

# A simple collection viewer for the new Primo UI

IGeLU 2016 Developers Day

<http://goo.gl/Cmqaxv>



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# What I want to do!

## Context



My Citations

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[RMAH-catalogue](#)

[All LIBISnet-catalogues](#)

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### Catalogue des intailles et empreintes orientales des Musées royaux du Cinquantaire

Speleers, Louis  
Bruxelles : Vromant,

● **Available at** Royal Museum of Art and History Library of Antiquity (EG MUS BRUX 1917 )

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Cylinder seal with battle scene



Cylinder seal with battle scene



Cylinder seal with battle scene



Cylinder seal with two decorated friezes



Cylinder seal with battle scene



Cylinder seal with reception scene



Cylinder seal with winged quadruped



Cylinder seal with three persons



Bull with 21 imprints

Convert an existing jQuery.PRIMO widget  
into an AngularJS Component for the  
new UI

# What it does

## The requirements

1. Show only in the KMKG view
2. Search for existence of a marker(Collectiedocumentatie) in search/lsr04 tag
3. Search for collection records using prefix MPLUS\_ + record id in the search/lsr05 tag
4. Parse result (get title, backlink, linktorsrc and thumbnail)
5. Render result

# 1. Only show in KMKG view

Must select a view.

## > UI customization Package Manager ?

Owner:  ▾ View\*  ▾ Deploy

### Download a Package

Template package ?

Download

Central package ?

Download

(A Package has not been loaded)

KMKG package ?

Download

(A Package has not been loaded)

### Upload package for KMKG

No file selected.

Upload

Inherit from Central package ?

Save

## 2. Search for the existence of a marker ...

- PNX data can be accessed through the parent controller

```
app.controller('collectionController', ['ngPrimo', function(ngPrimo) {  
  var vm = this;  
  var recordId = vm.parentCtrl.item.pnx.control.recordid;  
  
  if ((vm.parentCtrl.item.pnx.search.lsr04) &&  
      (/Collectiedocumentatie/.test(vm.parentCtrl.item.pnx.search.lsr04.toString()))) {
```

```
<lsr04>CollectionLBIBLOKO</lsr04>  
<lsr04>Callnumber902017ABRUSMURC1</lsr04>  
<lsr04>CollectionKMMRBIAN</lsr04>  
<lsr04>CallnumberEGMUSBRUX1917</lsr04>  
<lsr04>  
  AcquisitionTagCollectiedocumentatieGlypcolKMMRphysical  
</lsr04>  
<lsr04>AcquisitionTagMuseumpublicatieKMMRphysical</lsr04>  
<lsr35>996959410101471</lsr35>  
</search>
```

Our implementation is from  
before the current collection\*  
feature.

\* but can be easily ported

### 3. Search for collection records

The fun starts here, really

- Collection records are identified by MPLUS\_ + recordid
- Identifier is stored in search/lsr05 tag in the PNX record
- Query = lsr05,exact,recordid

```
ngPrimo.search.byQuery(['lsr05,exact,MPLUS_${recordId}'], {bulkSize: 10}).then(function(response) {  
  var result = response.data;  
  var imageRecords = [];  
  vm.imagesAll = [];
```



# Searching in Primo

- XServices
  - Proven to work
  - Older technology might disappear in the future
- Rest API
  - Only accessible through the developer network for hosted environments

# Using Rest API

- Need of an API key
  - In the URL
  - In the HEADER

More info:

<https://developers.exlibrisgroup.com/primo/apis/webservices/rest>

# Let us test this

## In the browser

```
angular.reloadWithDebugInfo();

//wait until browser is reloaded
var apiKey = 'YOUR KEY HERE';
var institution = 'YOUR INSTITUTION CODE HERE';
var query = 'any,contains,water';

var networkURL =
  `https://api-na.hosted.exlibrisgroup.com/primo/v1/pnxs?${query}&inst=${institution}&offset=1&limit=10`;
var directURL = `/primo_library/libweb/webservices/rest/v1/pnxs?q=${query}&inst=${institution}&offset=1&limit=10`;

var app = angular.element(document.querySelector('primo-explore'));
var injector= app.injector();
var http = injector.get('$http');
```

# Let us test this

## In the browser

```
//Doing a call using the developer network

//API key as a parameter
http.get(networkURL + '&apikey=' + apiKey).then(function(d){console.log(d)}, function(d){console.log('Crash and burn')});

//API key in the header
http.get(networkURL, {headers: {'Authorization': 'APIKEY ' + apiKey}})
    .then(function(d){console.log(d)}, function(d){console.log('Crash and burn')});

//Calling the Rest API directly

//API key as a parameter
http.get(directURL + '&apikey=' + apiKey)
    .then(function(d){console.log(d)}, function(d){console.log('Crash and burn')});

//API key in the header
http.get(directURL, {headers: {'Authorization': 'APIKEY ' + apiKey}})
    .then(function(d){console.log(d)}, function(d){console.log('Crash and burn')});
```

# Doing a call using the developer network

## API key as a parameter

```
> http.get(networkURL + '&apikey=' + apiKey).then(function(d){console.log(d)}, function(d){console.log('Crash and burn')});  
i { $$state={...}, then=function(), catch=function(), more... }
```

▼ GET https://api-na.hosted.exlibrisgroup.com/primo/v1/...t=10&apikey= [REDACTED] ❌

Params Headers

▼ Request Headers [view source](#)

```
Accept application/json, text/plain, */*  
Accept-Encoding gzip, deflate, br  
Accept-Language en-US,en;q=0.5  
Authorization Bearer eyJraWQiOiJwcm9udmVqcml2YXRlS2V5LUtVTTCIsImFsZyI6IktVMjU2In0.eyJpc3MiOiJqcmltbyIsImp0aSI6IiIsImV4cCI6MTQ3MzE0ODI1OSwiaWF0IjoxNDc2MDYxODU5LCJlc2VyIjojoiYw5vbmltb3VzLTA5MDVfMdc1MDU5IiwidXNlc  
k5hbWUiOm5lbGwsInVzZXJHcm91cCI6IkdVRVNUIiwiaWF0IjoxNDc2MDYxODU5LCJlc2VyIjojoiYw5vbmltb3VzLTA5MDVfMdc1MDU5IiwidXNlc  
iJLVUwiLCJ2aWV3SW5zdG10dXRpb25Db2RlIjojoiS1VMIiwiaXAiOiIxNDguMTIyLjE0LjU0Iiwib25DYW1wdXMiOiJmYWxzZSIsImxhbmd  
.lqaSKhLnsx45hACHwDl1QwwDMvwwbKwZxmbYatZzml5aBIXPTgPOCaeTyIuKJ0MksphdVcsZL2SOL-HhdIEvCw  
Host api-na.hosted.exlibrisgroup.com  
Origin http://limo.q.libis.be  
Referer http://limo.q.libis.be/primo-explore/search?vid=KULeuven&lang=en_US  
User-Agent Mozilla/5.0 (Macintosh; Intel Mac OS X 10.11; rv:48.0) Gecko/20100101 Firefox/48.0  
X-From-ExL-API-Gateway 1
```

! Cross-Origin Request Blocked: The Same Origin Policy disallows reading the remote resource at https://api-na.hosted.exlibrisgroup.com/primo/v1/pnxs?any,contains,water&inst=KUL&offset=1&limit=10&apikey=l7xxaa2ca915ae4d46e299c9ca4348f179a8. (Reason: missing token 'authorization' in CORS header 'Access-Control-Allow-Headers' from CORS preflight channel).

Crash and burn

# Doing a call using the developer network

## API key in the header

```
> http.get(networkURL, {headers: {'Authorization': 'APIKEY ' +apiKey}}).then(function(d){console.log(d)}, function(d){console.log('Crash and burn')});
```

```
i { $$state={...}, then=function(), catch=function(), more... }
```

▼ GET https://api-na.hosted.exlibrisgroup.com/primov1/pnxs?any,contains,water&inst=KUL&offset=1&limit=10 ✖ bundle-...0e92.js (line 16)

Params Headers

▼ Request Headers

[view source](#)

Accept	application/json, text/plain, */*
Accept-Encoding	gzip, deflate, br
Accept-Language	en-US,en;q=0.5
Authorization	APIKEY <span style="border: 2px solid red; padding: 2px;">[REDACTED]</span>
Host	api-na.hosted.exlibrisgroup.com
Origin	http://limo.q.libis.be
Referer	http://limo.q.libis.be/primo-explore/search?vid=KULeuven&lang=en_US
User-Agent	Mozilla/5.0 (Macintosh; Intel Mac OS X 10.11; rv:48.0) Gecko/20100101 Firefox/48.0
X-From-ExL-API-Gateway	1

! Cross-Origin Request Blocked: The Same Origin Policy disallows reading the remote resource at https://api-na.hosted.exlibrisgroup.com/primov1/pnxs?any,contains,water&inst=KUL&offset=1&limit=10. (Reason: missing token 'authorization' in CORS header 'Access-Control-Allow-Headers' from CORS preflight channel).

Crash and burn



# Calling the Rest API directly

## API key in the header

```
> http.get(directURL, {headers: {'Authorization': 'APIKEY ' + apiKey}}).then(function(d){console.log(d)}, function(d)
{console.log('Crash and burn')});
i { $$state={...}, then=function(), catch=function(), more... }
```

▼ GET http://limo.q.libis.be/primolibweb/webse...?q=any,contains,water&inst=KUL&offset=1&limit=10 401 Unauthorized € bundle-...0e92.js (lir

Params Headers Response HTML Cookies

▼ Response Headers [view source](#)

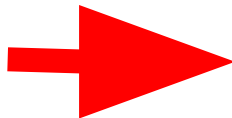
**Content-Encoding** gzip  
**Content-Language** en  
**Content-Type** text/html; charset=utf-8  
**Date** Mon, 05 Sep 2016 09:09:25 GMT  
**Server** Apache-Coyote/1.1  
**Transfer-Encoding** chunked  
**Vary** Accept-Encoding

▼ Request Headers [view source](#)

**Accept** application/json, text/plain, \*/\*  
**Accept-Encoding** gzip, deflate  
**Accept-Language** en-US,en;q=0.5  
**Authorization** APIKEY [REDACTED]  
**Cookie** JSESSIONID=8052E29164270E920001D80210; utma=113712538.313388026.1458294906.1467983882.1468407977  
.4; \_\_utmoz=113712538.1458294906.1.1.utmcsr=(direct)|utmccn=(direct)|utmcmd=(none); \_\_insp\_uid=1816634046  
; \_\_insp\_ref=d; PRIMO\_RT=; \_\_insp\_wid=398980649; \_\_insp\_slim=1472993605495; \_\_insp\_nv=false; \_\_insp\_targetl  
=http%3A%2F%2Flimo.q.libis.be%2Fprimolibweb%2Flibweb%2Faction%2Fdisplay.do%3Fvid%3DKMKRG%26search\_scope  
%3DPHYS\_ITEMS%26docId%3D32LIBIS\_ALMA\_DS71122741240001471%26fn%3Dpermalink%26prefLang%3Den\_US; \_\_insp\_targetl  
=Catalogue%20des%20intailles%20et%20empreintes%20orientales%20des%20Mus%C3%A9es%20royaux%20du%20Cinquanten  
%20-%20Royal%20Museums%20of%20Art%20and%20History; \_\_insp\_norec\_sess=true  
**Host** limo.q.libis.be  
**Referer** http://limo.q.libis.be/primolibweb/search?vid=KULeuven&lang=en\_US  
**User-Agent** Mozilla/5.0 (Macintosh; Intel Mac OS X 10.11; rv:48.0) Gecko/20100101 Firefox/48.0  
**X-From-ExL-API-Gateway** 1

✖ "NetworkError: 401 Unauthorized - http://limo.q.libis.be/primolibweb/webse...rest/v1  
/pnxs?q=any,contains,water&inst=KUL&offset=1&limit=10" pnxs?q=...imit=10

Crash and burn





# What did work?

overview

Developer Network URL	Direct URL
API key as a parameter(CORS)	API key as a parameter
API key in the header(CORS)	API key in the header(401)

# What errors did we encounter.

1. missing token 'authorization' in CORS header  
'Access-Control-Allow-Headers' from CORS preflight channel

**Access-Control-Allow-Headers** → Origin, X-Requested-With, Content-Type, Accept

**Access-Control-Allow-Methods** → GET,POST,DELETE,PUT,OPTIONS

**Access-Control-Allow-Origin** → \*

2. 401 Unauthorized

# Calling the Rest API directly

## No API key

```
> http.get(directURL).then(function(d){console.log(d)}, function(d){console.log('Crash and burn')});
i { $$state={...}, then=function(), catch=function(), more... }
```

▼ GET http://limo.q.libis.be/primo\_library/libweb/webse...?q=any,contains,water&inst=KUL&offset=1&limit=10 200 OK 363ms

Params Headers Response JSON Cookies

▼ Response Headers [view source](#)

Cache-Control	max-age=0
Content-Encoding	gzip
Content-Type	application/json
Date	Mon, 05 Sep 2016 09:19:47 GMT
Expires	Mon, 05 Sep 2016 09:19:47 GMT
Server	Apache-Coyote/1.1
Transfer-Encoding	chunked
Vary	Accept-Encoding

▼ Request Headers [view source](#)

Accept	application/json, text/plain, */*
Accept-Encoding	gzip, deflate
Accept-Language	en-US,en;q=0.5
Authorization	Bearer eyJraWQiOiJwcm1tb0V4cGxvcmVQcml2YXRlS2V5LUtVTCIsImFsZyI6IktVMjU2In0.eyJpc3MiOiJQcm1tb0V4cGxvcmVQcml2YXRlS2V5LUtVTCIsImFsZyI6IktVMjU2In0.eyJraWQiOiJwcm1tb0V4cGxvcmVQcml2YXRlS2V5LUtVTCIsImFsZyI6IktVMjU2In0
Cookie	JSESSIONID=8053E381C437CE83CDC23800D1D8C319; __utma=113712538.313388026.1458294906.1467983882.1468407977.4; __utms=113712538.1458294906.1.1.utmcsrc=(direct) utmccn=(direct) utmcmd=(none); __insp_uid=1816634046; __insp_ref=d; PRIMO_RT=; __insp_wid=398980649; __insp_slim=1472993605495; __insp_nv=false; __insp_target=http%3A%2F%2Flimo.libis.be%2Fprimo_library%2Flibweb%2Faction%2Fdisplay.do%3Fvid%3DKMKG%26search_scope%3DPHYS_ITEMS%26docId%3D32LIBIS_ALMA_DS71122741240001471%26fn%3Dpermalink%26prefLang%3Den_US; __insp_target=Catalogue%20des%20intailles%20et%20empreintes%20orientales%20des%20Mus%C3%A9es%20royaux%20du%20Cinquante%20-%20Royal%20Museums%20of%20Art%20and%20History; __insp_norec_sess=true
Host	limo.q.libis.be
Referer	http://limo.q.libis.be/primo-explore/search?vid=KULeuven&lang=en_US
User-Agent	Mozilla/5.0 (Macintosh; Intel Mac OS X 10.11; rv:48.0) Gecko/20100101 Firefox/48.0
X-From-ExL-API-Gateway	1

Object { data={...}, status=200, config={...}, more... }

# Rest API

## Timings

Call type	N	D	N	D	N	D	N	D	N	D
time_namelookup:	0.530	0.528	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
time_connect:	0.677	0.563	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
time_appconnect:	1.196	0.945	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
time_pretransfer:	1.196	0.945	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
time_redirect:	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
time_starttransfer:	2.024	1.428	0.736	0.438	0.617	0.488	0.690	0.448	0.705	0.385
time_total:	2.621	1.579	1.278	0.573	1.070	0.615	1.134	0.519	1.152	0.490

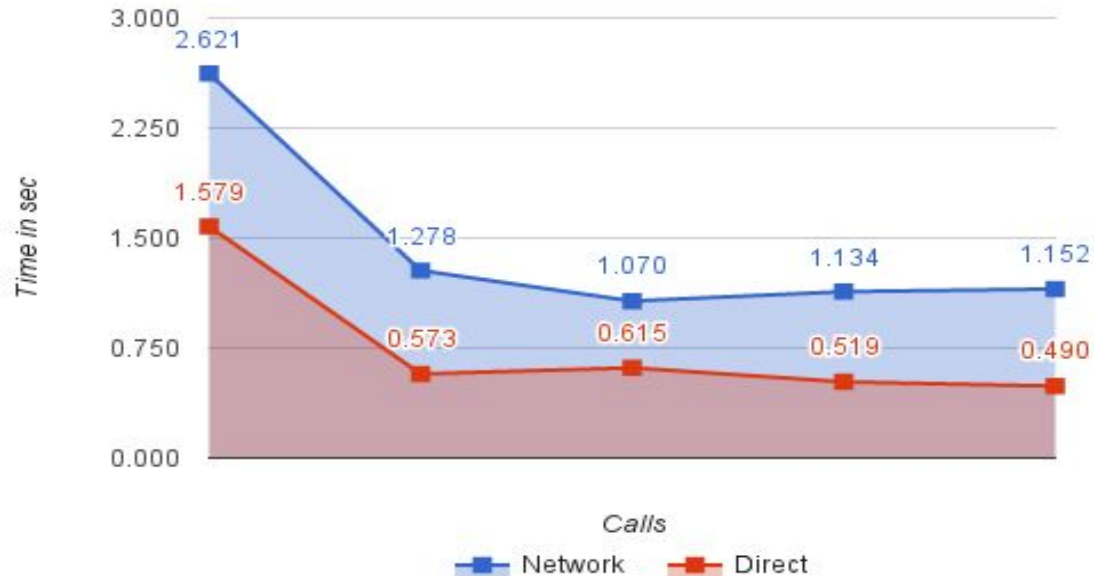
N

```
curl -w "@curl-format.txt" -o /dev/null -s --request GET \  
--url 'https://api-na.hosted.exlibrisgroup.com/primo/v1/pnxs?q=any%2Ccontains%2Cwater&inst=KUL&offset=1&limit=10&apikey=17xxaa2ca915ae4d46e299c9ca4348f179a8&test=[1-5]' \  
--header 'authorization: 17xxaa2ca915ae4d46e299c9ca4348f179a8' \  
--header 'cache-control: no-cache'
```

D

```
curl -w "@curl-format.txt" -o /dev/null -s --request GET \  
--url 'https://limo.libis.be/primo_library/libweb/webservices/rest/v1/pnxs?q=any%2Ccontains%2Cwater&inst=KUL&offset=1&limit=10&test=[1-5]' \  
--header 'cache-control: no-cache' \  
--header 'x-from-exl-api-gateway: 1'
```

## Timing - Network vs Direct Rest API calls



# But I do not know AngularJS

That is fine ...

# Just know 1 pattern.

see [‘Customisation of Primo new UI’](#) presentation.

# Model, View, Controller



```
app.component('prmFullViewAfter', {
  bindings: {parentCtrl: '<'},
  controller: 'collectionController',
  templateUrl: 'custom/KMKG/html/collection.html',
});
```

MODEL

CONTROLLER

VIEW

# parentCtrl

```
<div class="full-view-spacer flex-xl-30 flex-md-0 flex-lg-20 flex-ctrl.mediaQueries.lgPlus}" flex-xl="30" flex-lg="20" flex-md="0" fctrl.isOverlayFullView" style=""> </div>  
</div>  
</div>  
<prm-full-view-after parent-ctrl="ctrl"> </prm-full-view-after>  
</prm-full-view>  
</sticky-scroll>  
md-dialog-content>
```

# parentCtrl

parentCtrl	e { smoothScrollUtil=e, loginAlmaMashupService=e, primolyticsService=e, more... }
▶ \$mdDialog	Object { hide=h(), cancel=m(), show=i(), more... }
bxdisplay	false
bxenable	false
▶ fullViewService	e { restBaseURLs={...}, configurationUtil=e, \$state={...}, more... }
indexAlmaLogin	-1
▶ item	Object { delivery={...}, @rta_link="http://limo.q.libis.be/p..._VALUE_ _ _NO_VALUE_", context="L", more... }
▶ loginAlmaMashupService	e { indexAlma=1, setIndex=function(), getIndex=function(), more... }
▶ mediaQueries	e { xs=false, gtxs=true, sm=false, more... }
▶ primolyticsService	e { searchFieldsService=e, \$sessionStorage={...}, userSessionManagerService=e, more... }
▶ services	[ Object { scrollId="brief", serviceName="brief", title="nui.brief.results.tabs.brief" }, Object { scrollId="action_list", serviceName="action_list", title="nui.brief.results.tabs.send_to" }, Object { scrollId="getit_link1_0", serviceName="activate", title="nui.getit.alma_tab1_avail", more... }, 2 more... ]
▶ smoothScrollUtil	e { window=html#primoExploreRoot, focusOn=function(), elementFocus=function(), more... }
▶ \$timeout	o(o, s, c)
closeDialog	function()
ngAfterViewInit	function()
ngOnInit	function()
scrollToElementId	function(e)
scrollToElementIdWithBeacon	i()
▶ __proto__	e { ngOnInit=function(), ngAfterViewInit=function(), scrollToElementIdWithBeacon=i(), more... }

# Model

a domain object is a logical container of purely domain information, usually represents a logical entity in the problem domain space

Tim Howards

# Controller

- Contains logic to do the heavy lifting
  - Checking existence of marker
  - Searching for data
  - Parsing data

# View

- HTML file template
  - Rendered after component is created

# What is missing?

- A search service
- A real domain object

# Code on Github

<https://github.com/mehmetc/primo-explore-collection-viewer>

mehmetc / primo-explore-collection-viewer

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proprietary collection viewer — Edit

2 commits 1 branch 0 releases 1 contributor

Branch: master New pull request Create new file Upload files Find file Clone or download

mehmetc cleanup Latest commit 7a99746 8 minutes ago

css	cleanup	8 minutes ago
html	cleanup	8 minutes ago
img	initial	4 days ago
js	initial	4 days ago
.gitignore	initial	4 days ago
README.md	initial	4 days ago
showDirectives.txt	initial	4 days ago



# Show me, already!

The screenshot shows a library record page on the ExLibris platform. The page features a dark blue header with the 'ExLibris' logo. On the left, there is a vertical sidebar with a large white 'X' icon. The main content area displays the title 'La civiltà dell'acqua in Ostia Antica' by Ricciardi, Maria Antonietta; Scrinari, Valnea Santa Maria, published in Roma by Palombi. The record is marked as 'Beschikbaar' (Available) in green text. Below the title, there are navigation options: 'TOP', 'SEND TO', 'GET IT', 'DETAILS', and 'LINKS'. The 'SEND TO' section includes a search bar and icons for 'REFWORKS', 'ENDNOTES', 'EASYBI', 'CITATION', 'PERMALINK', 'AFBRUKEN', and 'E-MAIL'. The 'GET IT' section has a search bar and a prominent yellow button labeled 'Meld aan voor aanvraagopties' (Report for request options) with an 'Aanmelden' (Sign up) link. At the bottom, there is a section for 'GET IT FROM OTHER INSTITUTIONS' with a link to 'KU Leuven' and the status 'Beschikbaar'.

ExLibris

BOEK

La civiltà dell'acqua in Ostia Antica  
Ricciardi, Maria Antonietta ; Scrinari, Valnea Santa Maria  
Roma : Palombi,

Beschikbaar in Koninklijke Musea voor Kunst en Geschiedenis Library of Antiquity (ACI 2439 P)

TOP

SEND TO

GET IT

DETAILS

LINKS

Send to

REFWORKS ENDNOTES EASYBI CITATION PERMALINK AFBRUKEN E-MAIL

Get It

Meld aan voor aanvraagopties Aanmelden

GET IT FROM OTHER INSTITUTIONS

KU Leuven  
Beschikbaar

# Thank you



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@celikbe



<https://github.com/mehmetc>

Code

<https://github.com/mehmetc/primo-explore-collection-viewer>

Thoughts, ideas, tricks on the new Primo UI

<https://docs.google.com/document/d/1pfhN1LZSuV6ZOZ7REldKYH7TR1Cc4BUzTMdNHwH5Bkc/edit?usp=sharing>