Instructions for interface.py on windows:

We have tested this installation method on Windows, but it should work on Linux too. If there are any problems please contact olivier.stam@student.uva.nl

Before starting it is important to have python (3.11 is recommended) installed on your device and pip.

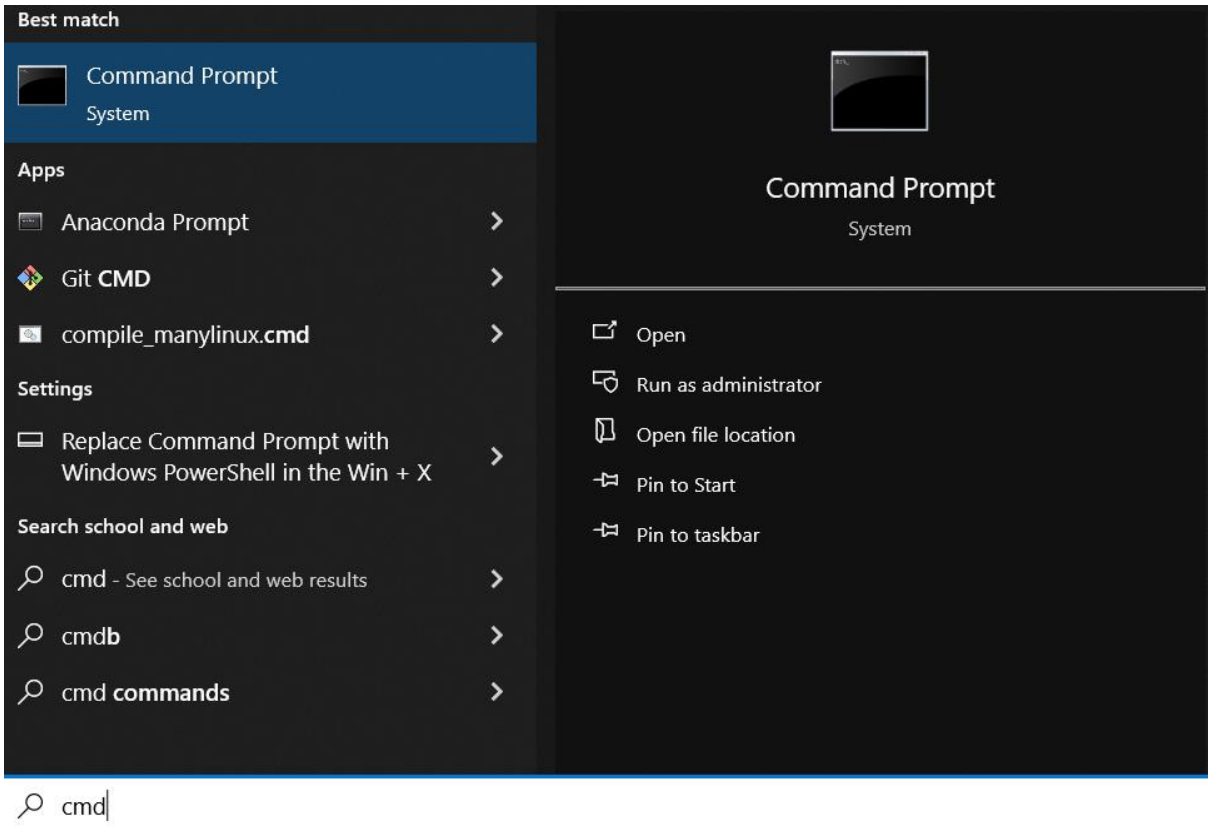
To download python follow this link:

https://www.python.org/downloads/

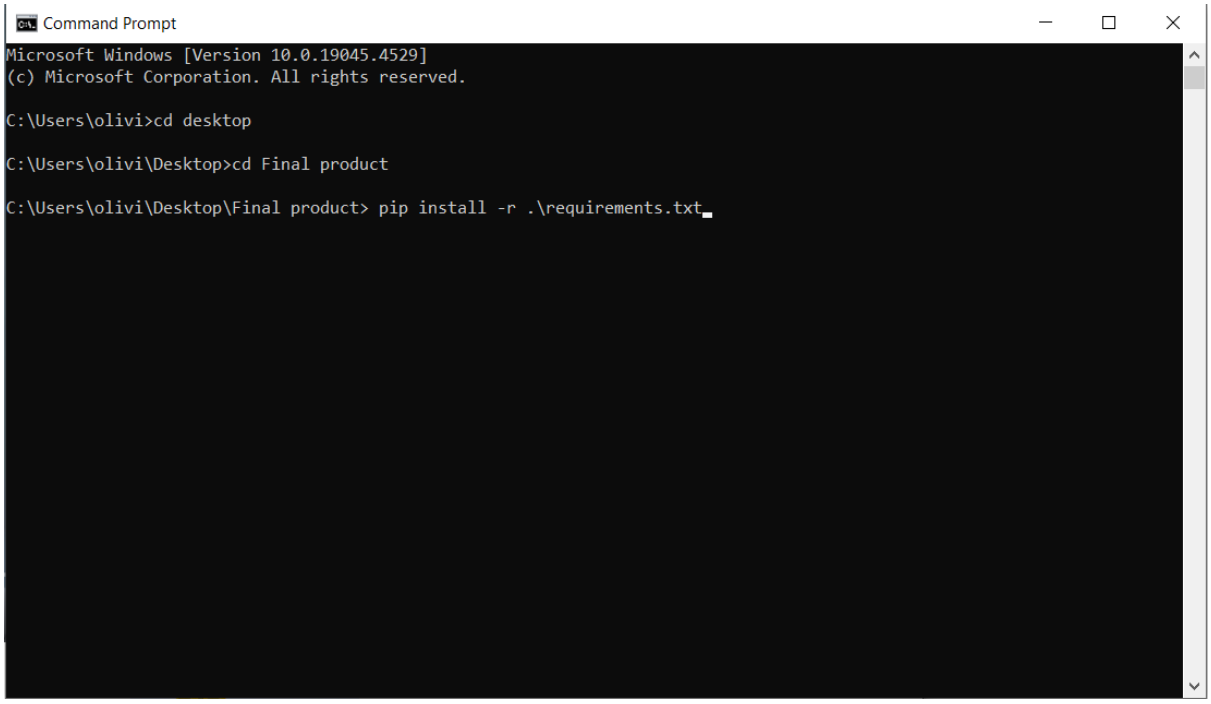
This site might help you out downloading pip:

https://www.geeksforgeeks.org/how-to-install-pip-on-windows/

- Go to your command prompt:



- Then go to your repository (we recommend just dragging the entire file to your desktop for easy access)



- Then type: 'pip install -r .\requirements.txt'

- When that is finished without errors type: python interface.py, this might take a while the first time!

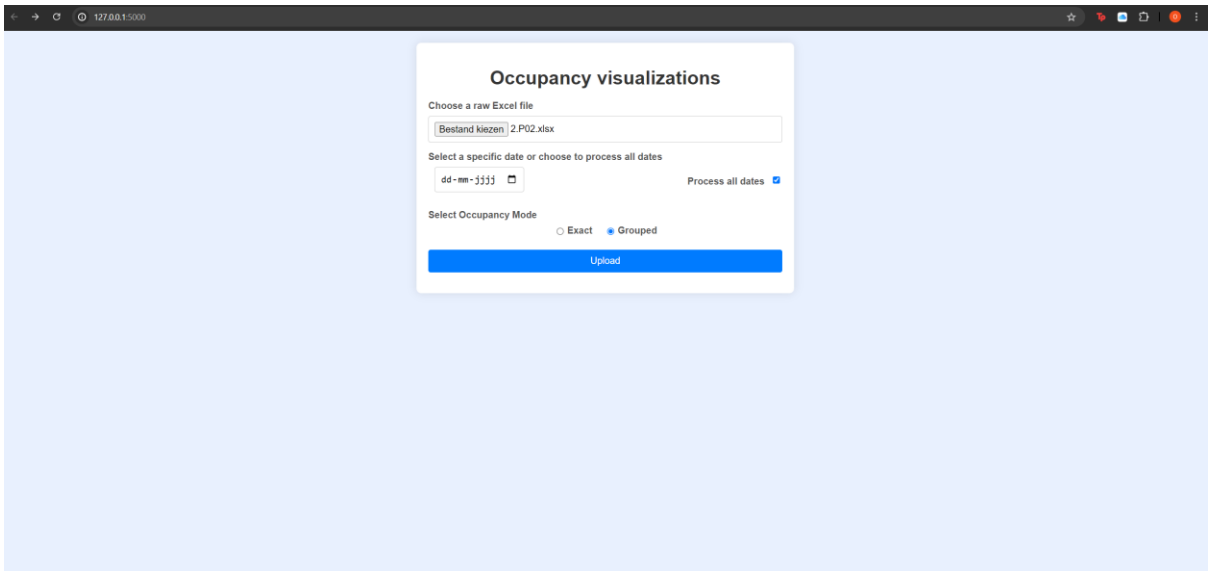
- If there are errors repeat the previous step.

```
C:\Users\olivi\Desktop\Final product>python interface.py
C:\Users\olivi\AppData\Local\Programs\Python\Python311\Lib\site-packages\sklearn\base.py:348: InconsistentVersionWarning
: Trying to unpickle estimator NearestNeighbors from version 1.5.0 when using version 1.3.2. This might lead to breaking
 code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
  warnings.warn(
 * Serving Flask app 'interface'
 * Debug mode: on
INFO:werkzeug:←[31m←[1mWARNING: This is a development server. Do not use it in a production deployment. Use a production
 WSGI server instead.←[0m
 * Running on http://127.0.0.1:5000
INFO:werkzeug:←[33mPress CTRL+C to quit←[0m
INFO:werkzeug: * Restarting with stat
C:\Users\olivi\AppData\Local\Programs\Python\Python311\Lib\site-packages\sklearn\base.py:348: InconsistentVersionWarning
: Trying to unpickle estimator NearestNeighbors from version 1.5.0 when using version 1.3.2. This might lead to breaking
 code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
  warnings.warn(
WARNING:werkzeug: * Debugger is active!
```

- Then type this into your browser: http://127.0.0.1:5000 or if your output says it is running on a different location use that.

Interface.py usage:

- Make sure to choose a non-preprocessed excel file
- You must select either a date or check the process all dates box.
- Then choose between Exact or Grouped mode. Exact mode will predict the exact occupancy and Grouped will divide the predictions between 1-2 and 3+, which will be more accurate.
- WATCH OUT! Sometimes when the file is too big Grouped runs out of memory, we strongly recommend either restarting the app or running it again but then for a specific date. In our tests we found restarting the application fixes the problem.
- Process all dates will take a while to run, depending on your hardware it should take between 5-15 seconds per month of data.
- When the application doesn't seem to work, please run the instruction steps for starting the application again.
- If you select a date that's not within the file, you'll get an error message 'ValueError', please just go back to the main page and select another day

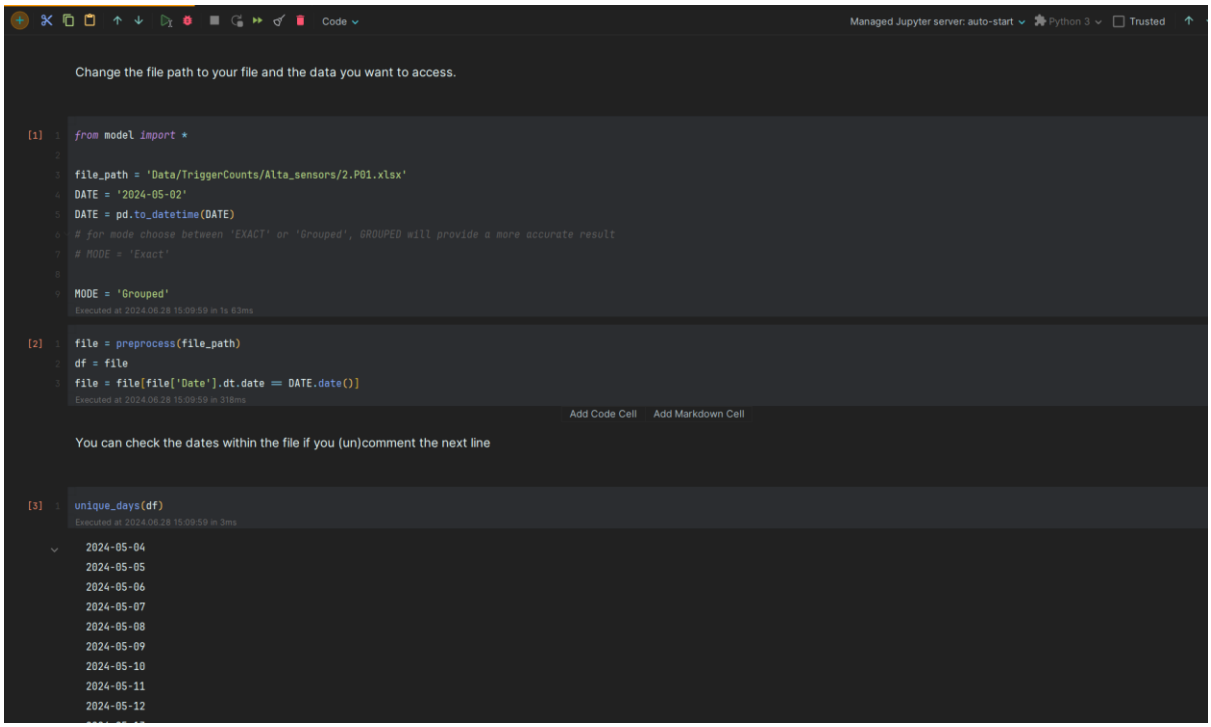


After you ran this you'll have the option to download all the facts within the summary as a CSV file by simply clicking the CSV button.

Interface_notebook.ipynb usage:

When using the notebook please only change the code in the first cell. In the third code cell a function to see all the available dates can be commented out or uncommented depending whether you want to see it.

Please provide a file path and a date you want to process. After that choose between the occupancy estimation modes, simply comment the mode you don't want to use out.



Now just run all the code.

You will encounter an error message, however, this won't affect the code and you can simply ignore it.