

## Practical exercises I

**Due on:** Tuesday, December 21, 2021

This assignment consists of two tasks, a basic NLP exercise using *python* and the *spaCy* library and a basic front end exercise to become familiar with *Vue.js*

### 1. NLP exercise

In this exercise you will practice using an out-of-the-box NLP tool on two typical NLP tasks: part-of-speech(POS)-tagging and named entity recognition (NER). You are going to use the [spaCy library](#).

If you have not worked with spaCy before, here are the official guides on [installation](#), [models & languages](#) and [linguistic features](#) that will help you with this task.

Your task is, to write a script, using spaCy's *en\_core\_web\_sm*-pipeline, that reads the text from *example.txt* and outputs:

1. A tab-separated file, containing one token per line, with two columns: (1) the token's text and (2) the token's POS tag; sentences should be separated by a blank line.
2. Another tab-separated file containing all the named entities that were found in the input file; one entity per line, with the columns as follows: (1) the entity text, (2) the entity's start index, (3) end index and (4) label.
3. **[Optional]:** Extend your script to have the POS tag file also include start and end indices for each token, as well as named entity labels for the tokens if applicable. (Hint: The relevant information is available in spaCy, check the [linguistic features](#) guide on how to access it.)

Please submit the output files and your code, either as a zip archive on moodle or just provide a link to a github repo.

## 2. Vue.js exercise

In this exercise you will set up a minimal project using Vue and implement a simple to-do-list web application.

If you have not used Vue before, please watch the introduction videos on moodle and inspect the example code. Use the techniques you have seen so far to create an editable to-do-list. It should display an unordered list of to-do-items (as strings) and the user should be able to create and delete items. Initially, the list should already contain the items *"Finish the assignment"* and *"Remember to submit the assignment"*.

**[Optional]:** Extend your to-do-list to allow editing the item strings and add an editable priority score to the items, that is used to sort the list, with the highest priority item displayed on top.

As with the NLP exercise, please submit your code, either as a zip archive on moodle or just provide a link to a github repo.