

Social Media and Digital Methods Laboratory instructions (Labs 2-6)

View and interact with Jupyter notebooks and learn about text mining techniques.

Prior Knowledge

Lectures.

Software Requirements

The notebooks are available in the course GitHub repository:

<https://github.com/UppsalaIM/2IS060>

Binder is a hosted service that takes care of all the installation for you, and runs the notebooks on the cloud. For running on the cloud using Binder you will need only:

- A Web browser: Google Chrome or Mozilla Firefox.

For running on your computer, you will need to install:

- Python 3.7 or newer
- Jupyter
- The `somialabs` Python package

Full installation instructions can be found in repository documentation (visit the URL given above).

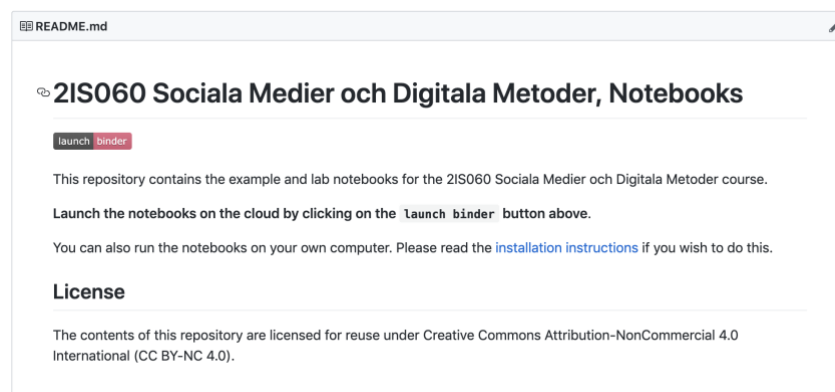
Starting the Labs

The laboratory sessions for this course are run in Jupyter.

Jupyter is an environment that is web based, and allows you to do interactive programming inside a Web browser. Jupyter allows you to view and create computational notebooks, which are like Web pages that contain cells that are static content and cells that are Python code that you can run and view the output in the browser. **You will not need to do any coding in these labs.**

1. Visit the GitHub source code repository for the Labs at <https://github.com/UppsalaIM/2IS060>

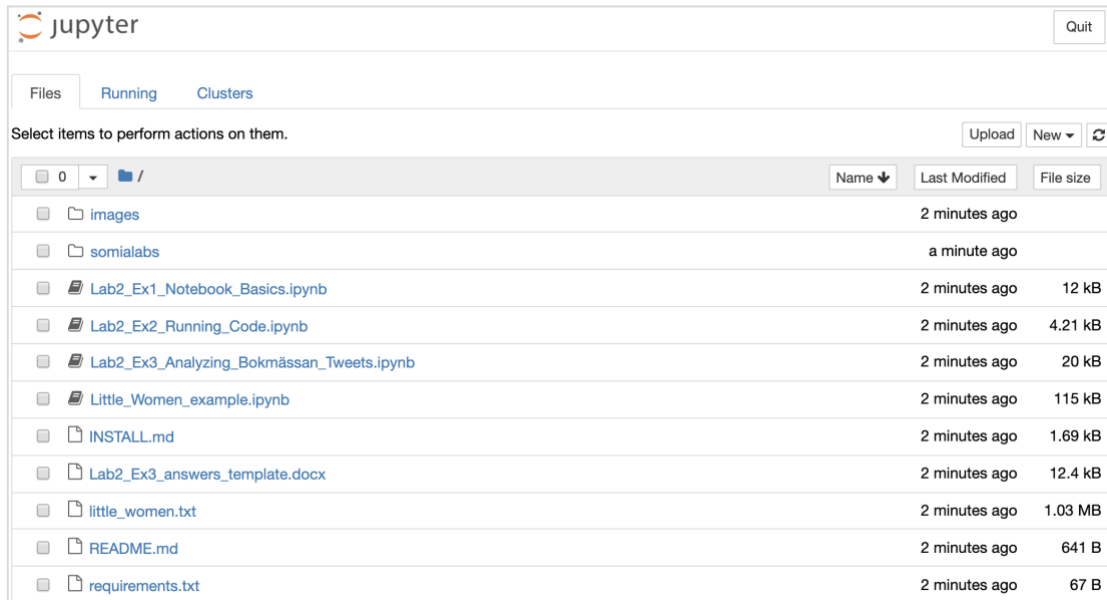
Scroll down and you should see some content that looks like this:



There are two ways to launch the notebooks repository. The simplest way is to use the **launch binder** button. If you installed Jupyter on to your own computer, launch Jupyter from the command-line with the command

```
jupyter notebook
```

or if you are using Anaconda launch Jupyter from the Anaconda Navigator app. Once launched, you should see the repository contents in the Jupyter dashboard like this:



The screenshot shows the Jupyter dashboard interface. At the top, there's a 'jupyter' logo and a 'Quit' button. Below that are tabs for 'Files', 'Running', and 'Clusters'. A message says 'Select items to perform actions on them.' with 'Upload', 'New', and a refresh icon. The main area is a file browser showing a directory structure. The current directory is '/', and it lists several files and folders. Each item has a checkbox, a name, a 'Last Modified' timestamp, and a 'File size'.

	Name	Last Modified	File size
<input type="checkbox"/>	images	2 minutes ago	
<input type="checkbox"/>	somialabs	a minute ago	
<input type="checkbox"/>	Lab2_Ex1_Notebook_Basics.ipynb	2 minutes ago	12 kB
<input type="checkbox"/>	Lab2_Ex2_Running_Code.ipynb	2 minutes ago	4.21 kB
<input type="checkbox"/>	Lab2_Ex3_Analyzing_Bokmässan_Tweets.ipynb	2 minutes ago	20 kB
<input type="checkbox"/>	Little_Women_example.ipynb	2 minutes ago	115 kB
<input type="checkbox"/>	INSTALL.md	2 minutes ago	1.69 kB
<input type="checkbox"/>	Lab2_Ex3_answers_template.docx	2 minutes ago	12.4 kB
<input type="checkbox"/>	little_women.txt	2 minutes ago	1.03 MB
<input type="checkbox"/>	README.md	2 minutes ago	641 B
<input type="checkbox"/>	requirements.txt	2 minutes ago	67 B

To launch a specific notebook, click on any of the **.ipynb** files in the dashboard.

2. Open each lab exercise notebook corresponding to the current session and complete the tasks in each notebook.

e.g. During Lab 2, Open up, read and complete the tasks contained in Lab2_Ex1_Notebook_Basics.ipynb, Lab2_Ex2..., Lab2_Ex3... etc.

The first few exercises (of Lab 2) will help you familiarize yourself with the Jupyter environment. The exercises that follow will aim to help you understand text mining and its application to social media data.

3. When you have completed all the questions in each lab exercises, remember to have a chat with the Lecturer/Teaching Assistant who is supervising your lab session.

Good luck!