

# Human-Computer Interaction: Social Media, design and communication

## 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/2IV176/textmining\\_jupyter.git](https://github.com/2IV176/textmining_jupyter.git)

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

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

#### Starting the Labs

The laboratory sessions 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/2IV176/textmining\\_jupyter.git](https://github.com/2IV176/textmining_jupyter.git)

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

README.md

# 2IV176 Human-Computer Interaction: Social Media, design and communication, Notebook



This repository contains the example and lab notebooks for the 2IV176 Human-Computer Interaction: Social Media, design and communication 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

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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 header with the Jupyter logo and several buttons: "Join this repo's Video Chat", "Visit repo", "Copy Binder link", and "Quit". Below the header, there are tabs for "Files", "Running", and "Clusters". The "Files" tab is active, showing a list of files and folders. The list has columns for "Name", "Last Modified", and "File size". The files listed include folders like "images" and various notebook files like "Lab1\_Analyzing\_Trump\_Tweets.ipynb", "Lab1\_Ex1\_Notebook\_Basics.ipynb", "Lab1\_Ex2\_Running\_Code.ipynb", "Lab2\_Sentiment\_Analysis.ipynb", "DonaldTweets.csv", "INSTALL.md", "Lab1\_answers\_template.docx", "lab1\_functions.py", "Lab2\_answers\_template.docx", "lab2\_functions.py", "neg\_tweets.txt", "pos\_tweets.txt", "README.md", "requirements.txt", and "Textmining\_lab\_instructions.pdf".

Name	Last Modified	File size
images	för 4 minuter sedan	
Lab1_Analyzing_Trump_Tweets.ipynb	för 4 minuter sedan	20.5 kB
Lab1_Ex1_Notebook_Basics.ipynb	för 4 minuter sedan	12 kB
Lab1_Ex2_Running_Code.ipynb	för 4 minuter sedan	4.21 kB
Lab2_Sentiment_Analysis.ipynb	för 4 minuter sedan	9.87 kB
DonaldTweets.csv	för 4 minuter sedan	1.7 MB
INSTALL.md	för 4 minuter sedan	1.65 kB
Lab1_answers_template.docx	för 4 minuter sedan	12.4 kB
lab1_functions.py	för 4 minuter sedan	14.4 kB
Lab2_answers_template.docx	för 4 minuter sedan	12.4 kB
lab2_functions.py	för 4 minuter sedan	6.54 kB
neg_tweets.txt	för 4 minuter sedan	111 kB
pos_tweets.txt	för 4 minuter sedan	50.5 kB
README.md	för 4 minuter sedan	721 B
requirements.txt	för 4 minuter sedan	104 B
Textmining_lab_instructions.pdf	för 4 minuter sedan	322 kB

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 1, Open up, read and complete the tasks contained

`Lab1_Ex1_Notebook_Basics.ipynb`, `Lab1_Ex2...`, `Lab1_Analyzing...` etc.

The first few exercises (of Lab 1) 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 submit your answers on Studentportalen.

**Good luck!**