

## Final

### Installing libraries

```
# installing dependencies
!pip install spotify_dl
```

```
Requirement already satisfied: spotify_dl in /usr/local/lib/python3.10/dist-packages (8.8.2)
Requirement already satisfied: sentry-sdk~=1.16 in /usr/local/lib/python3.10/dist-packages (from spotify_dl) (1.38.0)
Requirement already satisfied: yt-dlp>=2023.3.4 in /usr/local/lib/python3.10/dist-packages (from spotify_dl) (2023.11.16)
Requirement already satisfied: spotipy~=2.21 in /usr/local/lib/python3.10/dist-packages (from spotify_dl) (2.23.0)
Requirement already satisfied: mutagen~=1.45 in /usr/local/lib/python3.10/dist-packages (from spotify_dl) (1.47.0)
Requirement already satisfied: rich~=12.0 in /usr/local/lib/python3.10/dist-packages (from spotify_dl) (12.6.0)
Requirement already satisfied: urllib3~=1.26 in /usr/local/lib/python3.10/dist-packages (from spotify_dl) (1.26.18)
Requirement already satisfied: commonmark<0.10.0,>=0.9.0 in /usr/local/lib/python3.10/dist-packages (from rich~=12.0->spotif
Requirement already satisfied: pygments<3.0.0,>=2.6.0 in /usr/local/lib/python3.10/dist-packages (from rich~=12.0->spotify_d
Requirement already satisfied: certifi in /usr/local/lib/python3.10/dist-packages (from sentry-sdk~=1.16->spotify_dl) (2023.
Requirement already satisfied: redis>=3.5.3 in /usr/local/lib/python3.10/dist-packages (from spotipy~=2.21->spotify_dl) (5.0
Requirement already satisfied: requests>=2.25.0 in /usr/local/lib/python3.10/dist-packages (from spotipy~=2.21->spotify_dl)
Requirement already satisfied: six>=1.15.0 in /usr/local/lib/python3.10/dist-packages (from spotipy~=2.21->spotify_dl) (1.16
Requirement already satisfied: pycryptodomex in /usr/local/lib/python3.10/dist-packages (from yt-dlp>=2023.3.4->spotify_dl)
Requirement already satisfied: websockets in /usr/local/lib/python3.10/dist-packages (from yt-dlp>=2023.3.4->spotify_dl) (12
Collecting requests>=2.25.0 (from spotipy~=2.21->spotify_dl)
  Downloading requests-2.31.0-py3-none-any.whl (62 kB)
    62.6/62.6 kB 993.1 kB/s eta 0:00:00
Requirement already satisfied: brotli in /usr/local/lib/python3.10/dist-packages (from yt-dlp>=2023.3.4->spotify_dl) (1.1.0)
Requirement already satisfied: async-timeout>=4.0.2 in /usr/local/lib/python3.10/dist-packages (from redis>=3.5.3->spotipy~=
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages (from requests>=2.25.0->s
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-packages (from requests>=2.25.0->spotipy~=2.21
Installing collected packages: requests
  Attempting uninstall: requests
    Found existing installation: requests 2.30.0
    Uninstalling requests-2.30.0:
      Successfully uninstalled requests-2.30.0
ERROR: pip's dependency resolver does not currently take into account all the packages that are installed. This behaviour is
google-colab 1.0.0 requires pandas==1.5.3, but you have pandas 2.1.2 which is incompatible.
lastmileai 0.0.2 requires requests==2.30.0, but you have requests 2.31.0 which is incompatible.
python-aiconfig 1.1.4 requires openai>=1.0.0, but you have openai 0.28.0 which is incompatible.
python-aiconfig 1.1.4 requires requests==2.30.0, but you have requests 2.31.0 which is incompatible.
Successfully installed requests-2.31.0
```

```
!apt-get install python3-distutils
```

```
!apt-get install python3-apt
```

```
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
python3-distutils is already the newest version (3.10.8-1~22.04).
0 upgraded, 0 newly installed, 0 to remove and 29 not upgraded.
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
python3-apt is already the newest version (2.4.0ubuntu2).
0 upgraded, 0 newly installed, 0 to remove and 29 not upgraded.
```

### Importing libraries and dependencies.

```
# mounting google colab to google drive
from google.colab import drive
import os
import spotipy
from spotipy.oauth2 import SpotifyClientCredentials
```

### Mounting drive.

```
drive.flush_and_unmount() # unmount if already mounted
drive.mount('/content/drive')
```

```
Mounted at /content/drive
```

```
# navigating to current directory
import os

os.chdir('/content/drive/MyDrive/Llama')

# checking
!pwd

/content/drive/MyDrive/Llama
```

Asking for user song input.

```
# setting spotify environment
# defining environment
%env SPOTIPY_CLIENT_ID=6b9c98a474fc47a4aaf16c72c8c52c73
%env SPOTIPY_CLIENT_SECRET=b9d5fced5c3742e5b95ce4f7ad11ec4b

env: SPOTIPY_CLIENT_ID=6b9c98a474fc47a4aaf16c72c8c52c73
env: SPOTIPY_CLIENT_SECRET=b9d5fced5c3742e5b95ce4f7ad11ec4b

# asking for user song input
song_name = input("Enter which song you would like to sing: ")

Enter which song you would like to sing: Влюбилась – Руки на шее
```

```
# getting song url
# client_id = 'c1ec70f190044a7ab4d1206b2f22376b'
# client_secret = '772f35d1a2e048098362f44f239810d9'

client_id = '6b9c98a474fc47a4aaf16c72c8c52c73'
client_secret = 'b9d5fced5c3742e5b95ce4f7ad11ec4b'

client_credentials_manager = SpotifyClientCredentials(client_id, client_secret)
sp = spotipy.Spotify(client_credentials_manager=client_credentials_manager)

song_name = str(song_name)
results = sp.search(q=song_name, limit=1)
song_url = results['tracks']['items'][0]['external_urls']['spotify']

print(song_url)
artists = ""
for i in range(0, len(results['tracks']['items'][0]['artists']) - 1):
    artists += results['tracks']['items'][0]['artists'][i]['name'] + ', '
artists += results['tracks']['items'][0]['artists'][-1]['name']
print(artists)
print(artists + ' - ' + song_name + ".mp3")
print(results['tracks']['items'])
```

<https://open.spotify.com/track/7CnH4iBI9RzFpkhey5vKde>

Сусіди Стерпллять, Ai Mori

Сусіди Стерпллять, Ai Mori – Влюбилась – Руки на шее.mp3

{'album': {'album\_type': 'single', 'artists': [{'external\_urls': {'spotify': '<https://open.spotify.com/artist/6qUIEcT6FzexF>'

Downloading spotify URL to mp3.

```
# setting download environment
# defining environment
# %env SPOTIPY_CLIENT_ID=c1ec70f190044a7ab4d1206b2f22376b
# %env SPOTIPY_CLIENT_SECRET=772f35d1a2e048098362f44f239810d9
%env SPOTIFY_CLIENT_ID=6b9c98a474fc47a4aaf16c72c8c52c73
%env SPOTIFY_CLIENT_SECRET=b9d5fced5c3742e5b95ce4f7ad11ec4b

env: SPOTIFY_CLIENT_ID=6b9c98a474fc47a4aaf16c72c8c52c73
env: SPOTIFY_CLIENT_SECRET=b9d5fced5c3742e5b95ce4f7ad11ec4b

# running main script
!spotify_dl -l spotify_playlist_link_1 spotify_playlist_link_2

Starting spotify_dl v8.8.2
```

```
# downloading from spotify url to mp3
!spotify_dl -l {song_url} -o .
```

```
Starting spotify_dl v8.8.2
```

```
!pwd
```

```
/content/drive/MyDrive/Llama
```

Integrating LastMileAI's AIConfig.

```
!pip install openai
!pip install python-aiconfig
!pip install fastapi
!pip install kaleido
!pip install python-multipart
!pip install uvicorn
```

```
from google.colab import userdata
```

```
import python_utils
```

```
import openai
```

```

Requirement already satisfied: openai in /usr/local/lib/python3.10/dist-packages (0.28.0)
Requirement already satisfied: requests>=2.20 in /usr/local/lib/python3.10/dist-packages (from openai) (2.31.0)
Requirement already satisfied: tqdm in /usr/local/lib/python3.10/dist-packages (from openai) (4.66.1)
Requirement already satisfied: aiohttp in /usr/local/lib/python3.10/dist-packages (from openai) (3.9.1)
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages (from requests>=2.20->ope
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-packages (from requests>=2.20->openai) (3.6)
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.10/dist-packages (from requests>=2.20->openai) (
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.10/dist-packages (from requests>=2.20->openai) (
Requirement already satisfied: attrs>=17.3.0 in /usr/local/lib/python3.10/dist-packages (from aiohttp->openai) (23.1.0)
Requirement already satisfied: multidict<7.0,>=4.5 in /usr/local/lib/python3.10/dist-packages (from aiohttp->openai) (6.0.4)
Requirement already satisfied: yarl<2.0,>=1.0 in /usr/local/lib/python3.10/dist-packages (from aiohttp->openai) (1.9.3)
Requirement already satisfied: frozenlist>=1.1.1 in /usr/local/lib/python3.10/dist-packages (from aiohttp->openai) (1.4.0)
Requirement already satisfied: aiosignal>=1.1.2 in /usr/local/lib/python3.10/dist-packages (from aiohttp->openai) (1.3.1)
Requirement already satisfied: async-timeout<5.0,>=4.0 in /usr/local/lib/python3.10/dist-packages (from aiohttp->openai) (4.
Requirement already satisfied: python-aiconfig in /usr/local/lib/python3.10/dist-packages (1.1.4)
Collecting requests==2.30.0 (from python-aiconfig)
Using cached requests-2.30.0-py3-none-any.whl (62 kB)
Requirement already satisfied: black in /usr/local/lib/python3.10/dist-packages (from python-aiconfig) (23.11.0)
Requirement already satisfied: flake8 in /usr/local/lib/python3.10/dist-packages (from python-aiconfig) (6.1.0)
Requirement already satisfied: pylint in /usr/local/lib/python3.10/dist-packages (from python-aiconfig) (3.0.2)
Requirement already satisfied: pytest in /usr/local/lib/python3.10/dist-packages (from python-aiconfig) (7.4.3)
Requirement already satisfied: pydantic>=2.1 in /usr/local/lib/python3.10/dist-packages (from python-aiconfig) (2.4.2)
Requirement already satisfied: pybars3 in /usr/local/lib/python3.10/dist-packages (from python-aiconfig) (0.9.7)
Requirement already satisfied: google-generativeai in /usr/local/lib/python3.10/dist-packages (from python-aiconfig) (0.2.2)
Collecting openai==1.0.0 (from python-aiconfig)
Using cached openai-1.3.8-py3-none-any.whl (221 kB)
Requirement already satisfied: python-dotenv in /usr/local/lib/python3.10/dist-packages (from python-aiconfig) (1.0.0)
Requirement already satisfied: huggingface-hub in /usr/local/lib/python3.10/dist-packages (from python-aiconfig) (0.19.4)
Requirement already satisfied: result in /usr/local/lib/python3.10/dist-packages (from python-aiconfig) (0.15.0)
Requirement already satisfied: nest-asyncio in /usr/local/lib/python3.10/dist-packages (from python-aiconfig) (1.5.8)
Requirement already satisfied: prompt-toolkit in /usr/local/lib/python3.10/dist-packages (from python-aiconfig) (3.0.41)
Requirement already satisfied: mock in /usr/local/lib/python3.10/dist-packages (from python-aiconfig) (5.1.0)
Requirement already satisfied: pytest-asyncio in /usr/local/lib/python3.10/dist-packages (from python-aiconfig) (0.23.2)
Requirement already satisfied: lastmile-utils>=0.0.5 in /usr/local/lib/python3.10/dist-packages (from python-aiconfig) (0.0.
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages (from requests==2.30.0->p
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-packages (from requests==2.30.0->python-aiconf
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.10/dist-packages (from requests==2.30.0->python-
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.10/dist-packages (from requests==2.30.0->python-
Requirement already satisfied: chardet==5.2.0 in /usr/local/lib/python3.10/dist-packages (from lastmile-utils==0.0.5->python
Requirement already satisfied: isort==5.12.0 in /usr/local/lib/python3.10/dist-packages (from lastmile-utils==0.0.5->python-
Requirement already satisfied: jsoncomment==0.4.2 in /usr/local/lib/python3.10/dist-packages (from lastmile-utils==0.0.5->py
Requirement already satisfied: pandas==2.1.2 in /usr/local/lib/python3.10/dist-packages (from lastmile-utils==0.0.5->python-
Requirement already satisfied: pyright==1.1.335 in /usr/local/lib/python3.10/dist-packages (from lastmile-utils==0.0.5->pyth
Requirement already satisfied: autoflake==2.2.1 in /usr/local/lib/python3.10/dist-packages (from lastmile-utils==0.0.5->pyth
Requirement already satisfied: click>=8.0.0 in /usr/local/lib/python3.10/dist-packages (from black->python-aiconfig) (8.1.7)
Requirement already satisfied: mypy-extensions>=0.4.3 in /usr/local/lib/python3.10/dist-packages (from black->python-aiconfi
Requirement already satisfied: packaging>=22.0 in /usr/local/lib/python3.10/dist-packages (from black->python-aiconfig) (23.
Requirement already satisfied: pathspec>=0.9.0 in /usr/local/lib/python3.10/dist-packages (from black->python-aiconfig) (0.1
Requirement already satisfied: platformdirs>=2 in /usr/local/lib/python3.10/dist-packages (from black->python-aiconfig) (4.0
Requirement already satisfied: toml>=1.1.0 in /usr/local/lib/python3.10/dist-packages (from black->python-aiconfig) (2.0.1)
Requirement already satisfied: typing-extensions>=4.0.1 in /usr/local/lib/python3.10/dist-packages (from black->python-aicon
Requirement already satisfied: mccabe<0.8.0,>=0.7.0 in /usr/local/lib/python3.10/dist-packages (from flake8->python-aiconfig
Requirement already satisfied: pycodestyle<2.12.0,>=2.11.0 in /usr/local/lib/python3.10/dist-packages (from flake8->python-a
Requirement already satisfied: pyflakes<3.2.0,>=3.1.0 in /usr/local/lib/python3.10/dist-packages (from flake8->python-aiconf
Requirement already satisfied: annotated-types>=0.4.0 in /usr/local/lib/python3.10/dist-packages (from pydantic==2.1->python
Requirement already satisfied: pydantic-core==2.10.1 in /usr/local/lib/python3.10/dist-packages (from pydantic==2.1->python-
Requirement already satisfied: astroid<=3.1.0-dev0,>=3.0.1 in /usr/local/lib/python3.10/dist-packages (from pylint->python-a
Requirement already satisfied: tomli>=0.10.1 in /usr/local/lib/python3.10/dist-packages (from pylint->python-aiconfig) (0.
Requirement already satisfied: dill>=0.2 in /usr/local/lib/python3.10/dist-packages (from pylint->python-aiconfig) (0.3.7)
Requirement already satisfied: iniconfig in /usr/local/lib/python3.10/dist-packages (from pytest->python-aiconfig) (2.0.0)
Requirement already satisfied: pluggy<2.0,>=0.12 in /usr/local/lib/python3.10/dist-packages (from pytest->python-aiconfig) (
Requirement already satisfied: exceptiongroup>=1.0.0rc8 in /usr/local/lib/python3.10/dist-packages (from pytest->python-aico
Requirement already satisfied: json-spec in /usr/local/lib/python3.10/dist-packages (from jsoncomment==0.4.2->lastmile-utils
Requirement already satisfied: numpy<2,>=1.22.4 in /usr/local/lib/python3.10/dist-packages (from pandas==2.1.2->lastmile-uti
Requirement already satisfied: python-dateutil>=2.8.2 in /usr/local/lib/python3.10/dist-packages (from pandas==2.1.2->lastmi
Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.10/dist-packages (from pandas==2.1.2->lastmile-utils>
Requirement already satisfied: tzdata>=2022.1 in /usr/local/lib/python3.10/dist-packages (from pandas==2.1.2->lastmile-utils
Requirement already satisfied: nodeenv>=1.6.0 in /usr/local/lib/python3.10/dist-packages (from pyright==1.1.335->lastmile-ut
Requirement already satisfied: anyio<5,>=3.5.0 in /usr/local/lib/python3.10/dist-packages (from openai==1.0.0->python-aiconf
Requirement already satisfied: distro<2,>=1.7.0 in /usr/local/lib/python3.10/dist-packages (from openai==1.0.0->python-aiconfig) (1.7
Requirement already satisfied: httpx<1,>=0.23.0 in /usr/local/lib/python3.10/dist-packages (from openai==1.0.0->python-aicon
Requirement already satisfied: sniffio in /usr/local/lib/python3.10/dist-packages (from openai==1.0.0->python-aiconfig) (1.3
Requirement already satisfied: tqdm>4 in /usr/local/lib/python3.10/dist-packages (from openai==1.0.0->python-aiconfig) (4.66
Requirement already satisfied: google-ai-generativeai==0.3.3 in /usr/local/lib/python3.10/dist-packages (from google-g
Requirement already satisfied: google-auth in /usr/local/lib/python3.10/dist-packages (from google-generativeai->python-aico
Requirement already satisfied: google-api-core in /usr/local/lib/python3.10/dist-packages (from google-generativeai->python-
Requirement already satisfied: protobuf in /usr/local/lib/python3.10/dist-packages (from google-generativeai->python-aiconfi
Requirement already satisfied: proto-plus<2.0.0dev,>=1.22.0 in /usr/local/lib/python3.10/dist-packages (from google-ai-gener
Requirement already satisfied: filelock in /usr/local/lib/python3.10/dist-packages (from huggingface-hub->python-aiconfig) (
Requirement already satisfied: fsspec>=2023.5.0 in /usr/local/lib/python3.10/dist-packages (from huggingface-hub->python-aic
Requirement already satisfied: pyyaml>=5.1 in /usr/local/lib/python3.10/dist-packages (from huggingface-hub->python-aiconfig)
Requirement already satisfied: wcwidth in /usr/local/lib/python3.10/dist-packages (from prompt-toolkit->python-aiconfig) (0.
Requirement already satisfied: PyMeta3>=0.5.1 in /usr/local/lib/python3.10/dist-packages (from pybars3->python-aiconfig) (0.

```

```
!python -V
```

```
Python 3.10.12
```

```
Requirement already satisfied: six>=1.9.0 in /usr/local/lib/python3.10/dist-packages (from google-auth->google-generativeai-)
```

```
# !pip install openai --upgrade
```

```
!pip install openai==0.28
```

```
Collecting openai==0.28
```

```
Using cached openai-0.28.0-py3-none-any.whl (76 kB)
```

```
Requirement already satisfied: requests>=2.20 in /usr/local/lib/python3.10/dist-packages (from openai==0.28) (2.30.0)
```

```
Requirement already satisfied: tqdm in /usr/local/lib/python3.10/dist-packages (from openai==0.28) (4.66.1)
```

```
Requirement already satisfied: aiohttp in /usr/local/lib/python3.10/dist-packages (from openai==0.28) (3.9.1)
```

```
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages (from requests>=2.20->openai==0.28) (3.2.0)
```

```
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-packages (from requests>=2.20->openai==0.28) (3.4.1)
```

```
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.10/dist-packages (from requests>=2.20->openai==0.28) (2.0.4)
```

```
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.10/dist-packages (from requests>=2.20->openai==0.28) (2023.7.22)
```

```
Requirement already satisfied: attrs>=17.3.0 in /usr/local/lib/python3.10/dist-packages (from aiohttp->openai==0.28) (23.1.0)
```

```
Requirement already satisfied: multidict<7.0,>=4.5 in /usr/local/lib/python3.10/dist-packages (from aiohttp->openai==0.28) (6.0.4)
```

```
Requirement already satisfied: yarl<2.0,>=1.0 in /usr/local/lib/python3.10/dist-packages (from aiohttp->openai==0.28) (1.9.3)
```

```
Requirement already satisfied: frozenlist>=1.1.1 in /usr/local/lib/python3.10/dist-packages (from aiohttp->openai==0.28) (1.4.0)
```

```
Requirement already satisfied: aiosignal>=1.1.2 in /usr/local/lib/python3.10/dist-packages (from aiohttp->openai==0.28) (1.3.1)
```

```
Requirement already satisfied: async-timeout<5.0,>=4.0 in /usr/local/lib/python3.10/dist-packages (from aiohttp->openai==0.28) (4.0.3)
```

```
Installing collected packages: openai
```

```
Attempting uninstall: openai
```

```
Found existing installation: openai 1.3.8
```

```
Uninstalling openai-1.3.8:
```

```
Successfully uninstalled openai-1.3.8
```

```
ERROR: pip's dependency resolver does not currently take into account all the packages that are installed. This behaviour is
llmx 0.0.15a0 requires cohere, which is not installed.
```

```
python-aiconfig 1.1.4 requires openai>=1.0.0, but you have openai 0.28.0 which is incompatible.
```

```
Successfully installed openai-0.28.0
```

```
WARNING: The following packages were previously imported in this runtime:
```

```
[openai]
```

```
You must restart the runtime in order to use newly installed versions.
```

RESTART SESSION

```
Requirement already satisfied: exceptiongroup in /usr/local/lib/python3.10/dist-packages (from anvio<4.0.0,>=3.7.1->fastani)
```

```
!pip show openai
```

```
Name: openai
```

```
Version: 0.28.0
```

```
Summary: Python client library for the OpenAI API
```

```
Home-page: https://github.com/openai/openai-python
```

```
Author: OpenAI
```

```
Author-email: support@openai.com
```

```
License:
```

```
Location: /usr/local/lib/python3.10/dist-packages
```

```
Requires: aiohttp, requests, tqdm
```

```
Required-by: llmx, python-aiconfig
```

```
!ls /content/drive/MyDrive
```

```
4788a31698e2188d5e3c09b239f9755b.png
```

```
4af28ea3286602035049b81fab7a5589.png
```

```
b5231a81850d073ddc8185861cec52b5.png
```

```
'Beat saber.png'
```

```
'Copy of Copy of Copy of Copy of College Students - Target: 7-10 Interviews .gdoc'
```

```
'Copy of Derisking Step 1 and 2 Template.gsheet'
```

```
'Copy of Ideation Part II Template.gdoc'
```

```
'Copy of Individual Assignment: Use Your Filter Summary Template.gdoc'
```

```
'Copy of Product Studio: Use Your Filter Assignment.gsheet'
```

```
first-steps-meta-vr.png
```

```
'Gravity Sketch F1 Car'
```

```
h-interaction-ks2359.mp4
```

```
h-locomotion.mp4
```

```
H-Meshes_Movie_003.mp4
```

```
H-Rendering_Movie_002.mp4
```

```
IMG_20230815_143030.jpg
```

```
'Interaction -seshadri - ks2359.apk'
```

```
'Keshavan_Seshadri_ks2359_VCA_EIA.gslides'
```

```
Llama
```

```
'Locomotion - seshadri - ks2359.apk'
```

```
Movie_003.mp4
```

```
'Moye Moye'
```

```
Research_Resume_Keshavan_Seshadri.pdf
```

```
Resume-Keshavan.pdf
```

```
Spotify_transcriber.json
```

```
vr_final_full_video.mp4
```

```

'VR Project Milestone'
'WeFranch - Franchiseed - Open Studio.gslides'

import collections.abc
from aiconfig import AIConfigRuntime, InferenceOptions, CallbackManager
# Load the aiconfig. You can also use AIConfigRuntime.loadJSON({})
!pwd

config = AIConfigRuntime.load('Spotify_transcriber.json')

/usr/local/lib/python3.10/dist-packages/pydantic/_internal/_fields.py:128: UserWarning: Field "model_parsers" has conflict w
You may be able to resolve this warning by setting `model_config['protected_namespaces'] = ()`.
  warnings.warn(
/content/drive/MyDrive/Llama

%env OPENAI_API_KEY = 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
OPENAI_API_KEY = "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"

env: OPENAI_API_KEY=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

!pip install git+https://github.com/openai/whisper.git

Collecting git+https://github.com/openai/whisper.git
  Cloning https://github.com/openai/whisper.git to /tmp/pip-req-build-_5zytdja
  Running command git clone --filter=blob:none --quiet https://github.com/openai/whisper.git /tmp/pip-req-build-_5zytdja
  Resolved https://github.com/openai/whisper.git to commit e58f28804528831904c3b6f2c0e473f346223433
  Installing build dependencies ... done
  Getting requirements to build wheel ... done
  Preparing metadata (pyproject.toml) ... done
Requirement already satisfied: triton<3,>=2.0.0 in /usr/local/lib/python3.10/dist-packages (from openai-whisper==20231117) (
Requirement already satisfied: numba in /usr/local/lib/python3.10/dist-packages (from openai-whisper==20231117) (0.58.1)
Requirement already satisfied: numpy in /usr/local/lib/python3.10/dist-packages (from openai-whisper==20231117) (1.23.5)
Requirement already satisfied: torch in /usr/local/lib/python3.10/dist-packages (from openai-whisper==20231117) (2.1.0+cu118)
Requirement already satisfied: tqdm in /usr/local/lib/python3.10/dist-packages (from openai-whisper==20231117) (4.66.1)
Requirement already satisfied: more-itertools in /usr/local/lib/python3.10/dist-packages (from openai-whisper==20231117) (10
Requirement already satisfied: tiktoken in /usr/local/lib/python3.10/dist-packages (from openai-whisper==20231117) (0.5.2)
Requirement already satisfied: filelock in /usr/local/lib/python3.10/dist-packages (from triton<3,>=2.0.0->openai-whisper==2
Requirement already satisfied: llvmlite<0.42,>=0.41.0dev0 in /usr/local/lib/python3.10/dist-packages (from numba->openai-whi
Requirement already satisfied: regex<=2022.1.18 in /usr/local/lib/python3.10/dist-packages (from tiktoken->openai-whisper==2
Requirement already satisfied: requests<=2.26.0 in /usr/local/lib/python3.10/dist-packages (from tiktoken->openai-whisper==2
Requirement already satisfied: typing-extensions in /usr/local/lib/python3.10/dist-packages (from torch->openai-whisper==202
Requirement already satisfied: sympy in /usr/local/lib/python3.10/dist-packages (from torch->openai-whisper==20231117) (1.12
Requirement already satisfied: networkx in /usr/local/lib/python3.10/dist-packages (from torch->openai-whisper==20231117) (3
Requirement already satisfied: Jinja2 in /usr/local/lib/python3.10/dist-packages (from torch->openai-whisper==20231117) (3.1
Requirement already satisfied: fsspec in /usr/local/lib/python3.10/dist-packages (from torch->openai-whisper==20231117) (202
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages (from requests>=2.26.0->t
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-packages (from requests>=2.26.0->tiktoken->ope
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.10/dist-packages (from requests>=2.26.0->tiktoke
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.10/dist-packages (from requests>=2.26.0->tiktoke
Requirement already satisfied: MarkupSafe>=2.0 in /usr/local/lib/python3.10/dist-packages (from Jinja2->torch->openai-whisper==2
Requirement already satisfied: mpmath>=0.19 in /usr/local/lib/python3.10/dist-packages (from sympy->torch->openai-whisper==2

!sudo apt update && sudo apt install ffmpeg

Get:1 https://cloud.r-project.org/bin/linux/ubuntu jammy-cran40/ InRelease [3,626 B]
Hit:2 https://developer.download.nvidia.com/compute/cuda/repos/ubuntu2204/x86_64 InRelease
Hit:3 http://security.ubuntu.com/ubuntu jammy-security InRelease
Hit:4 http://archive.ubuntu.com/ubuntu jammy InRelease
Hit:5 http://archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:6 https://ppa.launchpadcontent.net/c2d4u.team/c2d4u4.0+/ubuntu jammy InRelease
Hit:7 https://ppa.launchpadcontent.net/deadsnakes/ppa/ubuntu jammy InRelease
Hit:8 http://archive.ubuntu.com/ubuntu jammy-backports InRelease
Hit:9 https://ppa.launchpadcontent.net/graphics-drivers/ppa/ubuntu jammy InRelease
Hit:10 https://ppa.launchpadcontent.net/ubuntuugis/ppa/ubuntu jammy InRelease
Fetched 3,626 B in 2s (2,082 B/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
29 packages can be upgraded. Run 'apt list --upgradable' to see them.
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
ffmpeg is already the newest version (7:4.4.2-0ubuntu0.22.04.1).
0 upgraded, 0 newly installed, 0 to remove and 29 not upgraded.

```

```

sg = ""
sg += song_name + "/" + artists + ' - ' + song_name + ".mp3"
print(sg)

!whisper "$sg" --model medium > lyrics.txt

Влюбилась – Руки на шее/Сусиди Стерплать, Ai Mori – Влюбилась – Руки на шее.mp3

# !pip install openai==0.28.1
# def transcribe_audio(audio_file_path: str) -> str:
#     with open(audio_file_path, "rb") as audio_file:
#         transcript = openai.Audio.transcribe(
#             "whisper-1",
#             audio_file,
#             api_key=OPENAI_API_KEY
#         )

# lyrics=transcribe_audio(song_name+"/"+ artists + ' - ' + song_name + ".mp3")
# !$lyrics

# print(config)
!pwd
f = open("lyrics.txt", "r")
lyrics = f.read()
print(lyrics)

/content/drive/MyDrive/Llama
Detecting language using up to the first 30 seconds. Use `--language` to specify the language
Detected language: Russian
[00:00.000 --> 00:08.000] Я помню, как она сказала мне
[00:30.000 --> 00:33.000] Горло на шее синего горит
[00:33.000 --> 00:36.000] В моей любовью ведь кайфу не бывает
[00:36.000 --> 00:40.000] Без контраста с болью
[00:40.000 --> 00:42.000] Тебя звонят родители
[00:42.000 --> 00:44.000] Что подумают они
[00:44.000 --> 00:46.000] Не берешь телефон
[00:46.000 --> 00:48.000] Это не простительно
[00:48.000 --> 00:50.000] Где же ты, где же ты
[00:50.000 --> 00:52.000] Теперь мне доступны
[00:52.000 --> 00:56.000] Сотни метров от земли
[00:56.000 --> 00:58.000] И ты сказала мне
[00:58.000 --> 01:00.000] Слушай, я давно влюбилась в руки
[01:00.000 --> 01:02.000] У меня на шее
[01:02.000 --> 01:04.000] Сажми сильнее
[01:04.000 --> 01:06.000] И тогда я буду ближе к небу
[01:06.000 --> 01:08.000] Могу забрать тебя с собой
[01:08.000 --> 01:10.000] Но только, если хочешь
[01:10.000 --> 01:11.000] Попробуй боли
[01:11.000 --> 01:14.000] И оболь любишь – это знать точно
[01:14.000 --> 01:16.000] Слушай, я давно влюбилась в руки
[01:16.000 --> 01:18.000] У меня на шее
[01:18.000 --> 01:20.000] Сажми сильнее
[01:20.000 --> 01:22.000] И тогда я буду ближе к небу
[01:22.000 --> 01:24.000] Могу забрать тебя с собой
[01:24.000 --> 01:26.000] Но только, если хочешь
[01:26.000 --> 01:30.000] Попробуй, понял, полюбишь, это знаю точно.
[01:36.000 --> 01:38.000] Я это знаю точно.
[01:44.000 --> 01:46.000] Я это знаю точно.
[01:46.000 --> 01:50.000] Задохнулась ты со мной, прикоснуться к языку.
[01:50.000 --> 01:54.000] Мне неплохо, я смеюсь, пока мир идет ко дну.
[01:54.000 --> 01:58.000] Заигрались слишком сильно, закрываются глаза.
[01:58.000 --> 02:01.000] Из меня выходят силы детка.
[02:01.000 --> 02:05.000] Тебя звонят родители, что подумают они.
[02:05.000 --> 02:08.000] Не берешь телефон, это не простительно.
[02:08.000 --> 02:10.000] Где же ты, где же ты?
[02:10.000 --> 02:15.000] Поднялись ближе к небу, только не упади.
[02:15.000 --> 02:16.000] Опади.
[02:16.000 --> 02:18.000] И ты сказала мне.
[02:18.000 --> 02:21.000] Слушай, я давно влюбилась в руки,
[02:21.000 --> 02:24.000] у меня на шее все жми сильнее,
[02:24.000 --> 02:27.000] и тогда я буду ближе к небу.
[02:27.000 --> 02:29.000] Могу забрать тебя с собой,
[02:29.000 --> 02:31.000] но только если хочешь,
[02:31.000 --> 02:35.000] попробуй, полюбишь, это знаю точно.
[02:35.000 --> 02:37.000] Слушай, я давно влюбилась в руки,
[02:37.000 --> 02:40.000] у меня на шее все жми сильнее,
[02:40.000 --> 02:43.000] и тогда я буду ближе к небу.
[02:43.000 --> 02:45.000] Могу забрать тебя с собой,
[02:45.000 --> 02:47.000] но только если хочешь,

```

```
[02:47.000 --> 02:50.000] попробуй, полюбишь, это знаю точно.
[02:51.000 --> 02:59.000] Я это знаю точно.
[02:59.000 --> 03:07.000] Я это знаю точно.
```

```
config = AIConfigRuntime.load('Spotify_transcriber.json')
config.set_parameter("lyrics", lyrics)
```

```
inference_options = InferenceOptions(stream=True)
```

```
phonetics = await config.run("cell_2")
```

```
ny-logger:Callback called. event
==>'on_run_start' file='aiconfig.Config' data={'prompt_name': 'cell_2', 'params': None, 'options': None, 'kwargs': {}} ts_ns=1
ny-logger:Callback called. event
==>'on_run_start' file='aiconfig.default_parsers.openai' data={'prompt': Prompt(name='cell_2', input='Give English phoenetic l
ny-logger:Callback called. event
==>'on_deserialize_start' file='aiconfig.default_parsers.openai' data={'prompt': Prompt(name='cell_2', input='Give English pho
ny-logger:Callback called. event
==>'on_deserialize_complete' file='aiconfig.default_parsers.openai' data={'output': {'top_p': 1, 'temperature': 1, 'model': 'g
ny-logger:Callback called. event
==>'on_run_complete' file='aiconfig.default_parsers.openai' data={'result': [ExecuteResult(output_type='execute_result', execu
ny-logger:Callback called. event
==>'on_run_complete' file='aiconfig.Config' data={'result': [ExecuteResult(output_type='execute_result', execution_count=0, da
```

```
meanings = await config.run("cell_3")
```

```
ns=1702234707163242185
```

```
_2.output}} to English Meanings', metadata=PromptMetadata(model=ModelMetadata(name='gpt-4', settings={}), tags=None, paramete
e {{cell_2.output}} to English Meanings', metadata=PromptMetadata(model=ModelMetadata(name='gpt-4', settings={}), tags=None,
: 'gpt-4', 'messages': [{'content': 'Give English phoenetic lyrics for karaoke for the song in Detecting language using up to
xecution_count=0, data={'content': "[00:00.000 --> 00:08.000] I remember how she told me\n[00:30.000 --> 00:33.000] The throa
, data={'content': "[00:00.000 --> 00:08.000] I remember how she told me\n[00:30.000 --> 00:33.000] The throat on my neck bur
```

```
print(phonetics[0].data['content'])
```

```
[00:00.000 --> 00:08.000] Ya pomnyu, kak ona skazala mne
[00:30.000 --> 00:33.000] Gorlo na sheye sinego gorit
[00:33.000 --> 00:36.000] V moyey lyubov'yu ved' kaifu ne byvaet
[00:36.000 --> 00:40.000] Bez kontrasta s bolyu
[00:40.000 --> 00:42.000] Tebya zvonyat roditeli
[00:42.000 --> 00:44.000] Chto podumayut oni
[00:44.000 --> 00:46.000] Ne beresh' telefon
[00:46.000 --> 00:48.000] Eto ne prostitel'no
[00:48.000 --> 00:50.000] Gde zhe ty, gde zhe ty
[00:50.000 --> 00:52.000] Teper' mne dostupny
[00:52.000 --> 00:56.000] Sotni metrov ot zemli
[00:56.000 --> 00:58.000] I ty skazala mne
[00:58.000 --> 01:00.000] Slushay, ya davno vlyubilas' v ruki
[01:00.000 --> 01:02.000] U menya na sheye
[01:02.000 --> 01:04.000] Sazhmi sil'nee
[01:04.000 --> 01:06.000] I togda ya budu blizhe k nebu
[01:06.000 --> 01:08.000] Mogu zabrat' tebya s soboy
[01:08.000 --> 01:10.000] No tol'ko, esli khochesh'
[01:10.000 --> 01:11.000] Poprobuy boli
[01:11.000 --> 01:14.000] I obol' lyubish' - eto znat' tochno
[01:14.000 --> 01:16.000] Slushay, ya davno vlyubilas' v ruki
[01:16.000 --> 01:18.000] U menya na sheye
[01:18.000 --> 01:20.000] Sazhmi sil'nee
[01:20.000 --> 01:22.000] I togda ya budu blizhe k nebu
[01:22.000 --> 01:24.000] Mogu zabrat' tebya s soboy
[01:24.000 --> 01:26.000] No tol'ko, esli khochesh'
[01:26.000 --> 01:30.000] Poprobuy, ponyal, polyubish', eto znayu tochno.
[01:36.000 --> 01:38.000] Ya eto znayu tochno.
[01:44.000 --> 01:46.000] Ya eto znayu tochno.
[01:46.000 --> 01:50.000] Zadohnulas' ty so mnoy, prikosnut'sya k yazyku.
[01:50.000 --> 01:54.000] Mne neplokho, ya smeyus', poka mir idet ko dnu.
[01:54.000 --> 01:58.000] Zaigralis' slishkom sil'no, zakryvayutsya glaza.
[01:58.000 --> 02:01.000] Iz menya vykhodyat sily detka.
[02:01.000 --> 02:05.000] Tebya zvonyat roditeli, chto podumayut oni.
[02:05.000 --> 02:08.000] Ne beresh' telefon, eto ne prostitel'no.
[02:08.000 --> 02:10.000] Gde zhe ty, gde zhe ty?
[02:10.000 --> 02:15.000] Podnyalis' blizhe k nebu, tol'ko ne upadi.
```



```

[02:15.000 --> 02:16.000] Opadi.
[02:16.000 --> 02:18.000] I ty skazala mne.
[02:18.000 --> 02:21.000] Slushay, ya davno vlyubilas' v ruki,
[02:21.000 --> 02:24.000] U menya na sheye vse zhmi sil'nee,
[02:24.000 --> 02:27.000] I togda ya budu blizhe k nebu.
[02:27.000 --> 02:29.000] Mogu zabrat' tebya s soboy,
[02:29.000 --> 02:31.000] No tol'ko esli khochesh',
[02:31.000 --> 02:35.000] Poprobuy, polyubish', eto znayu tochno.
[02:35.000 --> 02:37.000] Slushay, ya davno vlyubilas' v ruki,
[02:37.000 --> 02:40.000] U menya na sheye vse zhmi sil'nee,
[02:40.000 --> 02:43.000] I togda ya budu blizhe k nebu.
[02:43.000 --> 02:45.000] Mogu zabrat' tebya s soboy,
[02:45.000 --> 02:47.000] No tol'ko esli khochesh',
[02:47.000 --> 02:50.000] Poprobuy, polyubish', eto znayu tochno.
[02:51.000 --> 02:59.000] Ya eto znayu tochno.
[02:59.000 --> 03:07.000] Ya eto znayu tochno.

```

```
print(meanings[0].data['content'])
```

```

[00:00.000 --> 00:08.000] I remember how she told me
[00:30.000 --> 00:33.000] The throat on my neck burns blue
[00:33.000 --> 00:36.000] With my love, there is no pleasure
[00:36.000 --> 00:40.000] Without contrast to pain
[00:40.000 --> 00:42.000] Your parents are calling you
[00:42.000 --> 00:44.000] What will they think
[00:44.000 --> 00:46.000] You do not take the phone
[00:46.000 --> 00:48.000] It is unforgivable
[00:48.000 --> 00:50.000] Where are you, where are you
[00:50.000 --> 00:52.000] Now I have access
[00:52.000 --> 00:56.000] To hundreds of meters from the ground
[00:56.000 --> 00:58.000] And you told me
[00:58.000 --> 01:00.000] Listen, I have long been in love with hands
[01:00.000 --> 01:02.000] On my neck
[01:02.000 --> 01:04.000] Squeeze harder
[01:04.000 --> 01:06.000] And then I will be closer to the sky
[01:06.000 --> 01:08.000] I can take you with me
[01:08.000 --> 01:10.000] But only if you want
[01:10.000 --> 01:11.000] Try the pain
[01:11.000 --> 01:14.000] And you love – I know for sure
[01:14.000 --> 01:16.000] Listen, I have long been in love with hands
[01:16.000 --> 01:18.000] On my neck
[01:18.000 --> 01:20.000] Squeeze harder
[01:20.000 --> 01:22.000] And then I will be closer to the sky
[01:22.000 --> 01:24.000] I can take you with me
[01:24.000 --> 01:26.000] But only if you want
[01:26.000 --> 01:30.000] Try, understand, love, I know for sure.
[01:36.000 --> 01:38.000] I know this for sure.
[01:44.000 --> 01:46.000] I know this for sure.
[01:46.000 --> 01:50.000] You choked with me, touch the tongue.
[01:50.000 --> 01:54.000] I am not bad, I laugh while the world goes to the bottom.
[01:54.000 --> 01:58.000] Played too strong, eyes closing.
[01:58.000 --> 02:01.000] Power is coming out from me, baby.
[02:01.000 --> 02:05.000] Your parents are calling, what will they think.
[02:05.000 --> 02:08.000] You do not take the phone, it's unforgivable.
[02:08.000 --> 02:10.000] Where are you, where are you?
[02:10.000 --> 02:15.000] We got closer to the sky, just do not fall.
[02:15.000 --> 02:16.000] Fall.
[02:16.000 --> 02:18.000] And you told me.
[02:18.000 --> 02:21.000] Listen, I've loved hands for a long time,
[02:21.000 --> 02:24.000] On my neck squeeze harder,
[02:24.000 --> 02:27.000] And then I'll be closer to the sky.
[02:27.000 --> 02:29.000] I can take you with me,
[02:29.000 --> 02:31.000] But only if you want,
[02:31.000 --> 02:35.000] Try, you will love, I know for sure.
[02:35.000 --> 02:37.000] Listen, I have long been in love with hands,
[02:37.000 --> 02:40.000] On my neck squeeze harder,
[02:40.000 --> 02:43.000] And then I will be closer to the sky.
[02:43.000 --> 02:45.000] I can take you with me,
[02:45.000 --> 02:47.000] But only if you want,
[02:47.000 --> 02:50.000] Try, you will love, I know for sure.
[02:51.000 --> 02:59.000] I know this for sure.
[02:59.000 --> 03:07.000] I know this for sure.

```

Try again.