Security

✓ Insights

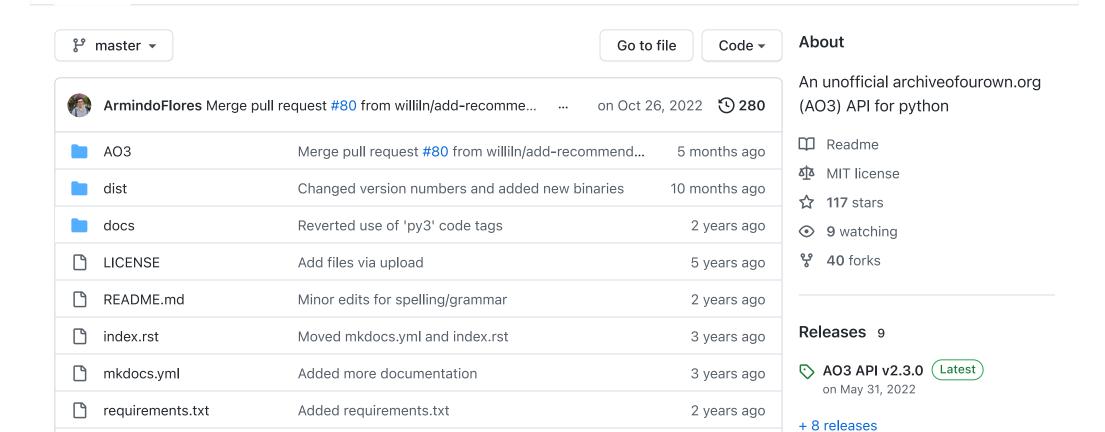
Projects

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setup.cfg

setup.py

AO3 API

This is an unofficial API that lets you access some of AO3's (archiveofourown.org) data through Python.

Add files via upload

Changed version numbers and added new binaries

Installation

Use the package manager pip to install AO3 API.

pip install ao3_api

Github

https://github.com/ArmindoFlores/ao3_api

Usage

This package is divided in 9 core modules: works, chapters, users, series, search, session, comments, extra, and utils.

Works

One of the most basic things you might want to do with this package is loading a work and checking its statistics and information. To do that, you'll need the A03.Work class.

We start by finding the *workid* of the work we want to load. We do that either by using A03.utils.workid_from_url(url) or by just looking at the url ourselves. Let's take a look:

Packages

5 years ago

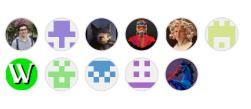
10 months ago

No packages published

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Languages

Python 100.0%

```
import A03

url = "https://archiveofourown.org/works/14392692/chapters/33236241"

workid = A03.utils.workid_from_url(url)

print(f"Work ID: {workid}")

work = A03.Work(workid)

print(f"Chapters: {work.nchapters}")
```

After running this snippet, we get the output:

```
Work ID: 14392692
Chapters: 46
```

It's important to note that some works may not be accessible to guest users, and in this case you will get 0 chapters as an output, and the error A03.utils.AuthError: This work is only available to registered users of the Archive if you try to load it. Nontheless, we can still do a lot more with this Work object: Lets try to get the first 20 words of the second chapter.

```
import A03
work = A03.Work(14392692)
print(work.chapters[1].title)  # Second chapter name
text = work.chapters[1].text  # Second chapter text
print(' '.join(text.split(" ")[:20]))

What Branches Grow Meaning
December 27, 2018

Christmas sucked this year, and Shouto's got the black eye to prove it.
Things had started out well enough,
```

The objects in work.chapters are of type A03.Chapter. They have a lot of the same properties as a Work object would.

Another thing you can do with the work object is download the entire work as a pdf or e-book. At the moment you can download works as AZW3, EPUB, HTML, MOBI, and PDF files.

```
import A03
work = A03.Work(14392692)
with open(f"{work.title}.pdf", "wb") as file:
    file.write(work.download("PDF"))
```

Advanced functionality

Usually, when you call the constructor for the Work class, all info about it is loaded in the __init__() function. However, this process takes quite some time (~1-1.5 seconds) and if you want to load a list of works from a series, for example, you might be waiting for upwards of 30 seconds. To avoid this problem, the Work.reload() function, called on initialization, is a "threadable" function, which means that if you call it with the argument threaded=True, it will return a Thread object and work in parallel, meaning you can load multiple works at the same time. Let's take a look at an implementation:

```
import A03
import time

series = A03.Series(1295090)

works = []
threads = []
start = time.time()
```

```
for work in series.work_list:
    works.append(work)
    threads.append(work.reload(threaded=True))
for thread in threads:
    thread.join()
print(f"Loaded {len(works)} works in {round(time.time()-start, 1)} seconds.")
Loaded 29 works in 2.2 seconds.
```

The load=False inside the Work constructor makes sure we don't load the work as soon as we create an instance of the class. In the end, we iterate over every thread and wait for the last one to finish using <code>.join()</code> . Let's compare this method with the standard way of loading AO3 works:

```
import A03
import time

series = A03.Series(1295090)

works = []
start = time.time()
for work in series.work_list:
    work.reload()
    works.append(work)

print(f"Loaded {len(works)} works in {round(time.time()-start, 1)} seconds.")

Loaded 29 works in 21.6 seconds.
```

As we can see, there is a significant performance increase. There are other functions in this package which have this functionality. To see if a function is "threadable", either use hasattr(function, "_threadable") or check its __doc__ string.

To save even more time, if you're only interested in metadata, you can load a work with the load_chapters option set to False. Also, be aware that some functions (like Series.work_list or Search.results) might return semi-loaded Work objects. This means that no requests have been made to load this work (so you don't have access to chapter text, notes, etc...) but almost all of its metadata will already have been cached, and you might not need to call Work.reload() at all.

The last important information about the Work class is that most of its properties (like the number of bookmarks, kudos, the authors' names, etc...) are cached properties. That means that once you check them once, the value is stored and it won't ever change, even if those values change. To update these values, you will need to call <code>Work.reload()</code> . See the example below:

```
import A03

sess = A03.GuestSession()
work = A03.Work(16721367, sess)
print(work.kudos)
work.leave_kudos()
work.reload()
print(work.kudos)

392
393
```

Users

Another useful thing you might want to do is get information on who wrote which works / comments. For that, we use the A03.User class.

```
import A03
```

```
user = A03.User("bothersomepotato")
print(user.url)
print(user.bio)
print(user.works) # Number of works published

https://archiveofourown.org/users/bothersomepotato
University student, opening documents to write essays but writing this stuff instead. No regrets though. My Tumblr, come chat with -or yell at- me if you feel like it! :)
2
```

⋮≣ README.md

Searcn

To search for works, you can either use the A03.search() function and parse the BeautifulSoup object returned yourself, or use the A03.Search class to automatically do that for you.

```
import A03
search = A03.Search(any_field="Clarke Lexa", word_count=A03.utils.Constraint(50
search.update()
print(search.total_results)
for result in search.results:
 print(result)
3074
<Work [five times lexa falls for clarke]>
<Work [an incomplete list of reasons (why Clarke loves Lexa)]>
<Work [five times clarke and lexa aren't sure if they're a couple or not]>
<Work [Chemistry]>
<Work [The New Commander (Lexa Joining Camp Jaha)]>
<Work [Ode to Clarke]>
<Work [it's always been (right in front of me)]>
<Work [The Girlfriend Tag]>
<Work [The After-Heda Chronicles]>
<Work [The Counter]>
<Work [May We Meet Again]>
<Work [No Filter]>
<Work [The Games We Play]>
<Work [A l'épreuve des balles]>
<Work [Celebration]>
<Work [Another level of fucked up]>
<Work [(Don't Ever Want to Tame) This Wild Heart]>
<Work [Self Control]>
<Work [Winter]>
<Work [My only wish]>
```

You can then use the workid to load one of the works you searched for. To get more then the first 20 works, change the page number using

```
search.page = 2
```

Session

A lot of actions you might want to take might require an AO3 account. If you already have one, you can access those actions using an AO3. Session object. You start by logging in using your username and password, and then you can use that object to access restricted content.

```
import A03

session = A03.Session("username", "password")
print(f"Bookmarks: {session.bookmarks}")
session.refresh_auth_token()
print(session.kudos(A03.Work(18001499, load=False))
```

```
Bookmarks: 67 True
```

We successfully left kudos in a work and checked our bookmarks. The session.refresh_auth_token() is needed for some activities such as leaving kudos and comments. If it is expired or you forget to call this function, the error A03.utils.AuthError: Invalid authentication token. Try calling session.refresh_auth_token() will be raised.

You can also comment / leave kudos in a work by calling
Work.leave_kudos() / Work.comment() and provided you have instantiated that object
with a session already (A03.Work(xxxxxx, session=sess) or using
Work.set_session()). This is probably the best way to do so because you will run into
less authentication issues (as the work's authenticity token will be used instead).

If you would prefer to leave a comment or kudos anonymously, you can use an A03.GuestSession in the same way you'd use a normal session, except you won't be able to check your bookmarks, subscriptions, etc. because you're not actually logged in.

Comments

To retrieve and process comment threads, you might want to look at the Work.get_comments() method. It returns all the comments in a specific chapter and their respective threads. You can then process them however you want. Let's take a look:

```
from time import time
import A03
work = A03.Work(24560008)
work.load_chapters()
start = time()
comments = work.get_comments(5)
print(f"Loaded {len(comments)} comment threads in {round(time()-start, 1)} seco
for comment in comments:
    print(f"Comment ID: {comment.id}\nReplies: {len(comment.get_thread())}")
Loaded 5 comment threads in 1.8 seconds
Comment ID: 312237184
Replies: 1
Comment ID: 312245032
Replies: 1
Comment ID: 312257098
Replies: 1
Comment ID: 312257860
Replies: 1
Comment ID: 312285673
Replies: 2
```

Loading comments takes a very long time so you should try and use it as little as possible. It also causes lots of requests to be sent to the AO3 servers, which might result in getting the error utils.HTTPError: We are being rate-limited. Try again in a while or reduce the number of requests. If that happens, you should try to space out your requests or reduce their number. There is also the option to enable request limiting using AO3.utils.limit_requests(), which make it so you can't make more than x requests in a certain time window. You can also reply to comments using the Comment.reply() function, or delete one (if it's yours) using Comment.delete().

Extra

AO3.extra contains the the code to download some extra resources that are not core to the functionality of this package and don't change very often. One example would be the list of fandoms recognized by AO3. To download a resource, simply use

A03.extra.download(resource_name) . To download every resource, you can use A03.extra.download_all() . To see the list of available resources, use A03.extra.get_resources() .

Contact info

For information or bug reports please contact francisco.rodrigues0908@gmail.com.

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