



Using Google Sheets Add Ons to Streamline Cataloging

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Presenters

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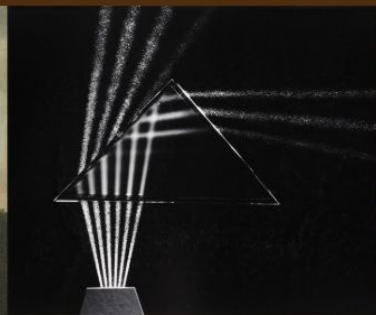
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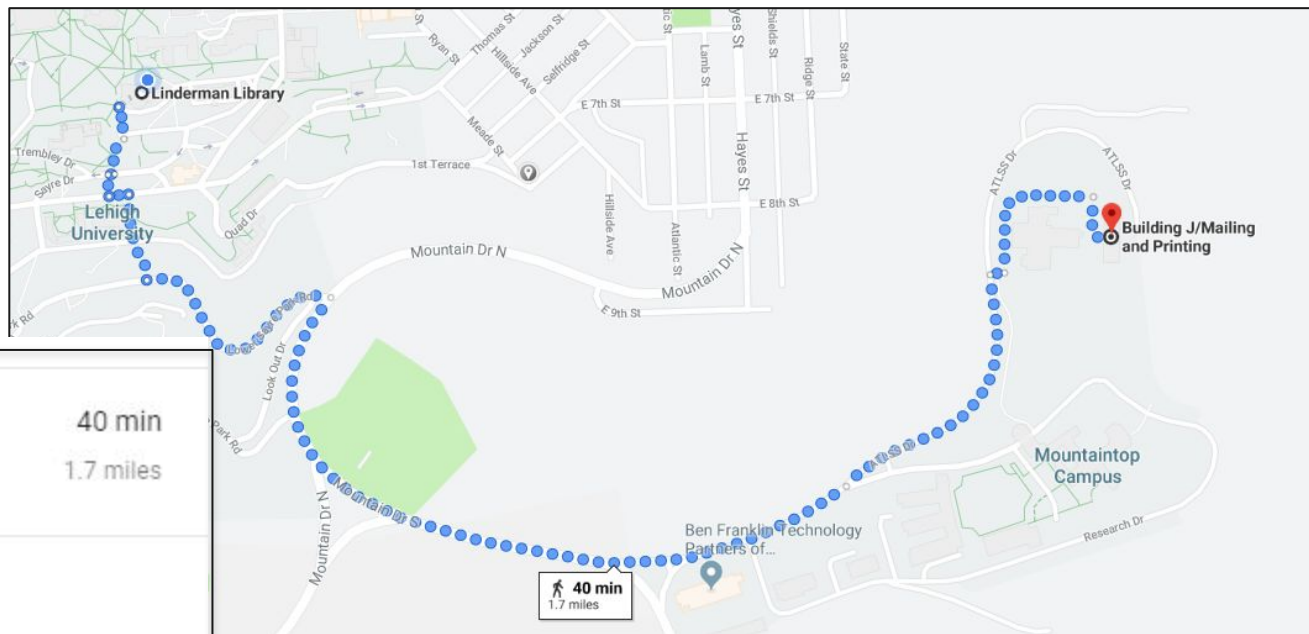




Challenges

1. Volume of books vs. available staff time
2. Accessibility of the collection

Linderman Library to LUAG Storage Facility



via Mountain Dr N

40 min

[DETAILS](#)

1.7 miles

↑ 479 ft - ↓ 66 ft





Other OCLC batch search tools considered

- Backlog Lookup by Yukari Sugiyama and Debbie Falvey, Yale University Library
https://github.com/ysugiyama3/backlog_lookup
- LS-Tools, Cornell University
<https://confluence.cornell.edu/pages/viewpage.action?pageId=337117449>

Inspiration from existing solutions

```
2998     ],
2999   },
3000   "columnName": "SUBJECT",
3001   "expression": "grel:cells['SUBJECT4'].value",
3002   "onError": "keep-original",
3003   "repeat": false,
3004   "repeatCount": 10
3005 },
3006 {
3007   "op": "core/text-transform",
3008   "description": "Text transform on cells in column CALL_NO using expression grel:cells",
3009   "engineConfig": {
3010     "mode": "row-based",
3011     "facets": [
3012       {
3013         "omitError": false,
3014         "expression": "isBlank(value)",
3015         "selectBlank": false,
3016         "selection": [
```

The screenshot shows a Confluence page from Cornell University. The page title is "Component: OCLC Record Retriever". The sidebar on the left lists several components, including "Component: Mechanism for Loading", "Component: OCLC Record Retriever", "Cleanup: Enhance Voyager Records", "Enhance: Batchmatch Replacer", "Enhance: E-Book Records Enhancer", "Enhance: OCLC Master Number", "Enhance: Order Records", "Import: New print records search", "Create: PDC", "Enhance: Backlog Books", "Enhance: OCLC WorldShare", "Enhance: Revision of OCLC System", "Export: Automated Monthly Export", "Export: Casalini Share VDE Extract", and "Export: Circulation counts for print". The main content area shows the page title "Component: OCLC Record Retriever" and a table of contents with sections like "Section 1: Administrative Process" and "High-Level description".

Pages / [CUL Tech Services Automation Working Group Home](#)

Component: OCLC Record Retriever

Created by Peter Hoyt, last modified by Nancy Solla on Aug 29, 2018

Section 1: Administrative Process

High-Level description:

Statement of problem to be solved	This specification defines the common support to acquire new MARC metadata or replace or
Explanation of business value (how does this support CUL's mission)	It is in the library's interest to define these relatively little effort. It is recognized that certain constraints must
Overview of the process	Implementation is a set of imbedded subroutines are made to an OCLC server keyed upon a

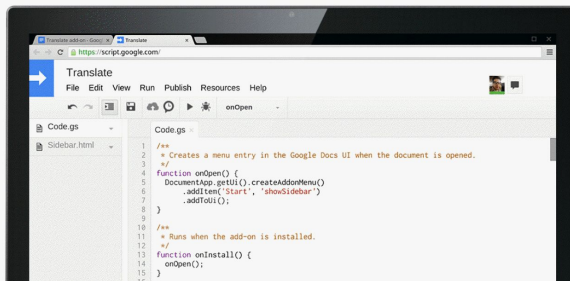
Google Apps Scripts - a recent discovery

Many Google apps, one platform in the cloud



Increase the power of your favorite Google apps — like [Calendar](#), [Docs](#), [Drive](#), [Gmail](#), [Sheets](#), and [Slides](#).

Apps Script lets you [do more with Google](#). All on a JavaScript platform in the cloud.



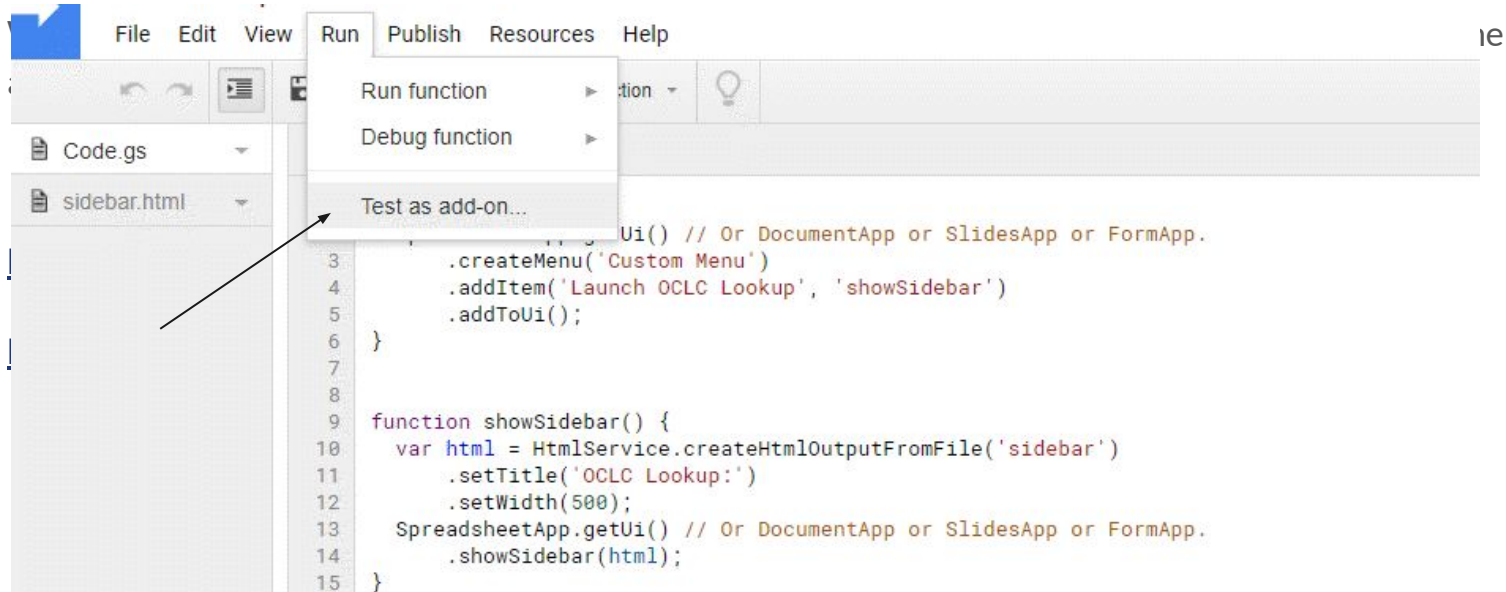
Try a 5-minute quickstart

Add-on for Google Docs

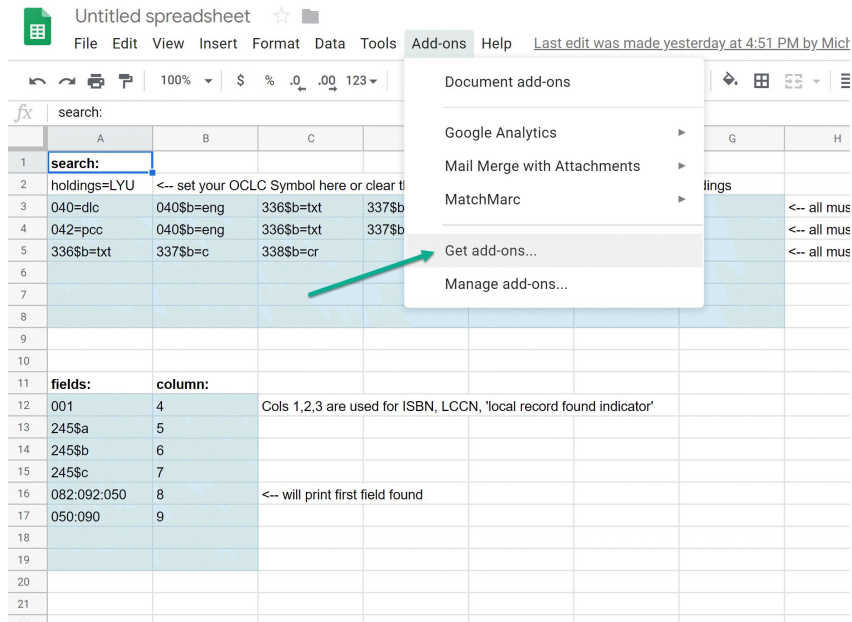
Create a Docs add-on that transforms selected text into other languages with Google Translate.

[BUILD WITH DOCS](#)

Google Apps Scripts - ability to share



Google Apps Scripts - ability to share



The screenshot shows the Google Sheets interface with the 'Add-ons' menu open. The menu options are: Document add-ons, Google Analytics, Mail Merge with Attachments, MatchMarc, Get add-ons..., and Manage add-ons... A green arrow points to the 'Get add-ons...' option. The spreadsheet contains data in columns A, B, and C, with rows 1 through 21 visible. The formula bar shows 'search:'.

	A	B	C
1	search:		
2	holdings=LYU	<-- set your OCLC Symbol here or clear t	
3	040=dlc	040\$b=eng	336\$b=txt 337\$b
4	042=pcc	040\$b=eng	336\$b=txt 337\$b
5	336\$b=txt	337\$b=c	338\$b=cr
6			
7			
8			
9			
10			
11	fields:	column:	
12	001	4	Cols 1,2,3 are used for ISBN, LCCN, 'local record found indicator'
13	245\$a	5	
14	245\$b	6	
15	245\$c	7	
16	082:092:050	8	<-- will print first field found
17	050:090	9	
18			
19			
20			
21			

Google Apps Scripts - ability to share

The screenshot shows the Google Sheets interface with an 'Add-ons' panel open. The panel has a search bar at the top right containing the text 'marc'. Below the search bar, two add-ons are listed:

- MatchMarc**
offered by matchmarc.com
MatchMARC automates MARC record searches using OCLC's WorldCat Search API. Configure the search to return your 'best' match.
+ FREE Utilities
- XBRL API Access**
offered by xbrl.us
This Google Sheets Add-on establishes connectivity via the XBRL API to request and return data from the XBRL US Public Database.
+ FREE Business Tools

A green arrow points to the MatchMarc add-on. A green box highlights the search bar containing 'marc'. The background shows a spreadsheet with columns A and B, and rows 1 through 15. The spreadsheet content includes search criteria like 'search:', 'holdings=L', '040=dlc', '042=pcc', '336\$b=txt', and fields like 'fields:', '001', '245\$a', '245\$b', and '245\$c'.



Google Apps Scripts - ability to share

<https://tinyurl.com/matchmarc>

<https://tinyurl.com/matchmarc-source>

<https://tinyurl.com/matchmarc-instructions>

Iterative development

The screenshot shows a Google Sheet titled "Math donations" with a sidebar titled "OCLC Lookup". The sheet contains a table with columns A through K. The first row is labeled "search:" and the second row is labeled "holdings=LYU". The table contains data for various OCLC symbols and their corresponding fields. The sidebar contains a form for searching OCLC records, including fields for the OCLC API Key, a dropdown for the tab containing ISBNs, a dropdown for the search criteria tab, and buttons for "Start Search" and "Click to initialize sample tabs".

	A	B	C	D	E	F	G	H	I	J	K
1	search:										
2	holdings=LYU	<-- set your OCLC Symbol here or clear this cell if you don't want it to look for your own holdings									
3	040\$d=eng	040\$b=eng	336\$b=txt	337\$b=n	338\$b=nc			<-- all must be true for a 'match'			
4	042=poc	040\$b=eng	336\$b=txt	337\$b=n	338\$b=nc			<-- all must be true for a 'match'			
5	336\$b=txt	337\$b=c	338\$b=cr					<-- all must be true for a 'match'			
6											
7											
8											
9											
10											
11	fields:	column:									
12	001	4	Cols 1,2,3 are used for ISBN, LCCN, 'local record found indicator'								
13	245\$a	5									
14	245\$b	6									
15	245\$c	7									
16	082-092-050	8	<-- will print first field found								
17	050-090	9									
18											
19											
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21											
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23											
24											
25											

OCLC Lookup:


OCLC API Key
9d

Select tab that contains ISBNs
Sheet1

Select search criteria tab
Sheet1

Start Search

Click to initialize sample tabs

 Lisa McColl
1:40 PM Mar 20

Same as rows 75 and 89. All things are equal except record 1055568854 has more holdings. I think it should have picked that record.

What operations does the add-on perform?

[illegible]

What operations does the add-on perform?

test

File Edit View Insert Format Data Tools Add-ons Help

All changes saved in Drive

fx

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C

D

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F

G

H

I

J

K

search:

holdings=LYU

O40=dlc

O42=pcc

336\$b=txt

O40\$b=eng

O40\$b=eng

336\$b=txt

337\$b=c

336\$b=txt

337\$b=txt

338\$b=cr

337\$b=n

337\$b=n

338\$b=nc

338\$b=nc

-- set your OCLC Symbol here or clear this cell if you don't want it to look for your own holdings

-- all must be true for a 'match'

-- all must be true for a 'match'

-- all must be true for a 'match'

fields:

column:

001

245\$a

245\$b

245\$c

082.092.050

050.090

4

5

6

7

8

9

Cols 1,2,3 are used for ISBN, LCCN, 'local record found indicator'

-- will print first field found

What operations does the add-on perform?

The screenshot shows a Google Sheet titled "Math donations" with a menu bar (File, Edit, View, Insert, Format, Data, Tools, Add-ons, Help) and a status bar indicating "All changes saved in Drive". The sheet contains a table with columns A through J. A purple box highlights a specific range of data in columns C through J, rows 1 through 29. The OCLC Lookup add-on sidebar is open on the right, showing an "OCLC API Key" field, a "Select tab that contains ISBNs" dropdown, a "Sample Searches" input field, a "Select search criteria tab" dropdown, a "Sample Search Criteria" input field, a "Start Search" button, and a "Click to initialize sample tabs" button.

ISBN	LCCN	Local record ind	Local record four	965795283	The EY Exhibito	Wifredo Lam /	edited by Catheri	759.97291	N6605.L35	A4 2016	
9781849763721				31988	Coins in history: a survey of coinage from the refo			737.409	1	CJ59	P65
9780297178545				357905	General topology			513.83	QA611	B65813	
997196693x	66-25377			12277902	The theory of dynamical systems	edited by Hiroshi		516.36	T3	QA614.8	T48 1984
9780159515975				51258500	Topology: a geometric appri	Terry Lawson.		514	21	QA611	L36 2003
	59-8656			523382	Mathematics dictionary /	edited by Glenn		510.3	QA5	J32 1959	
070429103				286147	Elementary linea the viewpoint of	[by] John T. Moo		512/5	QA251	M57	
0821818007				266473	Homotopy invariants in differential	by Tadashi Naga		515.13	N1	QA3	A57 no.100
821912920				1318984	Doubly timelike surfaces /	by John K. Beern		510.6	A5	QA3	A57 no.92
	52-5841			529758	Foundations of algebraic topology.	by Samuel Eilen		513.83	QA611	E5	
	55-8437			527978	Functional analysis /	Frigyes Riesz an		516.56	QA300	R452	
	61-17849			537014	An introduction to the theory of gar	E. S. Venttsel' ; tr		512.8	QA269	V38	
	65-13607			529800	Distributions, complex variables, a	[by] Hans Breme		530.15	QA401	B65	
	63-21682			1060035	On Riemann's th a supplement to	Translated from I		517.81	QA331	K613 1963	
0534980392				8935199	Graphs as mathematical models /	Gary Chartrand.		511.5	QA166	C453 1977x	
	60-14787			529633	Rings of continuous functions /	by Leonard Gilm		512.815	QA611	G5	
	61-7856			994439	Selected topics in the classical the	Maurice Hains.		517.8	QA331	H412	
0697277690				36311272	Introduction to modern algebra /	Neal H. McCoy.		512.02	M131	1995	21
	61-17837			541196	Configuration theorems	[by] B. I. Argunov		516.5	A6	QA471	A713
	68-21467			441996	Introduction to topology.			513/83	QA611	M39 1968	
0821811517				1941	Some mathematical problems in biology.			574/01/51	BX5199.L53	D69 2002	
0821811525				6353176	Some mathematical questions in b	prepared by the		518.4	QH324	S92 1967	
072042240x				123761580	Problems in the i proceedings of th	edited by Imre Li		510.1	UKD		
	79-108265			59197	Topics in dynamics.			531/3	QA372	N44	
9780191863998				1034560829	Philosophical foundations of labou	edited by Hugh C		344.01/01	K1705	P54 2018	
9780190697884				1057237977	Digital feminist a: girls and women	Kaitlynn Mendes		362.883	2	HV6558	M46 2019
9780190900045				1019845140	Legal translation outsourced /	Juliette R. Scott.		340/14	2	K213	S39 2019

Possible future uses of add-ons & challenges



Google apps scripts
on Google's servers

Campus Firewall



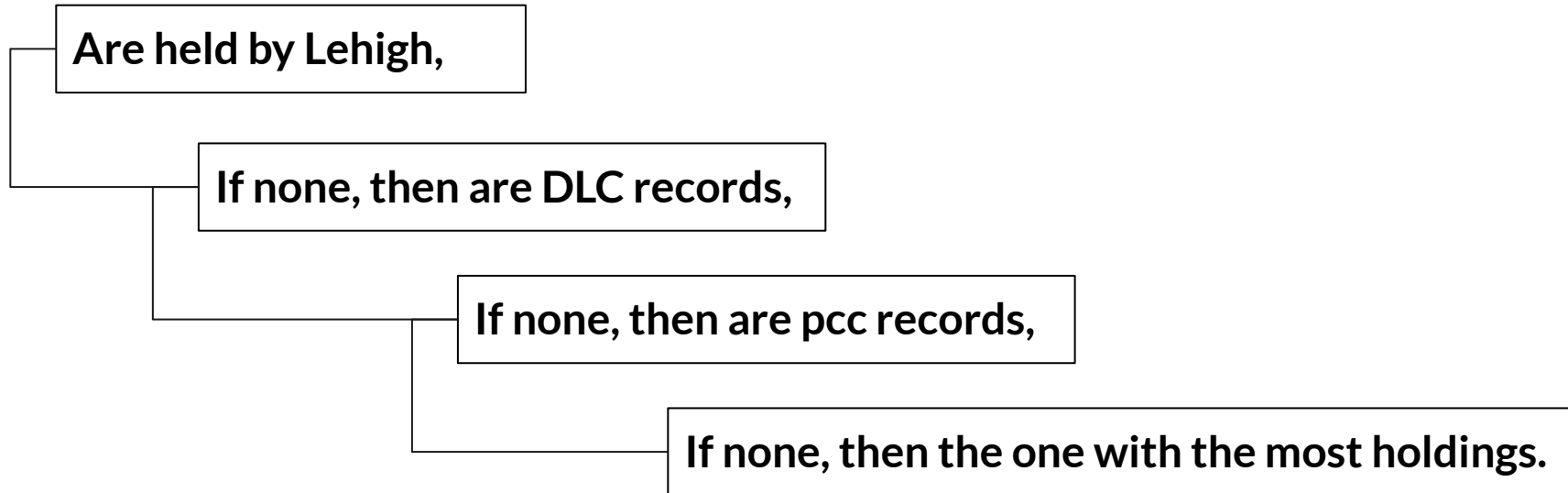


Two (Huge) Positives of MATCH MARC

1. Accurate
2. Convenient



Accuracy: Tiers of Logic

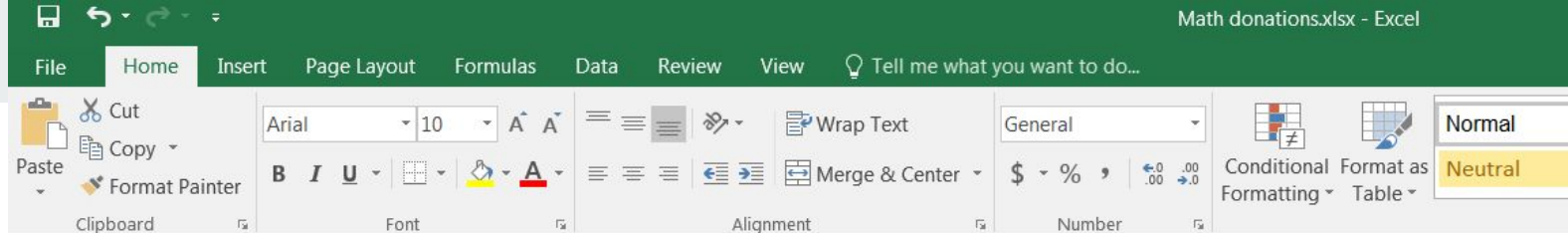


Accuracy



VS.





The theory of dynamical systems and its applications to nonlinear problems /						
	A	B	C	D	E	
1	ISBN	LCCN		MATCH MARC OCLC	MY OCLC	
2		66-25377	local record found	357905	357905	General topology.
3		66-30492		304924	304924	Intrinsic geometry of surfaces,
4		51-12754		527263	527263	Theory of matrices /
5	9971501112			13822645	804676132	Perspectives in nonlinear dynamics :
6	0122795016		local record found	528617	528617	Generalized functions.
7		52-12052		793134	793134	Fundamental concepts of algebra /
8		63-21849		528961	528961	Théorie des opérations linéaires.
9	997196693x			12277902	12277902	The theory of dynamical systems and i
10	9780198515975			51258500	51258500	Topology :
11		59-8656		523382	523382	Mathematics dictionary /
12	070429103			286147	286147	Elementary linear and matrix algebra;
13	0821818007			266473	266473	Homotopy invariants in differential geoe
14	821912920			1318984	1318984	Doubly timelike surfaces /
15		52-5841		529758	820469878	Foundations of algebraic topology,
16		55-8437		527978	527978	Functional analysis /
17		61-17849		537014	537014	An introduction to the theory of games
18		65-13607		529800	529800	Distributions, complex variables, and F
19		63-21682		1060035	1060035	On Riemann's theory of algebraic funct
20	0534980392			8935199	8935199	Graphs as mathematical models /
21		60-14787		529633	529633	Rings of continuous functions /
22		61-7856		994439	994439	Selected topics in the classical theory o
23	0607077600			26241272	26241272	Introduction to modern algebra /

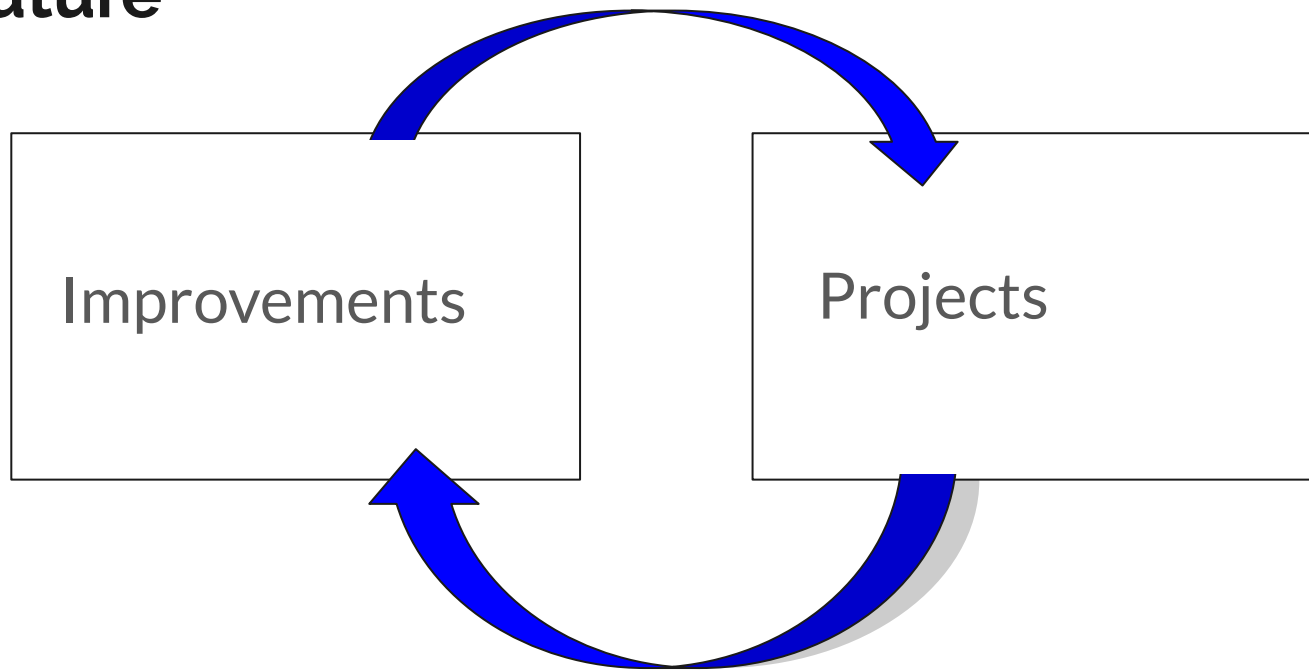
Test

Convenience of the Sheets Environment

1. Familiar
2. Portable
3. Flexible: a Google Sheet can become a
 - a. MARC file
 - b. TEXT file
 - c. Label sheet
 - d. Check list



Future





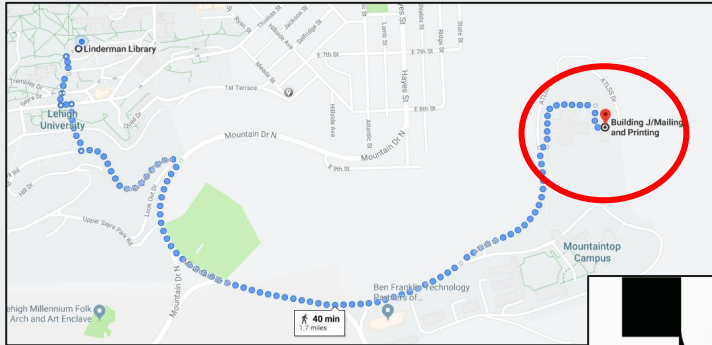
Thank you!

Please feel free to contact either of us with questions.

Michelle Suranofsky
mis306@lehigh.edu

Lisa McColl
lim213@lehigh.edu

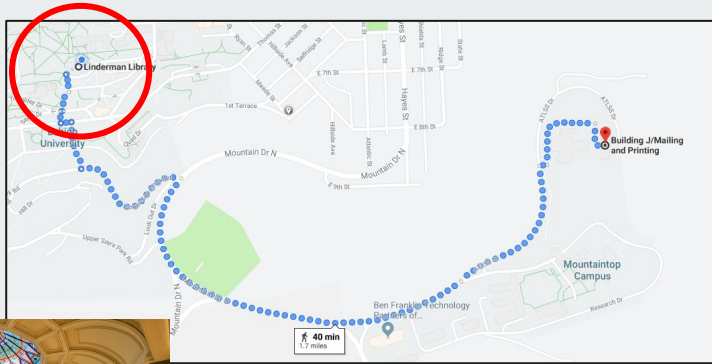
Appendix: Sample Workflow



Sheets

1. Enter ISBN or LCCN numbers for books.
2. Enter local notes in another column as needed

Appendix: Sample Workflow

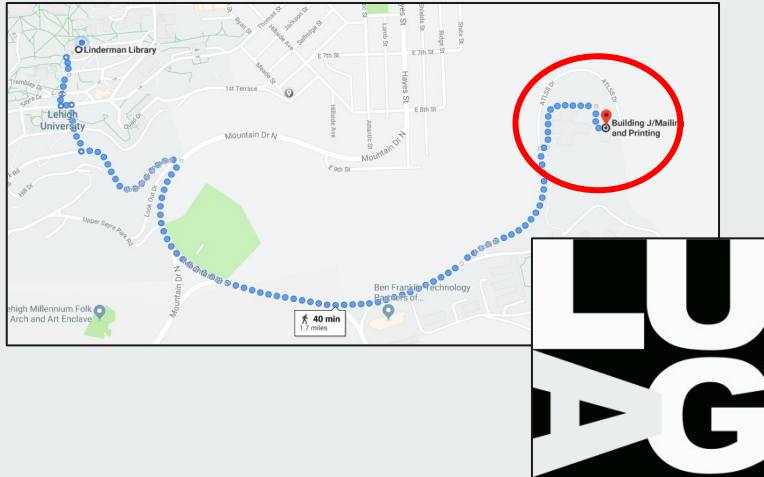


Sheets

1. Run MATCH MARC tool.
2. Use MARCEdit to obtain OCLC MARC file based on OCLC numbers found.
3. Scan in a barcode for each book into the Google Sheet.
4. Use MARCEdit to create a MARC file from the Google Sheet, with local information (call number, barcode, local notes.)
5. Merge OCLC MARC file with Local MARC file.
6. Import resulting file into ILS.
7. Create a spine label sheet using the Call Number Column created by MATCH MARC.



Appendix: Sample Workflow



Apply barcodes and spine labels to books, using the Google Sheet for reference and checks.