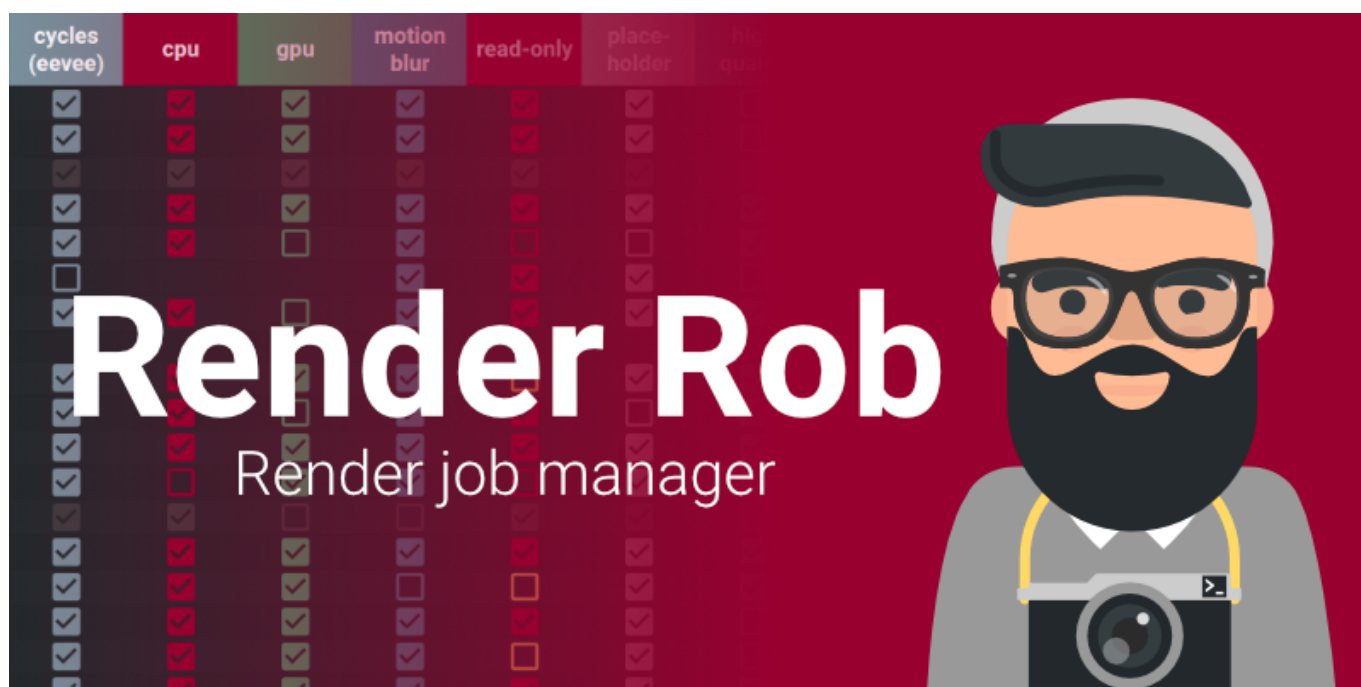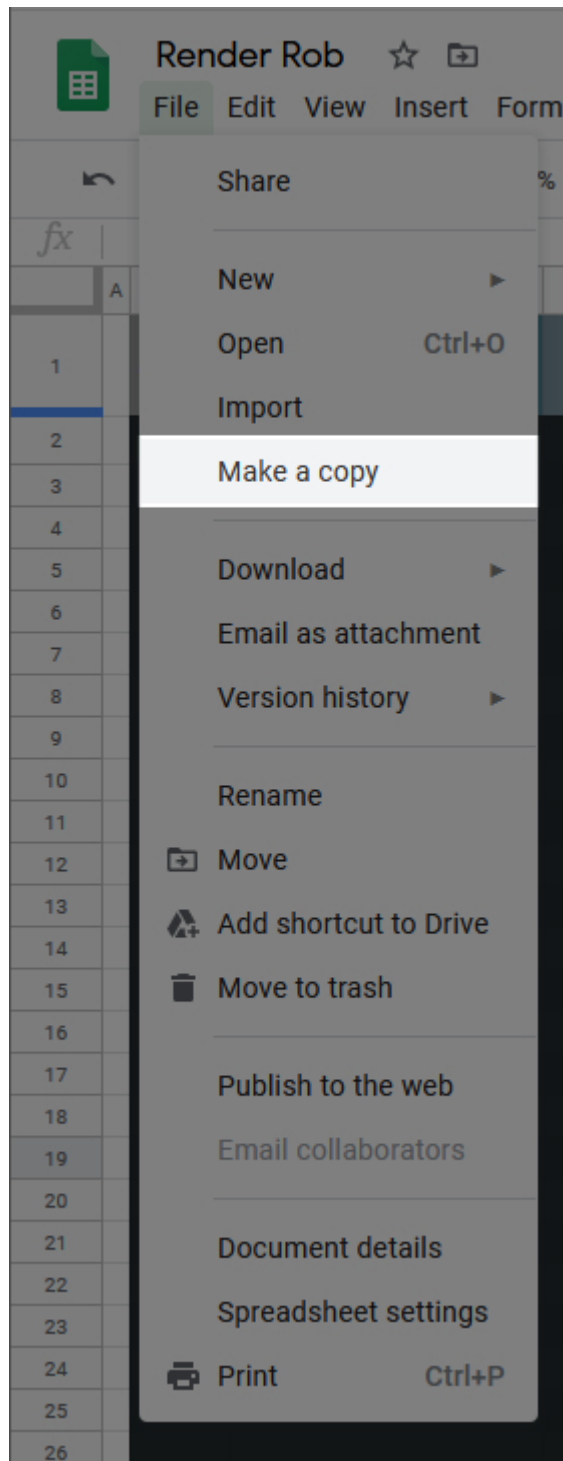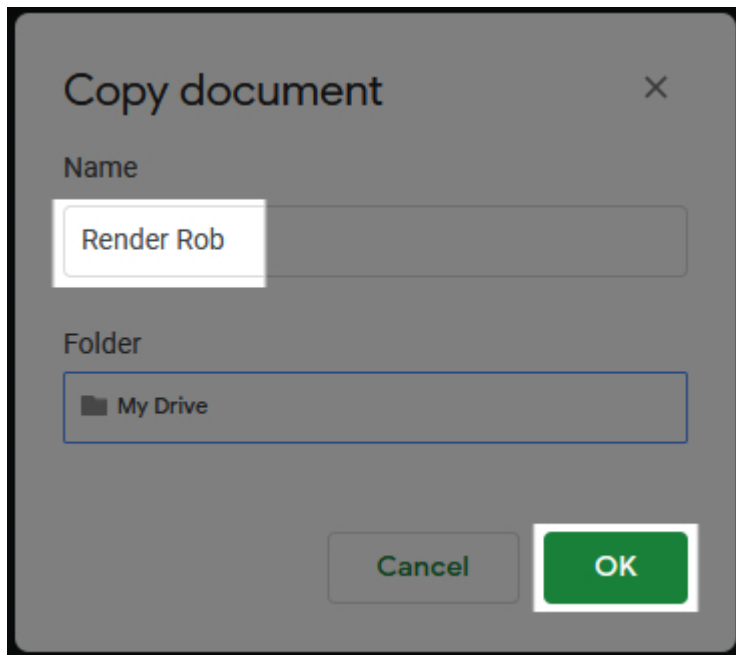# Render Rob

Setup

Spreadsheet

1. Open this Spreadsheet: https://docs.google.com/spreadsheets/d/1ec6AT0q2bhoBhWivzLhM-wXOfM2kwrOK1VlMKbTqRrU/edit?usp=sharing
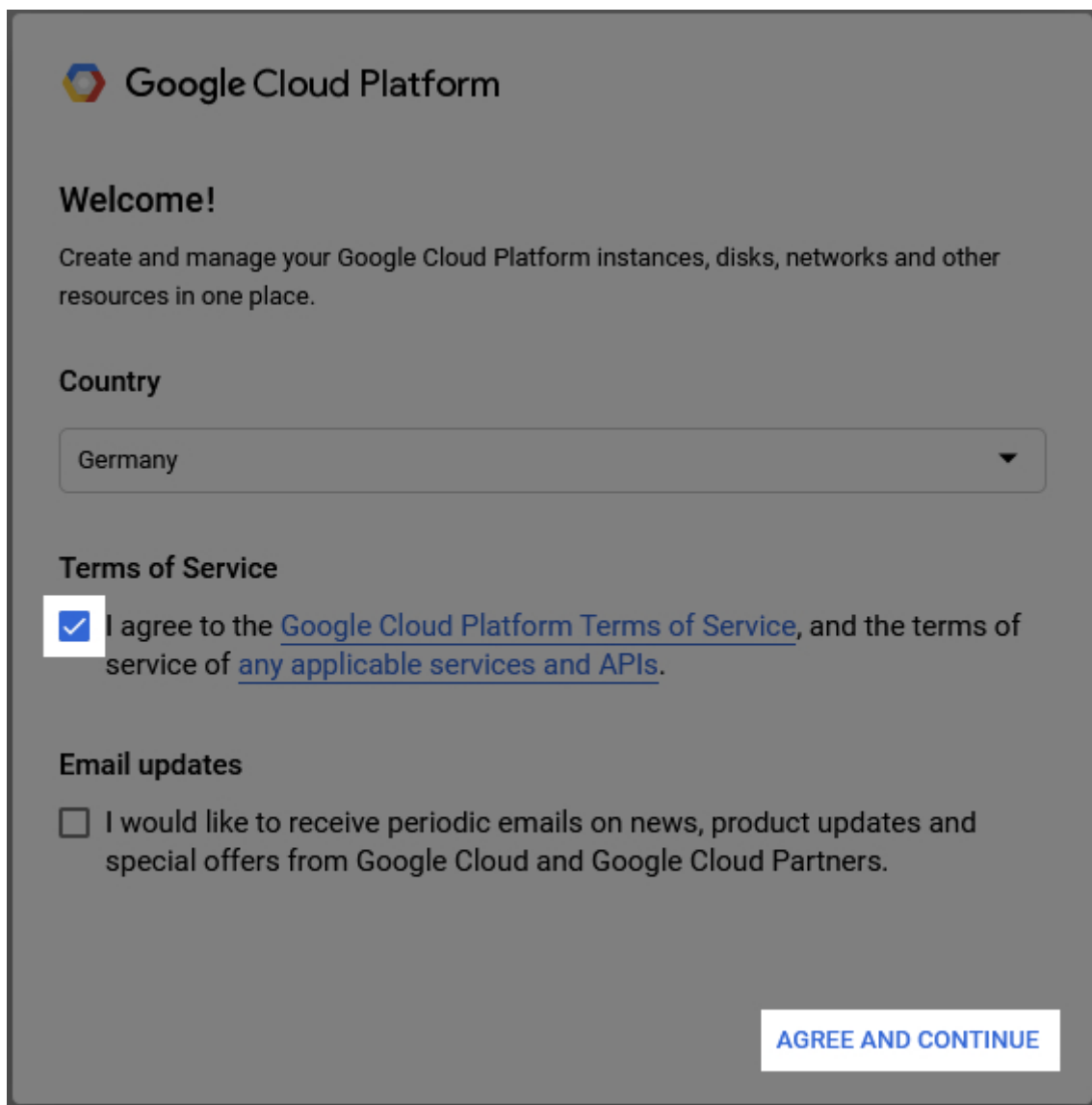
2. Make a copy into your Drive of the sheet

1. Name it Render Rob. Correct naming is important!

Setting up Google api

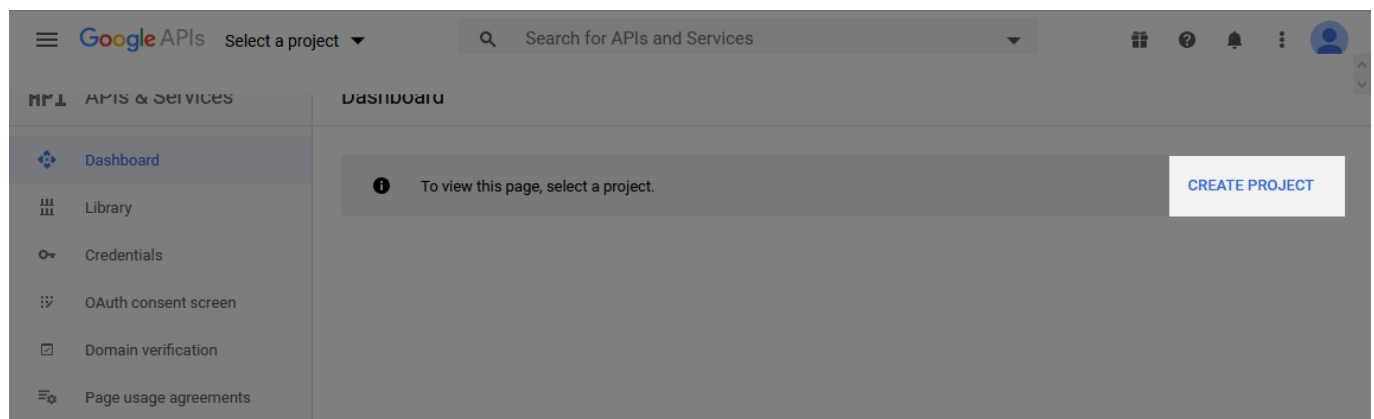1. Open up https://console.developers.google.com/, agree to terms and conditions and click on `Agree and continue`

2. Click on create project

1. Name the project e.g. Render Rob and click on create

4. Search for **Google Drive API** and enable it
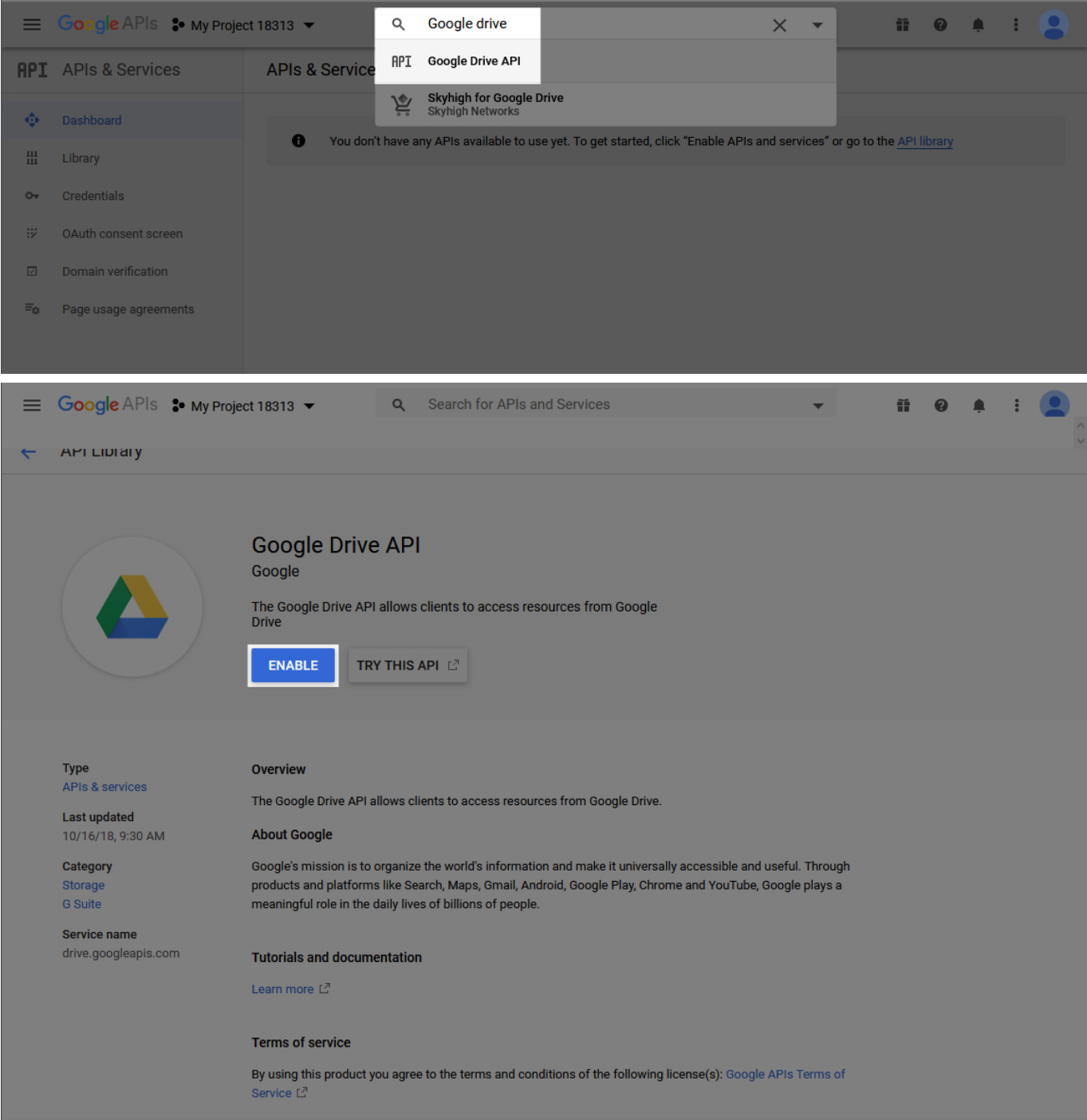
1. Same for **Google Sheets API**

1. Click on Create Credentials
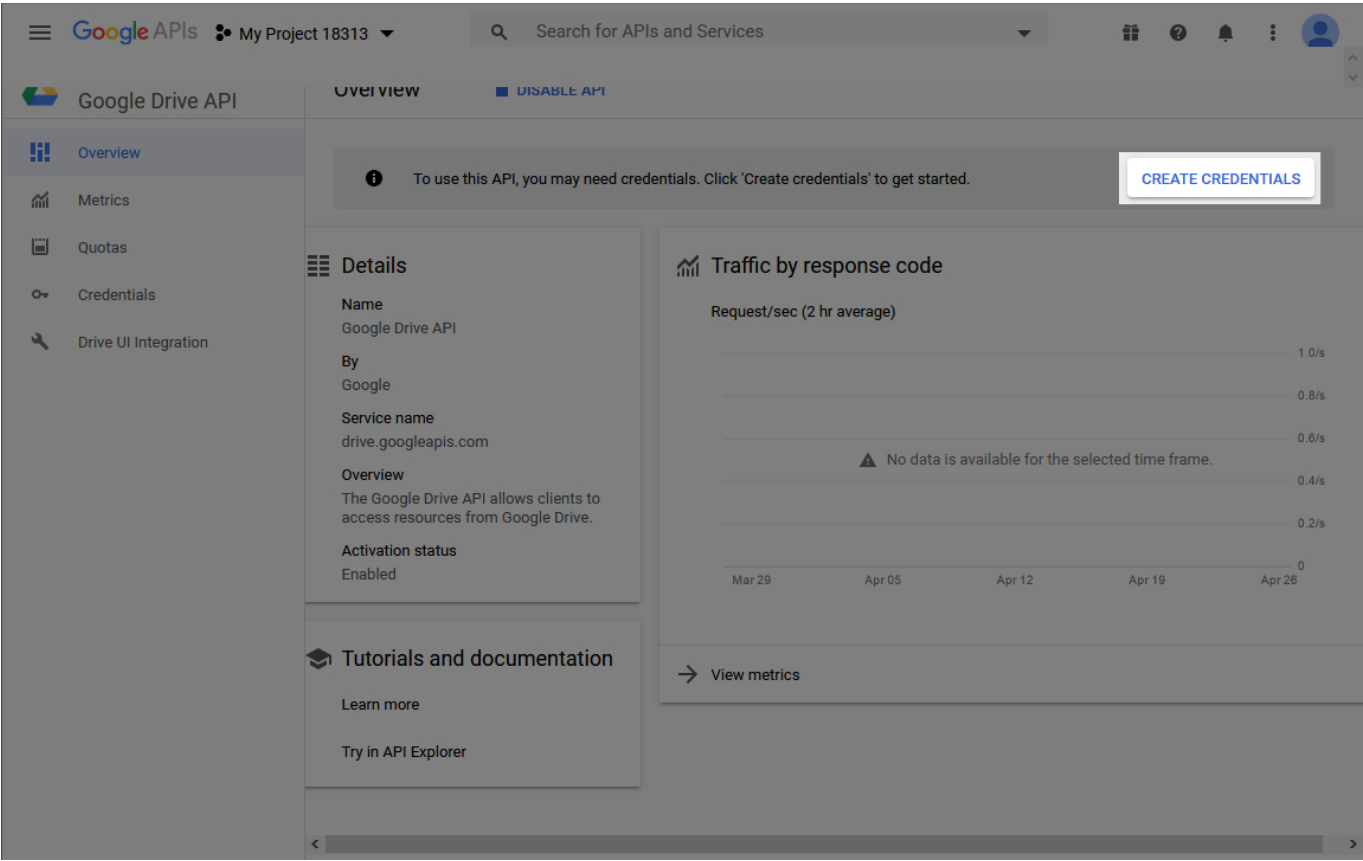
1. fill out the form and click on `What credentials do I need?`

Add credentials to your project

1   Find out what kind of credentials you need

We'll help you set up the correct credentials.
If you want you can skip this step and create an API key, client ID or service account.

Which API are you using?

Different APIs use different auth platforms and some credentials can be restricted to only call certain APIs.

Google Sheets API ▼

Where will you be calling the API from?

Credentials can be restricted using details of the context from which they're called. Some credentials are unsafe to use in certain contexts.

Other non-UI (e.g. cron job, daemon) ▼

What data will you be accessing?

Different credentials are required to authorise access depending on the type of data that you request.

○ User data
   Access data belonging to a Google user, with their permission

◉ **Application data**
   Access data belonging to your own application

Are you planning to use this API with App Engine or Compute Engine?

Applications running on GCE and GAE can use application default credentials and don't require you to create a credential.

○ Yes, I'm using one or both.

◉ No, I'm not using them.

What credentials do I need?

2   Get your credentials

Cancel

1. continue filling out

1. save the json file you get in the `Render Rob\Key` Folder

1. Copy the E-Mail Address from the json File and share the Spreadsheet with this mail
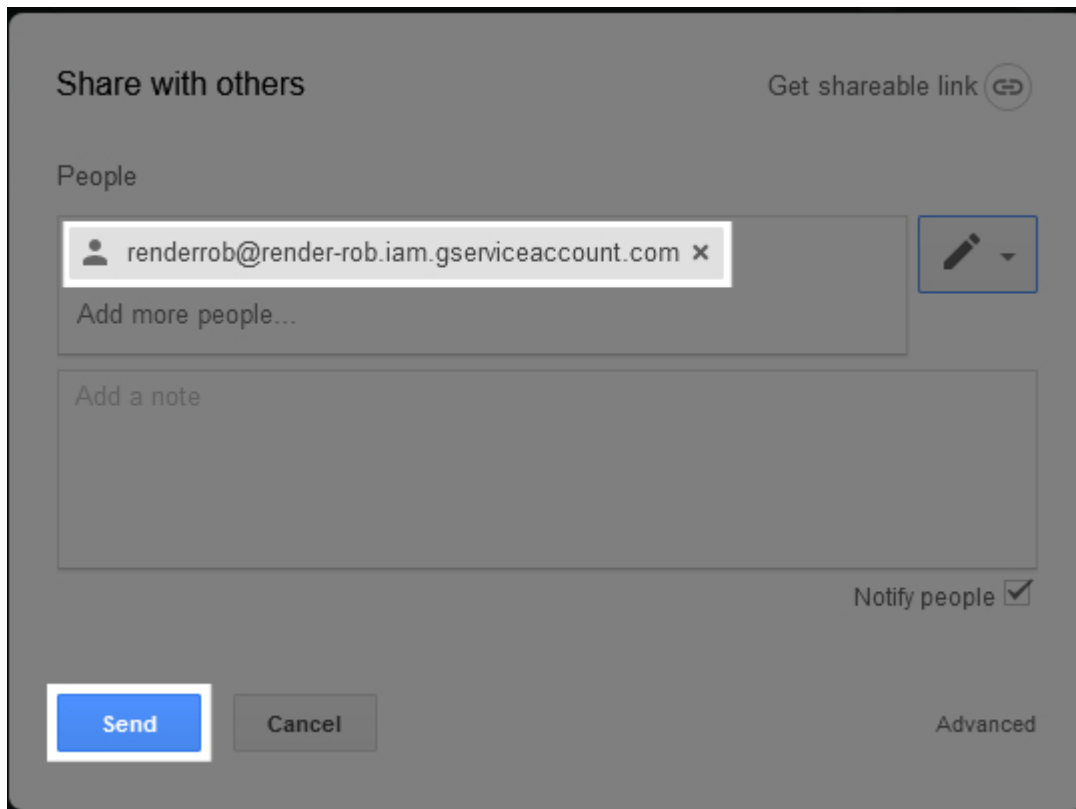
Filling the Spreadsheet

After setting that up, fill in the global settings in the Sheet. The Blender Path and Render Path is mandatory, the rest is optional.

path to blender	"C:\Program Files (x86)\Blender Foundation\Blender\blender.exe"	
path to render output folder	C:\Path\To\My\Renders	
path to blender files folder	C:\Path\To\My\Files	
preview resolution	25	✓
preview samples	4	✓
preview n-th frames	24	✓

Now you only have to paste your attributes of your job to be rendered, and run `renderrob.exe`!

Features

Feature list google doc:

Property	Usage
active	Activates or deactivates job
.blend file path	Path of blend file. Absolute path, aswell as relative path to file folder in globals is possible
camera	Name of camera to be activated, optional
start frame	First frame to be rendered
end frame	Last frame to be rendered

Property	Usage
X res	Horizontal resolution
Y res	Vertical resolution
samples	Number of cycles or eevee passes
file format	Output file format. Exr refers to multilayer exr
cycles (eevee)	If activated, cycles is used, otherwise eevee
cpu	Usage of cpu for rendering
gpu	Usage of gpu for rendering
motion blur	Usage of Motion blur
read only	If activated, already rendered images don't get overwritten
place-holder	Creating placeholders of images being rendered
high-quality	If deactivated, preview settings from globals are used
animation denoise	Usage of Post-Process Animation Denoising
denoise	Usage of Image-Denoising
comments	Put your own comments of the shot here

Further explanations

- If you want to abort all renders, you have to close all three command-line windows.
- The reason motion blur is in Render Rob, is that I often experienced situations where motion blur had artefacts, so I needed few frames without it.
- Column t is necessary. Please do not delete it.
- Column a is a help for being able to select cells easier.
- If read only is enabled, a new folder with a new version number is created and used as render output.
- Jobs get rendered in the order, the are shown in the list. You can reorder them by drag-and-drop. Therefore select the line and drag it on the left side up or down.
- Border rendering gets disabled, if high quality is active.
- Currently the rendering of multiple scenes and view layers is not supported. You will get a warning and it will only render the first scene and the first view layer.
- You can put your own blender commands in the file called `rr_user_commands.py`. An example for this would be the activation of an addon.
- If you disable cycles (and by that enbale eevee), the irrelevant settings get disabled.

Warnings in the sheet

If a property in the sheet gets marked yellow, this means, that a possible error is found. These are just warnings, so you still are able to start the job. In some cases it will work, in some it won't. Following things are being looked at:

- Double occurences of jobs
- No render device selected
- Both devices active, but no read only
- Both devices active, but no placeholders
- High quality animation, but no animation denoising
- Animation denoising, but exr is not selected
- Single frame rendering (start and end frame have the same value), but animation denoising is activated
- Single frame in high quality is being rendered, but Denoising is deactivated