

# Audeo

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Audeo is a python webscraping and web automation script that downloads a desired song and finds all related attributes such as album name, album artwork, and lyrics in order to create a complete mp3 file.

Audeo takes the song name and artist as input and searches for the link of song in the desired platform. Currently supported are [YouTube](#) & [SoundCloud](#). On [RapGenius](#), Audeo will then look for the album name, album artwork, and lyrics. The song is downloaded from [anything2mp3](#) which extracts the mp3 file provided link. Finally, the mp3 file attributes will be set with the scraped information.

## Purpose

- To have my OCD satisfied
- To improve listening experience
- To make downloading music less tedious
- To allow better music library organization
- To combat limited data plan which restricts music streaming

## Dependencies

Audeo uses these python libraries to work properly:

- [BeautifulSoup](#) - HTML/XML parser for extracting data
- [eyeD3](#) - MP3 file attributes editor
- [Selenium](#) - Selenium
- [chromedriver](#) - Webdriver

## Options

```
usage: audeo [-h] [-y] [-s] [-p] [-i] [-c CUSTOM_LINK] [-l]
            [SONG_NAME_AND_ARTIST [SONG_NAME_AND_ARTIST ...]]
```

Script **for** downloading an mp3 file and corresponding metadata, ultimately to create a com

positional arguments:  
SONG\_NAME\_AND\_ARTIST

optional arguments:  
-h, --help show this help message and exit

<code>-y, --youtube</code>	Searches the song from YouTube
<code>-s, --soundcloud</code>	Searches the song from SoundCloud (Includes album artwork from SoundCloud)
<code>-p, --package</code>	Gets entire mp3 package, including: mp3, lyrics, album name, and album artwork. *Recommended only for well-known songs from established artists*
<code>-i, --interactive</code>	Interactive option. Displays all possible song download options found. (Higher accuracy)
<code>-c CUSTOM_LINK, --custom-link CUSTOM_LINK</code>	Custom user link option, allowing for user to enter the link of the video or song
<code>-l, --lyrics-only</code>	Shows lyrics on screen

## Future features

- Progress bars
- Downloading with custom link
- SoundCloud profile interaction
- Downloading song currently playing in tab
- Downloading all songs from a YouTube playlist
- Further implementation for interactive option
- Extraction of mp3 from HypeM / DailyMotion/ Vimeo videos
- Hidden chromedriver windows using PhantomJS or virtual python env
- Migration to being a JavaScript application using Express.js, Angular.js, and Node.js

## Known bugs/flaws

- Bash forbidden characters in artist names will cause an error
  - ex: Joey Bad@\$\$, Ke\$ha
- Eyed3 date error when setting attributes
  - does not affect validity mp3 file
- Error thrown when song not found on RapGenius
- Download file path must be edited manually
- Custom link option is faulty and will throw an error