

Finding LC class data with ISBN

Intro to Python and API

Selena Chau, Collection Strategist Librarian

MentiMeter Poll

**Participation link: <https://www.menti.com/a1evvssqc6p9>

See the live results:

<https://www.mentimeter.com/app/presentation/a11ras5d7tacyrne52a2kfxirgiw5274>

Background

An application from a Collection Strategist perspective

Collection Strategies is a new, centralized department

My role encompasses multiple departments and topics in humanities and social sciences

UCSB Library transitioned to ePreferred collection development practices in recent years

COUNTER data analysis - still exploring roles and responsibilities

How advanced is this session?

This session introduces a tool that uses Python and the OCLC API without requiring any installation or prerequisites.

This session introduces core concepts and does not teach how to code. The amount of further participation and learning is up to you.

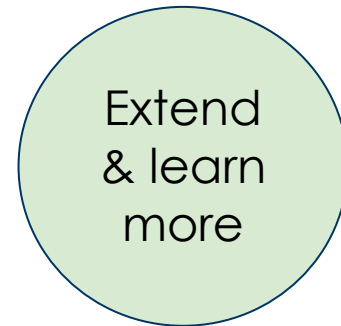
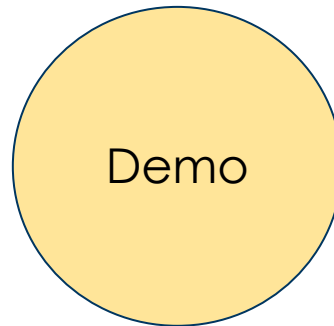
This session provides resources to learn more. Many of these resources are no cost, and only take time and motivation.

In a Nutshell

Why?

- Retrieve LC class to extend COUNTER usage data
- Share tools to allow colleagues to know what is possible
- Present a script that uses free tools, in a low-barrier environment - easier to jump in and get started

Mini roadmap



A tool using open source software

My script uses an API
and is written in...



<https://www.python.org/>

A popular, general-purpose programming language.

You will see it in...



<https://jupyter.org/>

A **Jupyter Notebook** is a document with a standard format that allows interactive code computations alongside text, images, and more.

Which is hosted on...



<https://mybinder.org/>

An interface used to interact with Jupyter Notebooks.

Find the LC class with ISBN

Upload csv:
1 column of ISBNs

1. isbnlib
Change ISBN to
canonical form

2. OCLC Classify API
Retrieve most popular
LC class

Download csv:
**has new column
of LC class**

My python script uses the OCLC Classify API. We will interact with it in Jupyter Notebooks, which is hosted on Binder.

Preparation

1. Access the Binder

- Go to <https://mybinder.org/> and enter the Github URL <https://github.com/selenachau/binder>
- Binder takes a while to load the first time (up to 5 minutes) and will disconnect with inactivity.
- You cannot save your changes online, but can make changes and download files to your computer

2. Two Jupyter Notebooks are available to use

- isbn-lcc-quick-convert.ipynb
- isbn-lcc-walkthrough.ipynb - *will not be presented, explore on your own*

Python, Jupyter Notebooks, and Binder

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Python isbnlib library

Clean and transform ISBNs with isbnlib

<https://pypi.org/project/isbnlib/>

Validate, clean, transform, hyphenate, and get metadata for ISBN strings

Some terminology:

isbnlike	canonical : only digits and X
979-10-90636-07-1	979109063671
954-430-603-X	954430603X

To use OCLC Classify API, the ISBNs need to be in canonical form. The isbnlib Python library can be used to convert a list of ISBNs into their canonical form.

Functions in isbnlib

Note the format of functions, with parentheses after the name of the function. Within the parentheses, enter an input value and optional parameters.

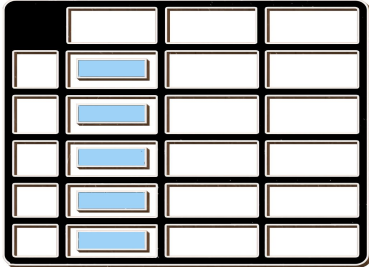
is_isbn13()	Returns TRUE or FALSE depending on whether the ISBN string is a valid ISBN13 or not
is_isbn10()	Returns TRUE or FALSE depending on whether the ISBN string is a valid ISBN10 or not
canonical()	Transform an ISBN string to its canonical form
mask(<i>isbn</i>, separator='-')	Puts dashes (or other separator) back into an ISBN.
meta(<i>isbn</i>, service='default')	Returns the main metadata associated with the ISBN. Service parameter options: 'goob' uses the Google Books service and is the default 'wiki' uses the wikipedia.org api 'open!' uses the OpenLibrary.org api
And more!	

OCLC Classify API

<http://classify.oclc.org>

Content and software is subject to OCLC's [terms and conditions](#).
See also [OCLC Classify API Documentation](#)

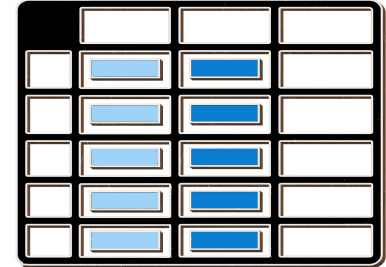
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Demo & Learn in Binder

Demo

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The file folder icon on the left is the File Browser.

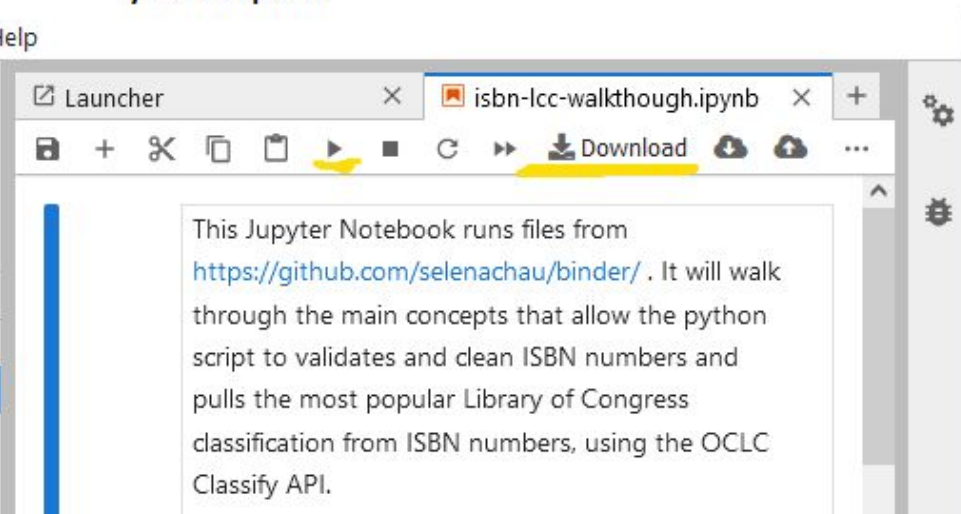
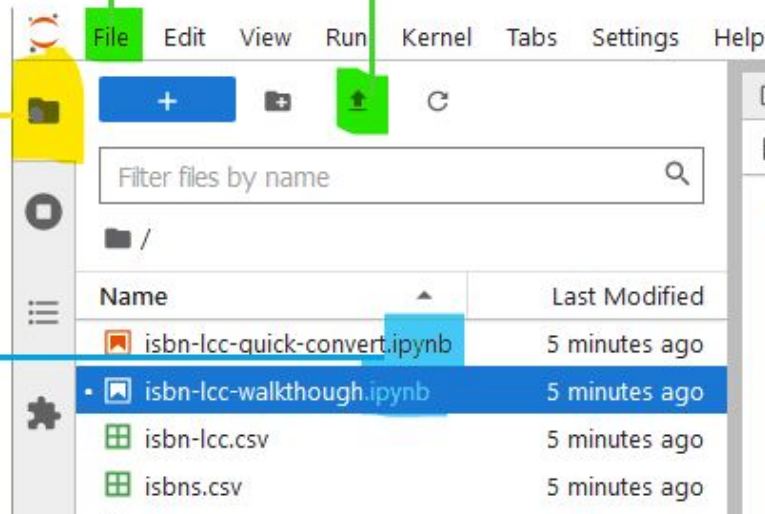
You can use the File menu or icons to upload or download files from this temporary location.

Note the file extension *.ipynb for Jupyter Notebooks.

Double click on the walkthrough Jupyter Notebook, and it opens in the right side panel.

After you click inside a code cell, you can use the play icon (or press Shift + Enter) to run the code.

If you want to save any changes you have made to the file, use this Download icon  Download to save the file to your computer.



Extensions of the script and how to learn more

Extension of the script

- <https://github.com/mbelvadi/lcc> from isbn

This script allows a user to import a COUNTER-formatted usage report and export a file that includes added LC classification.

Resources to learn more

- Browse on [GitHub.com](#)
- [Software Carpentry](#) and [Library Carpentry](#)
- [Code{4}Lib Journal](#)
- Python classes on [Code Academy](#), [Udemy](#), [Coursera](#), or [LinkedIn Learning](#) and more
- [Intro to Jupyter and Jupyter Notebooks](#) (short introduction)
- [Introduction to Jupyter and JupyterLab](#) (longer resource)
- [Tutorial on creating a Binder project](#)
- [Classify API documentation](#)

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