questions or requests. ChatGPT can help with a variety of tasks, such as:
	* Asking for advice or ideas.
	* Writing emails, essays, or stories.
	* Explaining complex topics in simple language.
2. **Refine Your Prompts for Better Results**: If the response isn’t quite right, try rephrasing your question or being more specific. For example, instead of asking "Tell me about animals," you can ask, "Can you describe the habitat of a polar bear?"

**Step 6: End the Conversation**

1. **Sign Out**: Once you’re done using ChatGPT, you can simply close the browser tab. If you want to log out, click on your profile icon in the top right corner and select "Log Out."

**Tips for Using ChatGPT Effectively:**

* **Be Specific**: The more specific your prompt, the more accurate the response will be.
* **Ask Follow-Up Questions**: If you need more details, don’t hesitate to ask additional questions.
* **Use Simple Language**: If you’re not sure how to phrase something, ChatGPT can understand basic prompts, so don’t worry about using overly complex language.

That’s it! Using ChatGPT with the free version is simple and intuitive—just type in your question, and ChatGPT will do its best to help you!

Models Capabilities and User Access

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Model** | **Release Date** | **Capabilities** | **Use Cases** | **Key Features** | **User Access Level** |
| **GPT-3.5** | November 2022 | Reliable and fast for most general tasks with basic capabilities in text generation, answering questions, and simple coding. | Chatbots, writing assistance, code generation, and summarization. | Faster responses, lower cost, efficient for routine tasks. | **Free**, **Plus**, **Pro** |
| **GPT-4** | March 2023 | Advanced language understanding and generation, enhanced reasoning abilities, supports multimodal input (text and image). | Complex problem-solving, creative writing, customer support, academic research, and technical queries. | Large context window, high-quality text generation, multi-step reasoning, and image inputs. | **Plus**, **Pro** |
| **GPT-4o** | February 2025 | Optimized for higher performance in specific contexts, ideal for interactive tasks requiring high sensitivity and fast response times. | Complex, real-time applications, such as live discussions, interactive simulations, and AI-based games. | Precision and quick responsiveness, optimized for interactive scenarios. | **Pro**, **Enterprise** |
| **GPT-4o-mini** | February 2025 | A smaller, more agile version of GPT-4o designed for tasks that require efficiency and faster processing in constrained environments. | Lightweight applications, real-time operations in tech fields, quick decision-making. | Fast response times, lower resource consumption while maintaining high interaction quality. | **Pro**, **Enterprise** |
| **o3** | January 2025 | Reflective and generative pre-trained transformer for complex reasoning tasks, more precise for logic-heavy tasks. | Technical fields, advanced scientific research, strategy development, and data-heavy queries. | Focused on logic, complex reasoning, and advanced problem-solving. | **Pro**, **Enterprise** |
| **o3-mini** | January 2025 | Smaller, faster, more efficient version of o3, optimized for speed with similar capabilities but with a lighter memory usage. | Real-time decision-making, technical troubleshooting, smaller data sets, and fast execution. | Speed and efficiency in technical domains, ideal for resource-constrained applications. | **Pro**, **Enterprise** |
| **GPT-4.5** | February 2025 | Improved pattern recognition, greater creativity, reduced hallucinations, higher accuracy. | High-level content creation, business insights, data analysis, and decision-making. | Better reliability, enhanced capabilities in generating long-form content, and creativity. | **Pro**, **Enterprise** |
| **GPT-5 (Planned)** | 2025 | Unified model that integrates the capabilities of both GPT-4 and o3 series, optimized for a wide range of tasks. | All-purpose AI applications, ranging from business intelligence to scientific research and creative arts. | Highly efficient integration of reasoning, creativity, and multimodal inputs. | **Enterprise** (Likely) |

**User Access Levels:**

* **Free**: Available to users with the free version of ChatGPT.
* **Plus**: Available to users who have subscribed to ChatGPT Plus.
* **Pro**: Available to users with ChatGPT Pro (paid version with enhanced features).
* **Teams**: Available to organizations using ChatGPT in collaborative team settings.
* **Enterprise**: Available for large organizations or companies requiring specialized models with high-scale access and customization.

Recent ChatGPT features, their release dates, descriptions, and user access levels:

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature/Update** | **Release Date** | **Description** | **User Access Level** |
| **Canvas Feature** | December 10, 2024 | Introduced a digital canvas allowing users to create and edit content alongside ChatGPT's responses. Enabled execution of Python code within the canvas for tasks like data analysis and debugging. | **Plus**, **Pro**, **Enterprise** |
| **Advanced Voice Mode Enhancements** | December 12, 2024 | Introduced festive voice options (e.g., Santa Voice) and real-time video and screen-sharing capabilities in voice chats, enhancing interactive sessions. | **Plus**, **Pro**, **Enterprise** |
| **Deep Research Mode** | February 2, 2025 | Enabled ChatGPT to autonomously browse the web and generate detailed reports on user-specified topics within 5 to 30 minutes. Allowed interpretation and analysis of text, images, and PDFs, with plans for visualizations and embedded images in reports. | **Plus**, **Pro**, **Enterprise** |
| **Operator Agent** | January 23, 2025 | Introduced an agent capable of performing tasks such as online shopping, booking reservations, and ordering services by navigating the web like a human user. Ensured users could oversee and intervene in tasks, especially those requiring sensitive information. | **Pro**, **Enterprise** |
| **o3 Model** | January 31, 2025 | Released a reflective generative pre-trained transformer designed for complex logical reasoning tasks, providing more deliberate and accurate responses. | **Pro**, **Enterprise** |
| **o3-mini Model** | January 31, 2025 | Introduced a smaller, faster, and more cost-effective version of the o3 model, optimized for speed and efficiency, suitable for technical domains requiring precision. | **Free**, **Plus**, **Pro**, **Enterprise** |
| **GPT-4.5** | February 27, 2025 | Launched GPT-4.5, offering improved pattern recognition, creativity, and user interaction, with reduced hallucinations. | **Pro**, **Enterprise** |

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Effective Prompting:

Prompt structure in a table with examples:

|  |  |  |
| --- | --- | --- |
| **Section** | **Purpose** | **Example** |
| **Goal** | Define the main objective or purpose of the request. | "I want a list of the best medium-length hikes within two hours of San Francisco." |
| **Return Format** | Specify how the response should be structured or formatted. | "For each hike, return the name of the hike, the starting and ending address, the distance, drive time, hike duration, and what makes it a cool and unique adventure." |
| **Warnings** | Provide any important cautions or points to keep in mind to avoid errors or misunderstandings. | "Be sure the name of the trail is correct, that it actually exists, and that the time is accurate." |
| **Context Dump** | Offer additional context or background information to help the model better understand the request. | "My girlfriend and I hike a lot and are looking for new, unique adventures outside of SF, as we've already done most of the well-known trails in the area." |

Other prompt Structures
​To enhance the effectiveness of your interactions with ChatGPT, consider employing the following six prompt formats, each tailored to different objectives:​

1. **Zero-Shot Prompting**:
	* **Purpose**: Directly request information or tasks without providing examples.​
	* **Example**: "Translate the following English sentence into French: 'Hello, how are you today?'"​
2. **Few-Shot Prompting**:
	* **Purpose**: Provide a few examples within the prompt to guide the model's response.​
	* **Example**:

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Translate the following English sentences into French:

1. "Good morning, everyone."

2. "What time does the train depart?"

3. "Can you recommend a good restaurant?"

1. **Chain-of-Thought Prompting**:
	* **Purpose**: Encourage step-by-step reasoning to arrive at a solution.​
	* **Example**:

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Solve the math problem: What is 15% of 200?

Let's think step by step:

- 15% is the same as 0.15.

- Multiply 0.15 by 200: 0.15 \* 200 = 30.

Therefore, 15% of 200 is 30.

1. **Role-Playing Prompting**:
	* **Purpose**: Assign a specific role to ChatGPT to simulate different perspectives or expertise.​
	* **Example**: "As a travel advisor, suggest a 3-day itinerary for a family visiting Tokyo, including must-see attractions and dining options."
2. **Reflexion Prompting**:
	* **Purpose**: Prompt the model to reflect on its own responses or consider alternative viewpoints.​
	* **Example**: "After providing your initial answer, evaluate its strengths and weaknesses, and suggest any improvements."
3. **Tree-of-Thought Prompting**:
	* **Purpose**: Guide the model to explore multiple possible solutions or paths before converging on the best answer.​
	* **Example**: "When planning a marketing strategy for a new product, consider various approaches such as social media campaigns, influencer partnerships, and traditional advertising. Discuss the potential benefits and drawbacks of each."

By incorporating these prompt formats, you can tailor your interactions with ChatGPT to achieve more accurate and contextually appropriate responses.

Examples and Exercises

Below are prompt examples to showcase ChatGPT's diverse capabilities across user tiers and features. Each example is accompanied by a structured prompt format to aid students in learning effective prompting techniques.

**For Free Version Users:**

1. **Creative Storytelling:**
	* **Prompt Format:**
	* [Role] As a [storyteller/novelist], create a [genre] story that [specific plot point or theme].
	* [Constraints] Limit the story to [word count] words.
	* [Tone] Maintain a [desired tone, e.g., humorous, suspenseful] tone throughout.
	* **Example:**
	* [Role] As a storyteller, create a fantasy story that revolves around a young wizard discovering a hidden realm.
	* [Constraints] Limit the story to 300 words.
	* [Tone] Maintain a whimsical and adventurous tone throughout.

*This prompt encourages ChatGPT to generate a short, imaginative tale, demonstrating its creative writing abilities.*

1. **Historical What-If Scenario:**
	* **Prompt Format:**
	* [Role] As a historian, analyze the potential outcomes if [historical event] had occurred differently.
	* [Analysis] Discuss the possible impacts on [specific aspects, e.g., politics, culture].
	* **Example:**
	* [Role] As a historian, analyze the potential outcomes if the Library of Alexandria had never been destroyed.
	* [Analysis] Discuss the possible impacts on global knowledge dissemination and technological advancement.

*This exercise showcases ChatGPT's ability to engage in speculative historical analysis.*

1. **Language Learning Assistance:**
	* **Prompt Format:**
	* [Role] As a language tutor, assist in learning [target language] by [method, e.g., translating sentences, explaining grammar].
	* [Content] Provide [number] examples with explanations.
	* **Example:**
	* [Role] As a language tutor, assist in learning Spanish by translating common English phrases and explaining the grammar behind them.
	* [Content] Provide 5 examples with brief explanations.

*This demonstrates ChatGPT's utility in educational and language learning contexts.*

1. **Idea Generation for Creative Projects:**
	* **Prompt Format:**
	* [Role] As a brainstorming assistant, generate [number] unique ideas for [creative project, e.g., short film plots, art concepts].
	* [Criteria] Ensure ideas are [specific criteria, e.g., original, thought-provoking].
	* **Example:**
	* [Role] As a brainstorming assistant, generate 3 unique ideas for short film plots that explore the concept of time travel.
	* [Criteria] Ensure ideas are original and thought-provoking.

*This illustrates ChatGPT's capability to aid in creative brainstorming sessions.*

**For ChatGPT Plus Users:**

1. **Advanced Technical Explanation:**
	* **Prompt Format:**
	* [Role] As an expert in [field, e.g., quantum physics], explain [complex concept] in simple terms.
	* [Level] Tailor the explanation for an audience with basic understanding of the subject.
	* **Example:**
	* [Role] As an expert in quantum physics, explain the concept of superposition in simple terms.
	* [Level] Tailor the explanation for an audience with basic understanding of physics.

*This prompt leverages ChatGPT's enhanced capabilities in delivering complex information accessibly.*

1. **Business Strategy Development:**
	* **Prompt Format:**
	* [Role] As a business consultant, develop a strategic plan for [business type] aiming to [goal, e.g., expand market reach].
	* [Components] Include [specific elements, e.g., market analysis, marketing strategies].
	* **Example:**
	* [Role] As a business consultant, develop a strategic plan for a local coffee shop aiming to expand its market reach.
	* [Components] Include market analysis, marketing strategies, and customer retention plans.

*This demonstrates ChatGPT's ability to assist in business planning and strategy formulation.*

1. **In-Depth Comparative Analysis:**
	* **Prompt Format:**
	* [Role] As an analyst, compare and contrast [item A] and [item B] in terms of [criteria, e.g., performance, cost].
	* [Depth] Provide a detailed analysis with supporting data.
	* **Example:**
	* [Role] As an analyst, compare and contrast electric cars and hybrid cars in terms of environmental impact and cost-effectiveness.
	* [Depth] Provide a detailed analysis with supporting data.

*This showcases ChatGPT's capacity for detailed comparative studies.*

1. **Personalized Learning Plan Creation:**
	* **Prompt Format:**
	* [Role] As an educational planner, create a personalized learning plan for [learner's profile, e.g., a high school student interested in computer science].
	* [Plan] Include recommended courses, resources, and extracurricular activities.
	* **Example:**
	* [Role] As an educational planner, create a personalized learning plan for a high school student interested in computer science.
	* [Plan] Include recommended courses, online resources, and relevant extracurricular activities.

*This illustrates ChatGPT's ability to tailor educational content to individual needs.*

**For Canvas Users:**

1. **Collaborative Story Writing:**
	* **Scenario:** Collaboratively write a short story with ChatGPT, utilizing Canvas's real-time editing features.
	* **Steps:**
		1. Open Canvas and start a new document titled "The Enchanted Forest."
		2. In the first section, write an introduction setting the scene in a mystical forest.
		3. Invite ChatGPT to continue the story, adding a plot twist where the forest comes alive.
		4. Edit and refine the story collaboratively, adding dialogue and descriptive elements.
		5. Finalize the story, ensuring coherence and engagement.
	* \*This exercise demonstrates Canvas's collaborative writing capabilities.\*
2. **Code Collaboration:**
	* **Scenario:** Work with ChatGPT in Canvas to develop a Python script that analyzes text sentiment.
	* **Steps:**
		1. In Canvas, start a new code block titled "Sentiment Analysis Script."
		2. Write the initial import statements for necessary libraries (e.g., nltk, textblob).
		3. Collaborate with ChatGPT to write functions that preprocess text data.
		4. Develop the main function that performs sentiment analysis on sample text.
		5. Test the script with various text inputs and refine based on feedback.

ChatGPT Resources:

**ChatGPT Help**: [ChatGPT Help Center](https://help.openai.com/en/collections/3742473-chatgpt)
This page provides official help, including release notes, FAQs, and guides on using ChatGPT.

**OpenAI Website**: [OpenAI Official Website](https://openai.com)
This is the main website for OpenAI, where you can find more information about ChatGPT, other AI models, and the research behind them.

**Release Notes:** [**ChatGPT Release Notes**](https://help.openai.com/en/articles/6825453-chatgpt-release-notes)This page contains the latest updates, features, and improvements made to ChatGPT, along with detailed release notes.

