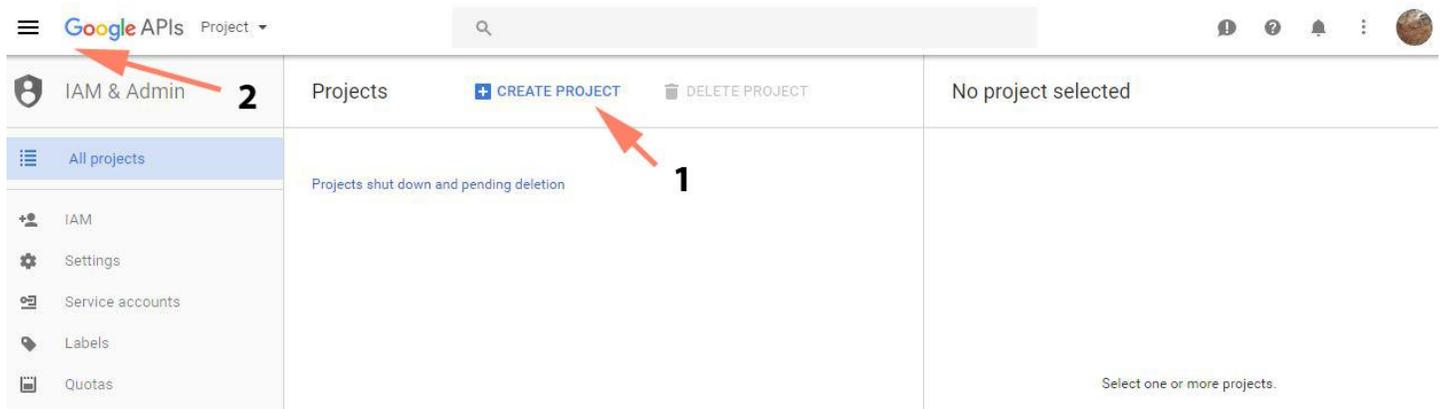


README FOR MAT2SHEETS

```
function status = mat2sheets(spreadsheetID, sheetID, sheetpos, d)
% This function takes values from an array or cell array and places them in
% a Google spreadsheet. It requires the one-time use of RunOnce (see below)
% SYNTAX: status = mat2sheets(spreadsheetID, sheetID, pos, d)
%
% ARGUMENTS:
%     spreadsheetID: (string), identifier from URL of your Google Sheet
%     sheetID:       (string), another identifier from URL
%     pos:           1x2 array with indices for [sheetrow, sheetcolumn]
%                   to start pasting data
%     d:            array or cell array of data to paste into Sheet
%
% RETURNS: status (0=failed, 1=success)
%
% EXAMPLES:
%     For sheet with the following URL:
%     https://docs.google.com/spreadsheets/d/1GPd-vBsX5VUejz5hrxE/edit#gid=552
%
%     A call may look like:
%     mat2sheets('1GPd-vBsX5VUejz5hrxE', '552', [2 3], [1 2 3 4 5])
%
%     Would put values 1,2,3,4,5 into cells C2,D2,E2,F2,G2, respectively
%
% USING RunOnce().
% Before using this code, you've got to enable the Drive/Sheets APIs via:
%     https://console.developers.google.com/
% Here, you will "create credentials" via an OAuth 2.0 client ID that comes
% with a Client ID and Client Secret. These codes are the two arguments of
% RunOnce(client_id, client_secret). Run RunOnce with both of these
% codes passed as strings, and follow the instructions.
%
% The following code is inspired by, and makes use of, code
% originally published in the file exchange by Claudiu Giurumescu.
% (https://www.mathworks.com/matlabcentral/fileexchange/31221-matlab-to-google-spreadsheets)
%
% I wrote this to accommodate for latest changes in Google API, added some
% comments, and simplified it all so that it can be implemented by the
% average user (hopefully!)
%
% Additionally, I use loadjson by Qianqian Fang to read the input streams
% from Google for learning meta data about the sheets
% (https://www.mathworks.com/matlabcentral/fileexchange/33381-jsonlab--a-toolbox-to-encode-decode-
% json-files)
%
% andrew robert bogaard 26 sept 2016
% abogaard@uw.edu
```

HOW TO SET UP GOOGLE DRIVE API CREDENTIALS

Open <https://console.developers.google.com/>



The screenshot shows the Google Cloud Platform console interface. At the top, there's a search bar and navigation icons. The main content area is divided into three columns. The left column contains the 'IAM & Admin' menu with a '2' badge. The middle column shows the 'Projects' tab with a '+ CREATE PROJECT' button and a 'DELETE PROJECT' button. A red arrow points to the 'CREATE PROJECT' button, and another red arrow points to the 'Projects' tab. The right column displays 'No project selected'. Below the 'Projects' tab, there's a message 'Projects shut down and pending deletion' with a '1' badge. At the bottom right, it says 'Select one or more projects.'

- Dashboard
- Library
- Credentials

Google APIs

Search all 100+ APIs

Popular APIs

- Google Cloud APIs**
 - Compute Engine API
 - BigQuery API
 - Cloud Storage Service
 - Cloud Datastore API
 - Cloud Deployment Manager API
 - Cloud DNS API
 - More
- Mobile APIs**
 - Google Cloud Messaging
 - Google Play Game Services
 - Google Play Developer API
 - Google Places API for Android
- Advertising APIs**
 - AdSense Management API
 - DCM/DFA Reporting And Trafficking API
 - Ad Exchange Seller API
 - Ad Exchange Buyer API
 - DoubleClick Search API
 - DoubleClick Bid Manager API

- Google Maps APIs**
 - Google Maps Android API
 - Google Maps SDK for iOS
 - Google Maps JavaScript API
 - Google Places API for Android
 - Google Places API for iOS
 - Google Maps Roads API
 - More
- Social APIs**
 - Google+ API
 - Blogger API
 - Google+ Pages API
 - Google+ Domains API

- Other popular APIs**
 - Analytics API
 - Translate API
 - Custom Search API
 - URL Shortener API
 - PageSpeed Insights API
 - Fusion Tables API
 - Web Fonts Developer API

- Google Apps APIs**
 - Drive API
 - Calendar API
 - Gmail API
 - Sheets API
 - Google Apps Marketplace SDK
 - Admin SDK
 - More
- YouTube APIs**
 - YouTube Data API
 - YouTube Analytics API
 - YouTube Reporting API

2
1



- Dashboard
- Library
- Credentials

About this API

The Google Drive API allows clients to access resources from Google Drive.

Using credentials with this API

Accessing user data with OAuth 2.0

You can access user data with this API. On the Credentials page, create an OAuth 2.0 client ID. A client ID requests user consent so that your app can access user data. Include that client ID when making your API call to Google. Learn more



Server-to-server interaction

You can use this API to perform server-to-server interaction, for example between a web application and a Google service. You'll need a service account, which enables app-level authentication. You'll also need a service account key, which is used to authorize your API call to Google. Learn more



API Manager

Dashboard

Library

Credentials

Credentials

Credentials OAuth consent screen Domain verification



1

APIs
Credentials

You need credentials to access APIs. Enable the APIs you plan to use and then create the credentials they require. Depending on the API, you need an API key, a service account, or an OAuth 2.0 client ID. Refer to the API documentation for details.

Create credentials ▾

2



APIs
Credentials

You need credentials to access APIs. Enable the APIs you plan to use and then create the credentials they require. Depending on the API, you need an API key, a service account, or an OAuth 2.0 client ID. Refer to the API documentation for details.

Create credentials ▾

API key

Identifies your project using a simple API key to check quota and access. For APIs like Google Translate.

OAuth client ID

Requests user consent so your app can access the user's data. For APIs like Google Calendar.

Service account key

Enables server-to-server, app-level authentication using robot accounts. For use with Google Cloud APIs.

Help me choose

Asks a few questions to help you decide which type of credential to use.



API Manager

- Dashboard
- Library
- Credentials**

Credentials



Create client ID

- Application type
- Web application
 - Android [Learn more](#)
 - Chrome App [Learn more](#)
 - iOS [Learn more](#)
 - PlayStation 4
 - Other

Name

matlab

Restrictions

Enter JavaScript origins, redirect URIs, or both

Authorized JavaScript origins

For use with requests from a browser. This is the origin URI of the client application. It can't contain a wildcard (http://*.example.com) or a path (http://example.com/subdir). If you're using a nonstandard port, you must include it in the origin URI.

http://www.example.com

Authorized redirect URIs

For use with requests from a web server. This is the path in your application that users are redirected to after they have authenticated with Google. The path will be appended with the authorization code for access. Must have a protocol. Cannot contain URL fragments or relative paths. Cannot be a public IP address.

http://www.example.com/oauth2callback

Create Cancel

API Manager

- Dashboard
- Library
- Credentials**

Credentials

← Credentials

← Create credential

OAuth client

Here is your client ID

Here is your client secret

OK

' = client_id

' = client_secret

OAuth 2.0 client IDs

Name	Creation date	Type	Client ID
matlab	Sep 29, 2016	Web application	6C...