

Hugging Face Hub

The [Hugging Face Hub](#) is a platform with over 120k models, 20k datasets, and 50k demo apps (Spaces), all open source and publicly available, in an online platform where people can easily collaborate and build ML together.

This example showcases how to connect to the [Hugging Face Hub](#) and use different models.

Installation and Setup

To use, you should have the [huggingface_hub](#) python package installed.

```
pip install huggingface_hub
```

```
# get a token: https://huggingface.co/docs/api-inference/quicktour#get-your-api-token
```

```
from getpass import getpass
```

```
HUGGINGFACEHUB_API_TOKEN = getpass()
```

```
.....
```

```
import os

os.environ["HUGGINGFACEHUB_API_TOKEN"] = HUGGINGFACEHUB_API_TOKEN
```

Prepare Examples

```
from langchain import HuggingFaceHub
```

```
from langchain import PromptTemplate, LLMChain
```

```
question = "Who won the FIFA World Cup in the year 1994? "
```

```
template = """Question: {question}
```

```
Answer: Let's think step by step."""
```

```
prompt = PromptTemplate(template=template, input_variables=["question"])
```

Examples

Below are some examples of models you can access through the `Hugging Face Hub` integration.

Flan, by Google

```
repo_id = "google/flan-t5-xxl" # See https://huggingface.co/models?pipeline_tag=text-generation&sort=downloads for some other options
```

```
llm = HuggingFaceHub(repo_id=repo_id, model_kwargs={"temperature": 0.5, "max_length": 64})  
llm_chain = LLMChain(prompt=prompt, llm=llm)  
  
print(llm_chain.run(question))
```

The FIFA World Cup was held in the year 1994. West Germany won the FIFA World Cup in 1994

Dolly, by Databricks

See [Databricks](#) organization page for a list of available models.

```
repo_id = "databricks/dolly-v2-3b"
```

```
llm = HuggingFaceHub(repo_id=repo_id, model_kwargs={"temperature": 0.5, "max_length": 64})  
llm_chain = LLMChain(prompt=prompt, llm=llm)  
print(llm_chain.run(question))
```

First of all, the world cup was won by the Germany. Then the Argentina won the world cup in 2022. So, the Argentina won the world cup in 1994.

Question: Who

Camel, by Writer

See [Writer's](#) organization page for a list of available models.

```
repo_id = "Writer/camel-5b-hf" # See https://huggingface.co/Writer for other options
```

```
llm = HuggingFaceHub(repo_id=repo_id, model_kwargs={"temperature": 0.5, "max_length": 64})  
llm_chain = LLMChain(prompt=prompt, llm=llm)  
print(llm_chain.run(question))
```

XGen, by Salesforce

See [more information](#).

```
repo_id = "Salesforce/xgen-7b-8k-base"
```

```
llm = HuggingFaceHub(repo_id=repo_id, model_kwargs={"temperature": 0.5, "max_length": 64})  
llm_chain = LLMChain(prompt=prompt, llm=llm)  
print(llm_chain.run(question))
```

Falcon, by Technology Innovation Institute (TII)

See [more information](#).

```
repo_id = "tiiuae/falcon-40b"
```

```
llm = HuggingFaceHub(repo_id=repo_id, model_kwargs={"temperature": 0.5, "max_length": 64})  
llm_chain = LLMChain(prompt=prompt, llm=llm)  
print(llm_chain.run(question))
```