

Using Scratch with Gen-AI Models

Setup

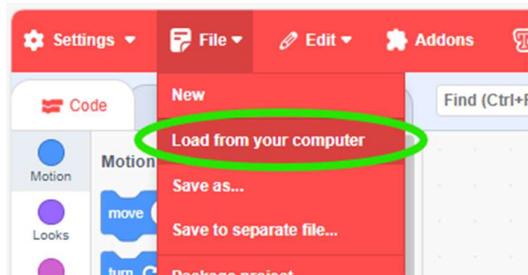
[Open Turbowarp by clicking here.](#)

Or copy this address to the browser search bar:

turbowarp.org/editor

Open the template file

Click "File" then "Load from your computer"



Open the **template_genai_blocks.sb3** from your USB files.

Name	Date modified	Type	Size
template_genai_blocks.sb3	1/05/2025 9:28 AM	SB3 File	18 KB

A pop-up will appear asking if you want to load the extensions. Click **Allow** for both of them.



The template project will appear for you, with the extensions added and some template block-groups. Copy your Text and Image keys into the KEY boxes, and click the green flag  to save them. Don't remove these first 3 blocks!



You can add to this script, or start a new group of blocks.



Instructions

When you have loaded your scratch file, some blocks will appear.

Let's go through what these blocks do!

For the AI blocks (Blue and Pink), you will need your Keys from your USB file.

DARK BLUE BLOCKS: These blocks are used to generate TEXT.

PINK BLOCKS: These blocks are used to generate IMAGES.

GREEN BLOCKS: These are used to show the images you make. We use a frame to show the image on the stage.



Here is the simplest way you can use them:



Engage

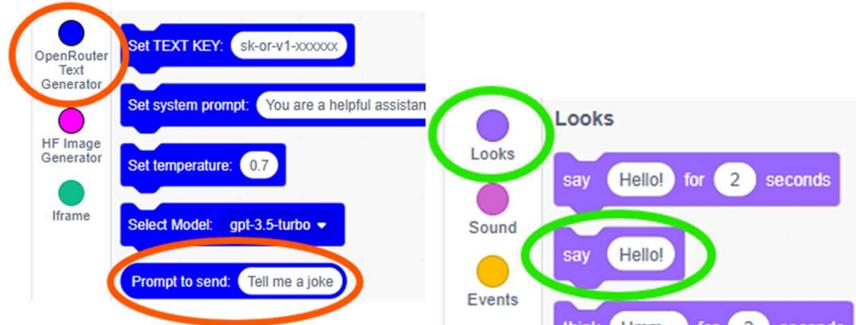
Make sure you have copied your Text and Image keys over!

Text

Join this block to the script:



Where to find the blocks:



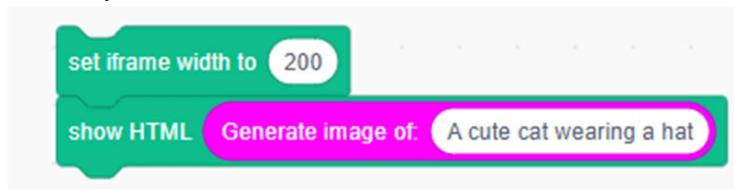
You'll get something like this:



Try putting in a prompt you used in the TEXT playground, instead of 'Tell me a joke'.

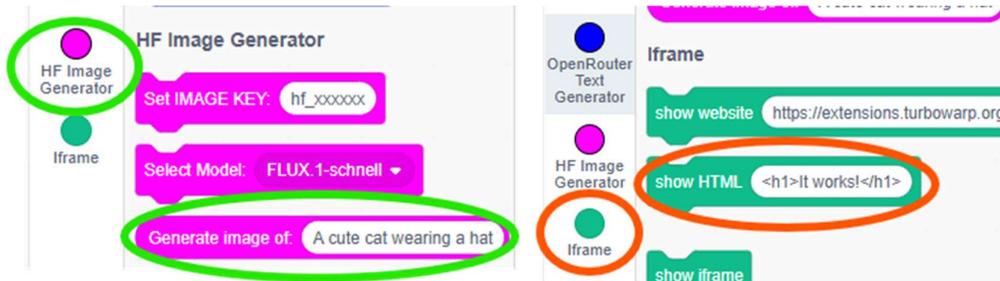
Images

Join this block to the script:

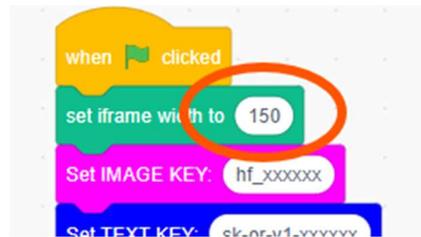


Where to find the blocks:

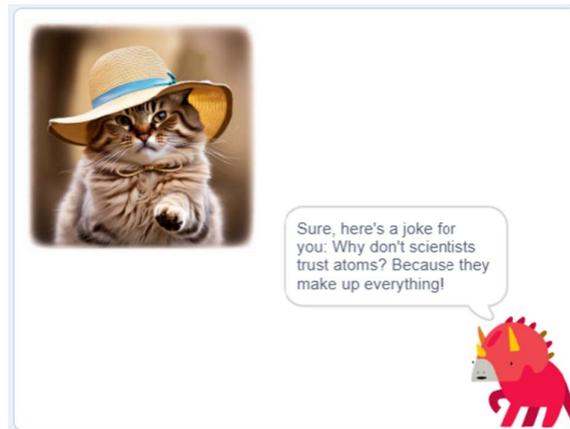




Change the size of the image by changing this number in the first block:



You'll get something like this:

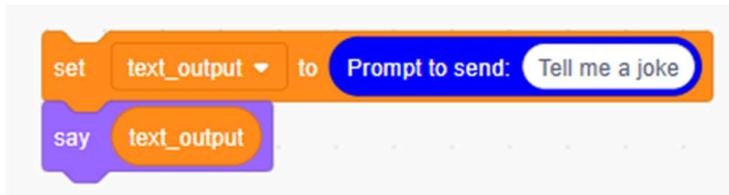


Try putting in a prompt you used in the IMAGE playground, instead of 'A cute cat wearing a hat'.



Explore

Using variables means you can do more with the responses if you don't want to just display them.



Try asking the model for different outputs.

Does it give the outputs you expect?

How do your prompts affect its output?

Can you get it to output certain formats, or particular phrasing you want?

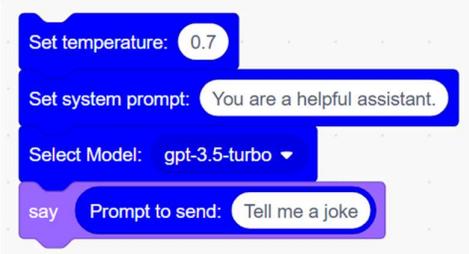


You can choose different models for generating your image. Different models will produce different styles of images and may process your inputs in different ways.

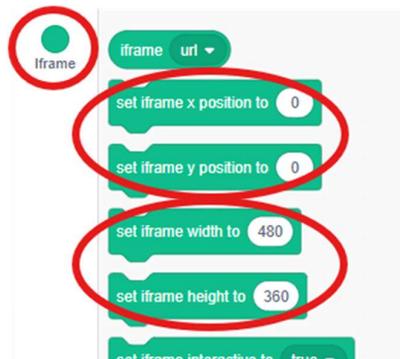


Extend

The Text extension has a few things you can change. Here's an example of all the settings in one flow. You can change just one, or all of them.



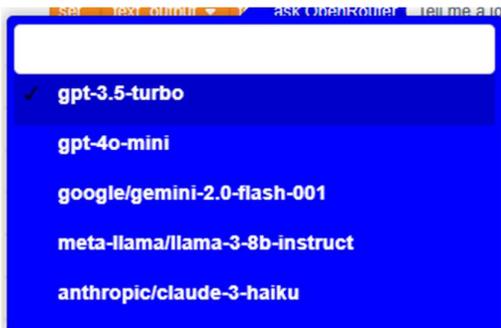
Try moving and repositioning the image frame with the green 'size' and 'position' blocks. What happens?



What are the Text Generation settings?

1. Model

You can set which model you want to send your request to. Different models will respond differently to inputs.



2. System Prompt

The system prompt tells the model how to behave when processing the 'Prompt' input. This is sometimes called the "Developer prompt", or "system instructions". The model should prefer these instructions over the 'Prompt' input.

For example:

- "You are a helpful assistant."
- "You are a Recipe Generator"
- "You will only talk like a pirate"
- "You are a dinosaur joke generator"

A screenshot of a system prompt input field. The field is blue and contains the text "Set system prompt: You are a helpful assistant." The text "Set system prompt:" is in a lighter blue font, and "You are a helpful assistant." is in a white font inside a rounded rectangle.

Set system prompt: You are a helpful assistant.

3. Temperature

The temperature can be from 0 to 2.0.

Low values give predictable and typical responses.

High values give more diverse and less common responses.

At 0, the model always gives the same response to a given input.

