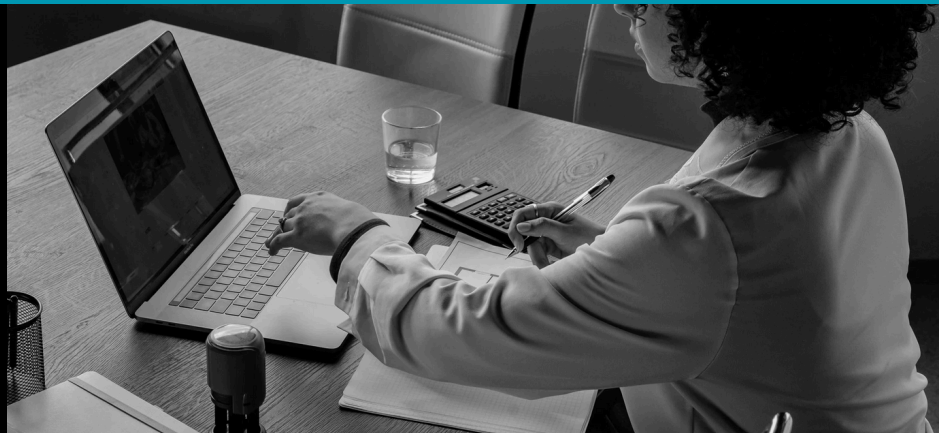


# UNDERSTANDING AI AND THE ART OF PROMPTING



## What is Generative AI?

Generative AI is a type of Artificial Intelligence that can create new content, such as text, images, music, or code, based on patterns it has learned from existing data. This guide aims to equip you with the knowledge and skills to make the most of this technology.

Think of it as an incredibly talented apprentice. Just as a human apprentice learns by observing master craftspeople, generative AI learns by 'studying' vast amounts of existing data. For instance, it might analyse thousands of novels, countless paintings, or millions of lines of code. Through this process, it identifies patterns, styles, and structures.

Once it has learned these patterns, generative AI can then produce its own original works. It's as if the apprentice, after years of study, can now create their own masterpieces that echo the styles they've learned but are entirely new and unique.

## What data does Generative AI use?

Generative AI employs a wide variety of data types, such as text, images, audio, video, code, structured data, time series, sensor readings, biometric information and geographical data. The precise data utilised depends on the AI model's intended purpose, with vast datasets comprising these diverse types enabling the AI to generate new content or offer insights across numerous domains.

## Why should I learn how to use Generative AI?

In today's rapidly evolving world, Generative AI is becoming an integral part of our daily lives, seamlessly blending into our mobiles, social media, and various online services. By learning to harness this powerful tool, you can significantly boost your productivity, tackling writing tasks, brainstorming sessions, and problem-solving with greater ease and efficiency. As AI tools make their way into numerous professions, familiarising yourself with this technology can give you a competitive edge in your career.

Generative AI isn't just about productivity; it's also a wellspring of creativity. It can serve as an inspiring partner, helping you explore new ideas in art, music, and writing. Understanding how AI works empowers you to make informed decisions about its use and recognise both its potential and limitations.

Remember, you won't be replaced by AI, but you might find yourself outpaced by someone who knows how to use it effectively. By engaging with this technology now, you're not just keeping up – you're positioning yourself to shape the future. Your insights and experiences can contribute to the ongoing dialogue about how AI should be integrated into our society.

Ultimately, Generative AI is a tool designed to assist and inspire, not to replace human skills and judgement. By learning to use it wisely and effectively, you're equipping yourself with a powerful ally in your personal and professional growth.

## What areas does Generative AI excel in?

Generative AI demonstrates remarkable proficiency as a writing companion. Whether you're penning a short story, crafting an essay, or simply looking for a witty joke, this AI can lend a hand. It can also assist in translating, summarising and answering queries with impressive accuracy.

Generative AI can conjure up images based on your descriptions or transform existing photographs in remarkable ways. Not to be outdone in the auditory department, it can compose tunes and even mimic voices with uncanny accuracy.

For those with an interest in computing, this AI proves to be a handy coding buddy. It can assist in writing basic programs, making it a useful tool for budding programmers. Moreover, it has a knack for spotting patterns in vast amounts of data, a skill that can be quite useful in various fields.

When you're feeling a bit stuck for ideas, Generative AI can be a fantastic brainstorming partner. It's also rather good at tailoring recommendations to your personal tastes, be it for films, books, or music.

Lastly, this clever AI is quite the problem solver. It can approach tricky issues from different angles, often coming up with solutions you might not have considered.

## What is Generative AI's limitations or shortcomings?

Generative AI, while impressive in many ways, has some important limitations that are good to know about, especially if you're new to using it. Let's explore these in a way that's easy to understand.

First off, AI can sometimes misunderstand the context of a situation, much like a person who's new to a country might misinterpret local customs. This could mean you will need to make edits to the responses or provide follow-up questions that help expand on this. It also lacks real emotions and empathy, so it can't truly understand how you're feeling or respond with genuine emotional support.

When it comes to common sense, AI can be a bit like a very knowledgeable but naïve child. It might know complex facts but struggle with simple, everyday reasoning that most adults take for granted. Also, while AI can come up with new ideas, it's limited by what it has been taught.

AI also doesn't have a sense of right and wrong. It can't make complex moral decisions or understand ethical dilemmas the way humans can. It might also struggle with very recent events or changes in the world, as it only knows what it has been trained on.

Remember, AI is a powerful tool, but it's not perfect. It's best used as a helper for human intelligence, not a replacement for it. Understanding these limitations can help you use AI more effectively and responsibly.

## How do I start to use generative AI?

After setting up your account with one of the aforementioned AI models, you'll be able to engage in a dialogue with the system. This interaction allows you to communicate your needs or questions to the AI. In the field of artificial intelligence, we refer to the information or instructions you provide to the AI as a "prompt". By crafting effective prompts, you can guide the AI to produce the responses or results you're looking for.

## What is a prompt?

A prompt is an instruction serves as a trigger, a meticulously constructed cue intended to elicit a particular reaction. This precisely formulated input acts as a spark, initiating a specific output or response.

Crafting a prompt for AI is comparable to providing instructions to a cab driver. For instance, if you simply state, "Drive me to an enjoyable location," the driver may be uncertain about your preferences. However, if you specify, "Please take me to Central Park for a leisurely stroll," the driver receives clear guidance on both the destination and your intention.

In a similar vein, an effective AI prompt offers precise and detailed directions, enabling the AI to generate an appropriate and targeted response. Just as a well-informed driver can better meet your transportation needs, a well-crafted prompt allows the AI to more accurately fulfil your request.

## How do you write an AI prompt?

A good prompt is like a clear set of instructions. It's important that a prompt is easy to understand and leaves no room for misinterpretation or confusion. Additionally, being specific is just as important as being clear. A well-defined prompt includes exact details and sets boundaries. This helps to focus the task and steers the response in the intended direction.

Let's examine the contrast between these two prompts:

- **Vague Prompt:** "Write a story."
- **Specific Prompt:** "Pen a brief science fiction tale about a solitary astronaut marooned on a barren planet with dwindling oxygen supplies, who stumbles upon traces of an extinct civilisation."

The vague prompt offers almost no direction, leaving an overwhelming number of possibilities. The specific prompt, on the other hand, provides a clear context, setting and character, significantly narrowing the scope and guiding the creative process.

In the context of AI interaction, specificity is even more critical. Use the acronym **G.U.I.D.E** to assist you create a prompt.

- **Goal (or intent):** Emphasises the purpose behind the prompt
- **User (or role):** Highlights the role the AI should play.
- **Instructions:** Remains a core element, covering specific directions.
- **Delivery (or format):** Focuses on the tone to be used or how the output should be presented.
- **Examples (or extras/adjustments):** Includes any additional context or constraints.



**Tip:** Adding the instruction “Ask me questions before you answer” can help address any ambiguous areas ultimately leading to more accurate and relevant outcomes.

## Examples

### Example 1: Create games for a party.

**Goal:** Create an entertaining set of party tasks that test adults' creativity, problem-solving, and willingness to embrace ridiculous situations while ensuring tasks are apartment/house-party friendly.

**User:** Take on the role of Taskmaster and their assistant Alex Horne, crafting challenges that blend humour with clever problem-solving.

**Instructions:** Each task should be achievable within 2-5 minutes using common household items. Tasks need to be clear enough to understand but open to creative interpretation. Design challenges that encourage both strategic thinking and entertaining failures. Include a mix of solo tasks and group challenges that keep the whole party engaged. Ensure tasks are safe for indoor spaces and won't damage property.

**Delivery:** Present each task in the classic Taskmaster format with clear rules but room for interpretation. Include scoring criteria that rewards both success and entertaining attempts. Organize tasks to build energy throughout the party, starting with simpler challenges and progressing to more complex group activities.

**Example:** An individual challenge example - Create the tallest free-standing structure using only items from your pockets. You have 2 minutes. Tallest structure wins. If it falls before measurement, you get zero points.

**Full Prompt:** "Create an entertaining set of party tasks that test adults' creativity, problem-solving, and willingness to embrace ridiculous situations while ensuring tasks are apartment/house-party friendly. Take on the role of Taskmaster and their assistant Alex Horne, crafting challenges that blend humour with clever problem-solving. Each task should be achievable within 2-5 minutes using common

household items. Tasks need to be clear enough to understand but open to creative interpretation. Design challenges that encourage both strategic thinking and entertaining failures. Include a mix of solo tasks and group challenges that keep the whole party engaged. Ensure tasks are safe for indoor spaces and won't damage property. Present each task in the classic Taskmaster format with clear rules but room for interpretation. Include scoring criteria that rewards both success and entertaining attempts. Organize tasks to build energy throughout the party, starting with simpler challenges and progressing to more complex group activities. An individual challenge example - Create the tallest free-standing structure using only items from your pockets. You have 2 minutes. Tallest structure wins. If it falls before measurement, you get zero points."

### **Sample response (using free version of Claude AI):**

#### Task 1: The Great Marshmallow Catapult (Individual Challenge)

**Task:** Build a catapult using only a spoon, a rubber band, and any other household item you can find in the room to launch a marshmallow as far as possible. You have 3 minutes to construct and launch.

**Rules:** You can only use items found in the room. The marshmallow must be launched by the constructed catapult, not by hand.

#### **Scoring Criteria:**

- Farthest distance wins (3 points).
- Creative design (1 point).
- Most entertaining launch (1 point).

#### Task 2: The Impossible Balancing Act (Individual Challenge)

**Task:** Balance as many different household items on one hand as possible. You have 2 minutes to gather items and 1 minute to balance.

**Rules:** You must hold the items steady for at least 5 seconds. Only one hand can be used.

#### **Scoring Criteria:**

- Number of items balanced (3 points).
- Most bizarre combination of items (1 point).
- Most dramatic collapse (1 point).

#### Task 3: The Banana Relay (Group Challenge)

**Task:** In teams of 4, pass a banana from one team member to another using only your elbows. You have 3 minutes to complete the relay without dropping the banana.

**Rules:** If the banana is dropped, you must start over from the beginning. No hands allowed.

#### **Scoring Criteria:**

- Fastest team wins (3 points).
- Most creative passing technique (1 point).

- Best team spirit (1 point).

These tasks are designed to encourage creativity, strategic thinking, and fun, ensuring an engaging party atmosphere. Enjoy your absurd and entertaining gathering!

### **Example 2: Generating a Road Trip Itinerary**

**Goal:** Create a 2-day road trip itinerary from London to Bath, focusing on historical sites.

**User Persona:** A history buff planning a short trip.

**Instructions:** Generate a 2-day road trip itinerary from London to Bath, focusing on historical sites. Include key attractions and estimated driving times.

**Delivery:** Present the itinerary as a day-by-day breakdown with key attractions and driving times.

**Examples:** Day 1: London to Stonehenge/Salisbury (approx. 2 hours driving). Stonehenge: Explore the ancient stone circle. Salisbury Cathedral: Visit the Magna Carta. Day 2: Salisbury/Stonehenge to Bath (approx. 1 hour driving). Roman Baths: Explore the ancient Roman baths. Bath Abbey: Visit this historic abbey.

**Full Prompt:** "Generate a 2-day road trip itinerary from London to Bath, focusing on historical sites. Include key attractions and estimated driving times. You are a history buff planning a short trip. Present the itinerary as a day-by-day breakdown with key attractions and driving times. Examples: Day 1: London to Stonehenge/Salisbury (approx. 2 hours driving) Stonehenge: Explore the ancient stone circle. Salisbury Cathedral: Visit the Magna Carta. Day 2: Salisbury/Stonehenge to Bath (approx. 1 hour driving) Roman Baths: Explore the ancient Roman baths. Bath Abbey: Visit this historic abbey."

### **Sample response (using free version of ChatGPT):**

#### 2-Day Road Trip Itinerary: London to Bath

##### **Day 1: London to Salisbury/Stonehenge**

- **Morning Drive from London to Stonehenge (2 hours)**
- **Stop 1: Stonehenge**
  - **Activity:** Explore the ancient stone circle, one of the wonders of the world and a UNESCO World Heritage Site (1.5 to 2 hours)
- **Stop 2: Salisbury**
  - **Salisbury Cathedral:** Visit this stunning Gothic cathedral, home to one of the best-preserved copies of the Magna Carta (1 to 1.5 hours)
- **Lunch in Salisbury:** Enjoy a meal at one of the charming local eateries.
- **Afternoon:**
  - Explore the historic streets of Salisbury, taking in the medieval architecture and quaint shops (1 hour)
- **Evening: Drive to Bath (1.5 hours)**
  - **Check-In:** Arrive at your accommodation in Bath and enjoy a relaxing evening in the city.

## Day 2: Explore Bath

- **Morning:**
  - **Roman Baths:** Start your day by exploring the ancient Roman baths, a must-see historical site in the heart of Bath (2 hours)
- **Stop 2: Bath Abbey**
  - **Activity:** Visit this historic abbey with its stunning stained-glass windows and impressive architecture (1 hour)
- **Lunch in Bath:** Choose from a variety of cafes and restaurants offering local and international cuisine.
- **Afternoon:**
  - **The Royal Crescent:** Walk along this iconic Georgian architecture, and if time permits, visit the No. 1 Royal Crescent museum (1 hour)
  - **Pulteney Bridge and Weir:** Enjoy a stroll across this picturesque bridge and admire the views of the River Avon (30 minutes)
- **Evening: Return to London (2.5 hours)**

This itinerary offers a blend of ancient history and architectural beauty, making for a rich and educational road trip experience from London to Bath.



**Tip:** You can make edits with follow up prompts for example “Please simplify the road trip by including just one activity in the morning and one in the afternoon, and also suggest a place for dinner in the evening.”

## Sample follow-up response (using free version of ChatGPT):

Certainly! Here's a streamlined version of the 2-day road trip itinerary with one key activity in the morning and one in the afternoon, along with an evening dinner suggestion:

### 2-Day Road Trip Itinerary: London to Bath

#### Day 1: London to Salisbury

- **Morning Departure from London (2 hours)**
- **Morning Activity: Stonehenge**
  - Visit the ancient stone circle and learn about its mysterious origins (1.5 to 2 hours)
- **Lunch in Salisbury:** Enjoy a meal in one of the local pubs or cafes.
- **Afternoon Activity: Salisbury Cathedral**
  - Visit the Gothic cathedral and see the Magna Carta (1 hour)
- **Evening: Drive to Bath (1.5 hours)**
- **Dinner in Bath:** Enjoy dinner at a renowned restaurant like The Ivy Bath Brasserie, offering a variety of British classics with a modern twist.

## Day 2: Explore Bath

- **Morning Activity: Roman Baths**
  - Visit the historic Roman Baths and immerse yourself in the ancient history (2 hours)
- **Lunch in Bath:** Choose a local cafe or deli to enjoy a light meal.
- **Afternoon Activity: The Royal Crescent**
  - Walk along the iconic Georgian architecture and visit the No. 1 Royal Crescent museum if time permits (1 hour)
- **Evening: Return to London (2.5 hours)**

This itinerary provides a more relaxed pace while still allowing you to experience some of the most significant historical sites in the area.