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

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

Prior Knowledge
Units 1-6, specifically the units about Data and Text Mining. Chapter 1 from textbook.

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

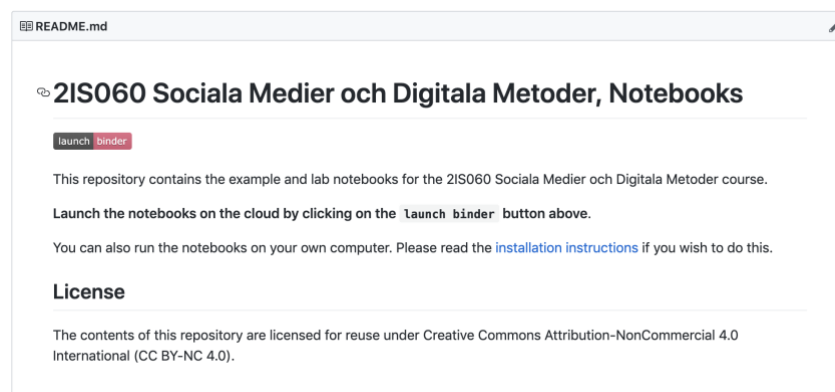Full installation instructions can be found in repository documentation (visit the URL given above).

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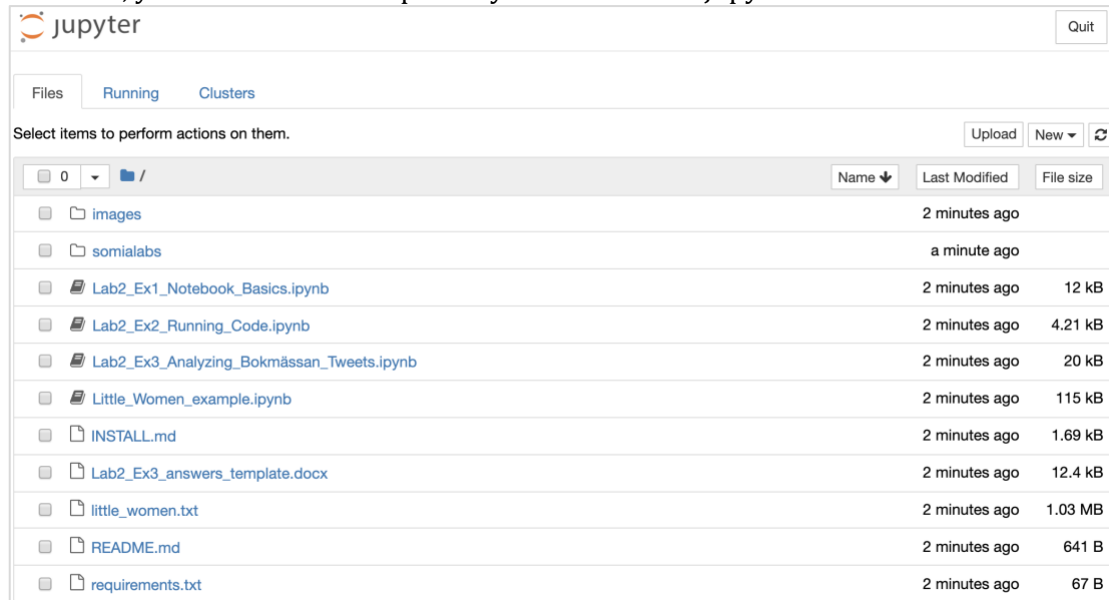   https://github.com/UppsalaIM/2IS060

    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:

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, submit your answers to Studentportalen. Here are the details for each lab:

Lab	About	Textbook ref.	Submission	Deadline
Lab 2	Text preprocessing	Chapter 5	http://www.uu.se/goto/tedd015	2020-05-12 17:00
Lab 3	Classification	Chapter 6	http://www.uu.se/goto/unil944	2020-05-12 17:00
Lab 4	Sentiment analysis	Chapter 14	http://www.uu.se/goto/vtda138	2020-05-12 17:00
Lab 5	Topic modelling	Chapter 15	http://www.uu.se/goto/boxz243	2020-05-12 17:00
Lab 6	Summary	Ch.1,5-6,14-15	http://www.uu.se/goto/moyp959	2020-05-12 17:00

Submit the completed lab **when you have done it**. The *latest deadline* to submit the labs is give in the table above but make sure to submit your answers before the deadline if you want feedback before then.

Good luck!