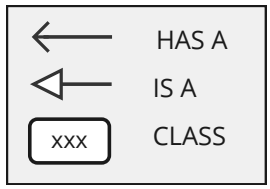


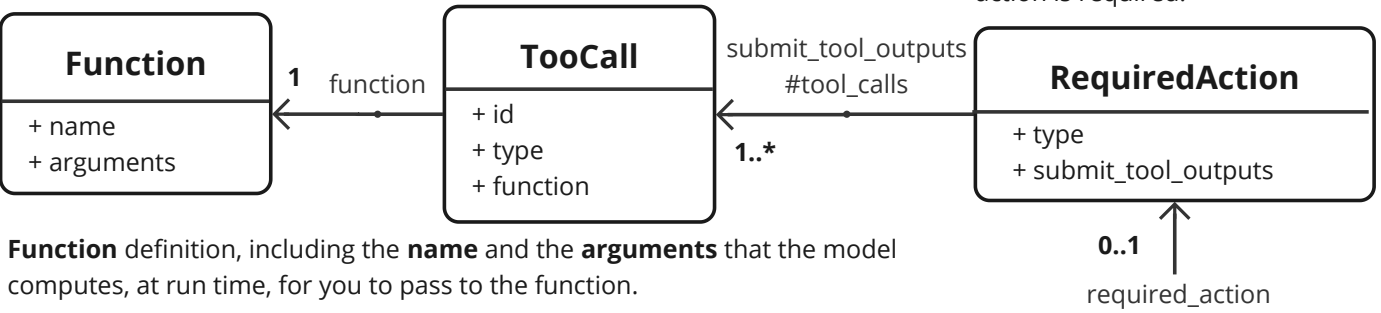
OpenAI Assistant API - Core Concepts



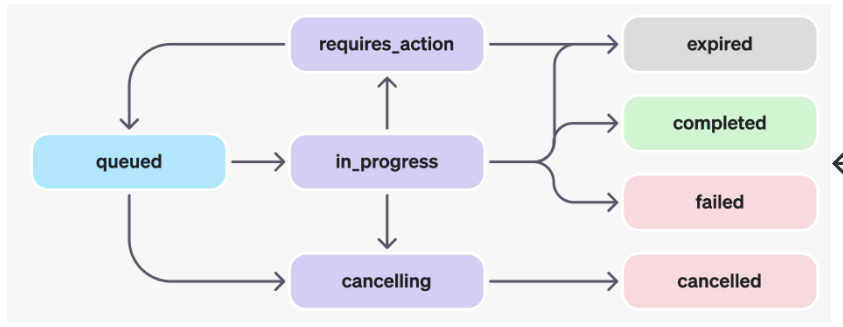
Allows you to describe functions to the Assistants and have it intelligently return the functions that need to be called along with their arguments. The Assistants API will pause execution during a Run when it invokes functions, and you can supply the results of the function call back to continue the Run execution.

Retrieval augments the Assistant with knowledge from outside its model, such as proprietary product information or documents provided by your users. Once a file is uploaded and passed to the Assistant, OpenAI will automatically chunk your documents, index and store the embeddings, and implement vector search to retrieve relevant content to answer user queries.

Allows the Assistants API to write and run **Python** code in a sandboxed execution environment. Can process files with diverse data and formatting, and generate files with data and images of graphs. Run code iteratively to solve **code** and **math** problems.

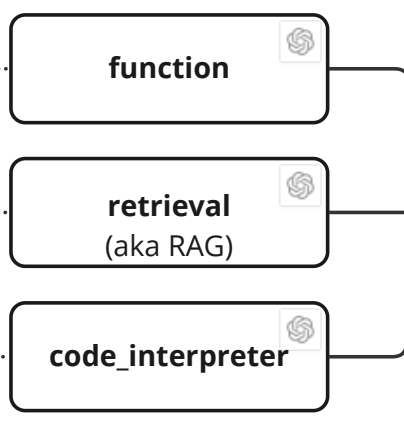
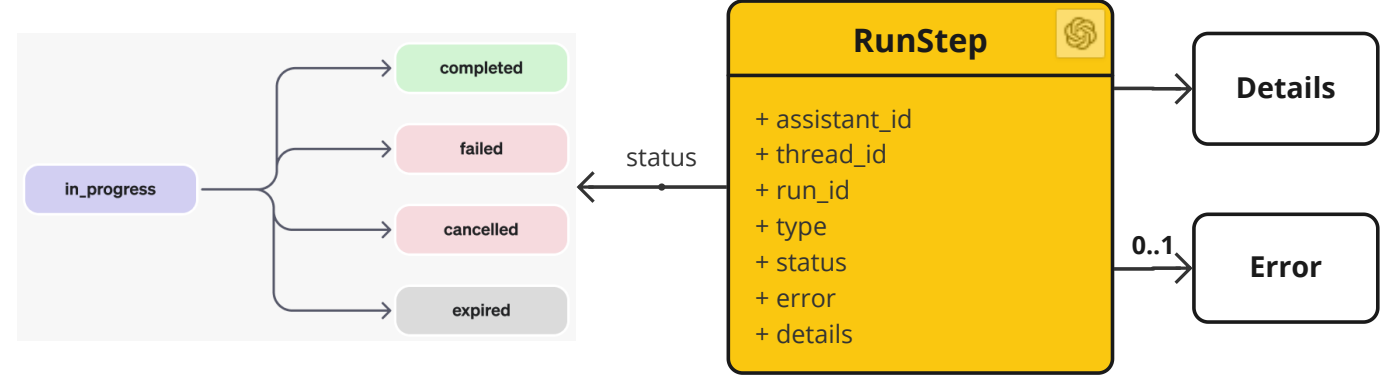


Function definition, including the **name** and the **arguments** that the model computes, at run time, for you to pass to the function.

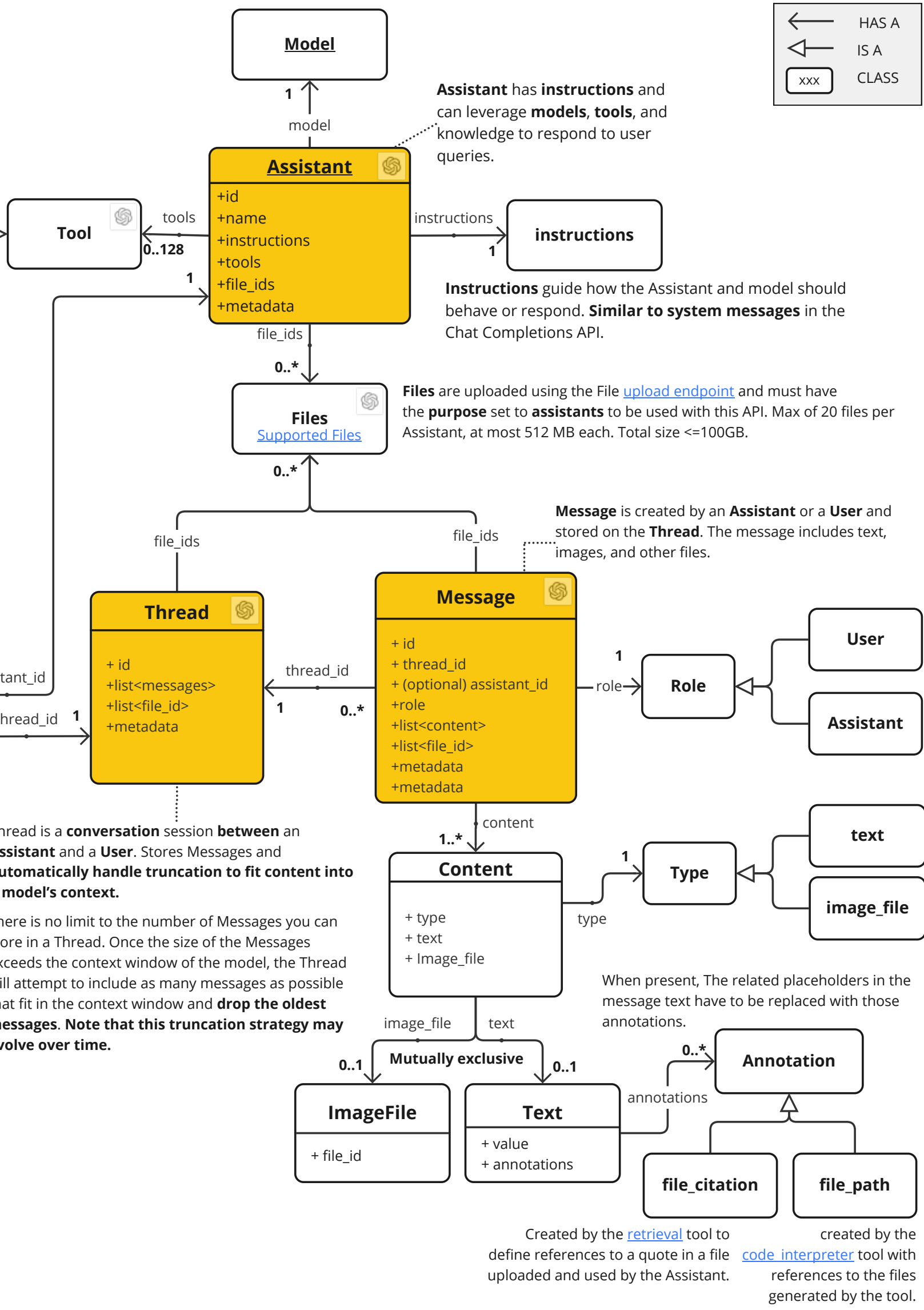


Run represents an invocation of an **Assistant** on a **Thread**. The Assistant uses its configuration and the Thread's Messages to perform tasks by calling **models** and **tools**. As part of a Run, the Assistant appends Messages to the Thread.

RunStep provides a detailed list of steps the **Assistant** took as part of a **Run**, such as **calling tools** or **creating Messages**.



Details on the action required to continue the run. Will be null if no action is required.



Assistant has **instructions** and can leverage **models**, **tools**, and knowledge to respond to user queries.

Instructions guide how the Assistant and model should behave or respond. **Similar to system messages** in the Chat Completions API.

Files are uploaded using the File [upload endpoint](#) and must have the **purpose** set to **assistants** to be used with this API. Max of 20 files per Assistant, at most 512 MB each. Total size <=100GB.

Message is created by an **Assistant** or a **User** and stored on the **Thread**. The message includes text, images, and other files.

Thread is a **conversation** session **between** an **Assistant** and a **User**. Stores Messages and **automatically handle truncation to fit content into a model's context**.

There is no limit to the number of Messages you can store in a Thread. Once the size of the Messages exceeds the context window of the model, the Thread will attempt to include as many messages as possible that fit in the context window and **drop the oldest messages**. **Note that this truncation strategy may evolve over time.**

When present, The related placeholders in the message text have to be replaced with those annotations.

Created by the [retrieval](#) tool to define references to a quote in a file uploaded and used by the Assistant. [code interpreter](#) tool with references to the files generated by the tool.