TP0 – NLP Environment Setup with Anaconda

Dr. BENDIABDALLAH Mohammed Hakim
University of Ain Temouchent, Computer Science Department

January 26, 2026

Objective

The objective of this TP0 is to prepare a clean and functional Python environment for the **Natural Language Processing (NLP)** module. All future practical sessions (TP1 to TP4) will rely on this environment.

Required File

Make sure you have the following file in your working directory:

- `nlp_course_env.yml`

This file contains all the Python libraries required for the NLP course.

1 Creating the NLP Environment from YAML

To create the Conda environment using the provided YAML file, execute:

```
conda env create -f nlp_course_env.yml
```

This command automatically creates an environment named `nlp_course` with all required dependencies.

2 Activating the Environment

Once the environment is created, activate it using:

```
conda activate nlp_course
```

Your terminal prompt should now display (`nlp_course`).

3 Installing NLTK Resources (Mandatory)

Some NLP tasks require additional linguistic resources. Run the following commands in Python or Jupyter Notebook:

```python
import nltk
nltk.download('punkt')
nltk.download('wordnet')
nltk.download('averaged_perceptron_tagger')
```

4 Installing and Launching Jupyter Notebook

Installation

If Jupyter Notebook is not installed, run:

```
conda install jupyter notebook
```

Launching Jupyter

To start Jupyter Notebook:

```
jupyter notebook
```

Your default web browser will open automatically.

5 Managing Environments (Useful Commands)

List existing environments

```
conda env list
```

Deactivate the environment

```
conda deactivate
```

Conclusion

This TP0 ensures that all students work with the same Python environment throughout the NLP module. A correct setup at this stage is essential to avoid technical issues in future practical sessions.