

SKOG300 Forest planning exercise:

Technical issues:

The code that we are running is still in development – any suggestions for improvement are warmly welcomed!

We will be using a program that runs python, through a browser interface (jupyter notebook). For the university computer's these following instructions should get things working:

Step 0: If on your personal laptop:

Download anaconda installer: (large 600-700 mb, maybe excessive as all resources not needed)

www.anaconda.com

or Miniconda: (bare bones, only 70 Mb)

<https://docs.conda.io/en/latest/miniconda.html>

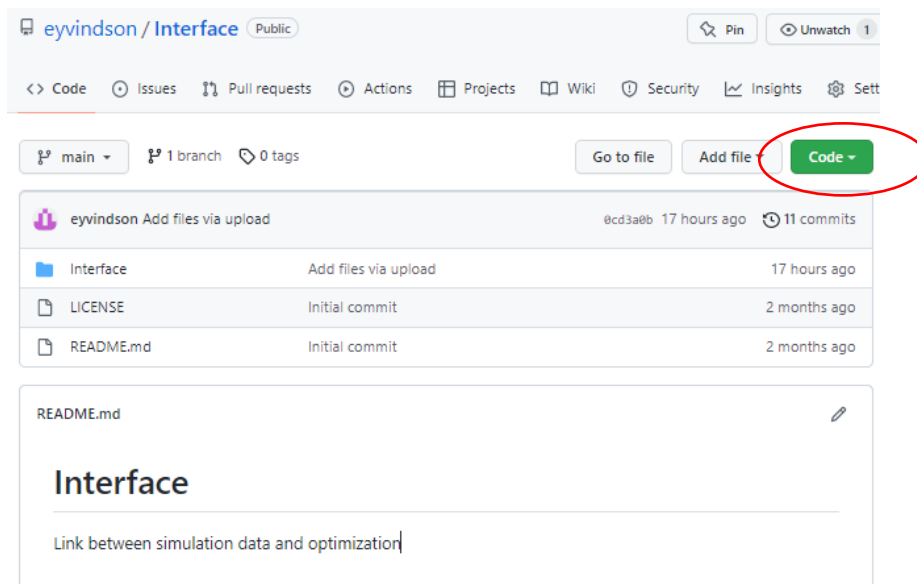
select for your OS type & install.

Once installed – can proceed.

Step 1:

Download the software code from:

<https://github.com/eyvindson/interface>



Press “Code” and download zip, extract to a folder on your machine.

** If you are experienced with git, you can fork it, make changes and suggest those changes are implemented...

Step 2:

Run the “Anaconda prompt (Miniconda 3)” – press the start button, and search for “Anac” and this should pop up.

You'll get something like:



Step 3: We need to install a couple of things:

First head to where you extracted the files: i.e.:

Cd C:\Users\kyey\OneDrive - Norwegian University of Life Sciences\Documents\skog300\Interface-main\Interface

then type:

conda env create -f environment_SKOG300.yml -n SKOG300

This will create a new python environment where different modules and packages are installed (will take some time...)

Then we need to install google ortools: For information:

<https://developers.google.com/optimization>

To do so:

pip install ortools

Step 4: [Following steps are required if restarting – must be in the folder where the python codes are located. i.e.:

Cd C:\Users\kyey\OneDrive - Norwegian University of Life Sciences\Documents\skog300\Interface-main\Interface

Activate the environment:

conda activate SKOG300

Step 5:

Start jupyter notebook by:

Jupyter notebook


*Now a browser should pop up that looks something like:

Select items to perform actions on them.

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<input type="checkbox"/>	..			seconds ago	
<input type="checkbox"/>	DATA			an hour ago	
<input type="checkbox"/>	 Mapping_Exercise.ipynb	Running		an hour ago	28.4 kB
<input type="checkbox"/>	 Optimization_exercise.ipynb			an hour ago	16.5 kB
<input type="checkbox"/>	 Simple_optimization.ipynb			an hour ago	5.55 kB
<input type="checkbox"/>	DATA.zip			an hour ago	3.58 MB
<input type="checkbox"/>	environment2.yml			an hour ago	6.57 kB

--- We will be running the Mapping_Exercise.ipynb and the Simple_optimization.ipynb