Human-Computer Interaction: Social Media Laboratory instructions (Text mining)

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/2IV121/textmining

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).
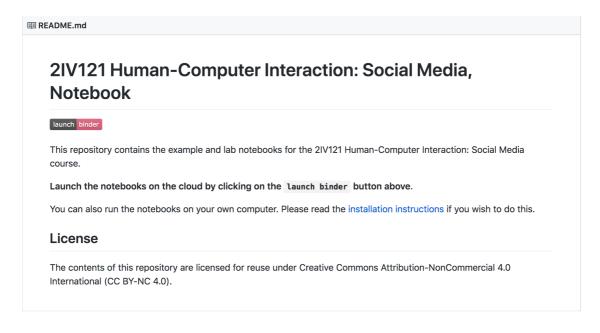
Starting the Labs

The laboratory session for textmining in this course is 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 the lab.**

1. Visit the GitHub source code repository for the Labs at
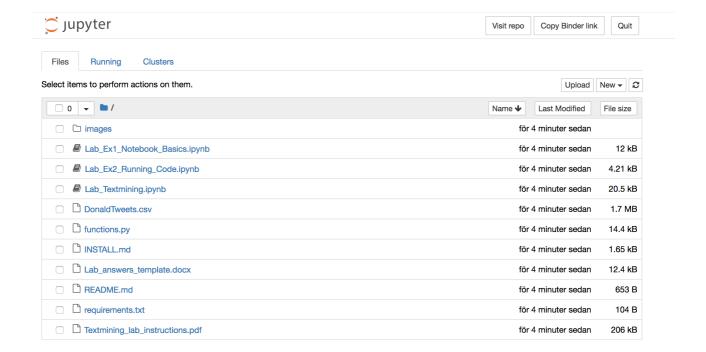
 https://github.com/2IV121/textmining

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

📖 **README.md**

2IV121 Human-Computer Interaction: Social Media, Notebook

`launch` `binder`

This repository contains the example and lab notebooks for the 2IV121 Human-Computer Interaction: Social Media course.

Launch the notebooks on the cloud by clicking on the `launch binder` button above.

You can also run the notebooks on your own computer. Please read the installation instructions if you wish to do this.

License

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:

◯ Jupyter   Visit repo Copy Binder link Quit

| Files | Running | Clusters |

Select items to perform actions on them.   Upload New ▾ ⟳

☐ 0 ▾ 📁 /	Name ↓	Last Modified	File size
☐ 📁 images		för 4 minuter sedan	
☐ 📕 Lab_Ex1_Notebook_Basics.ipynb		för 4 minuter sedan	12 kB
☐ 📕 Lab_Ex2_Running_Code.ipynb		för 4 minuter sedan	4.21 kB
☐ 📕 Lab_Textmining.ipynb		för 4 minuter sedan	20.5 kB
☐ 📄 DonaldTweets.csv		för 4 minuter sedan	1.7 MB
☐ 📄 functions.py		för 4 minuter sedan	14.4 kB
☐ 📄 INSTALL.md		för 4 minuter sedan	1.65 kB
☐ 📄 Lab_answers_template.docx		för 4 minuter sedan	12.4 kB
☐ 📄 README.md		för 4 minuter sedan	653 B
☐ 📄 requirements.txt		för 4 minuter sedan	104 B
☐ 📄 Textmining_lab_instructions.pdf		för 4 minuter sedan	206 kB

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

2. Open lab exercise notebook `Lab_Textmining.ipynb` which corresponds to the current session and complete the tasks in it. The first few notebooks (`Lab_Ex1`and `Lab_Ex2`) 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!