

## 36118: Applied Natural Language Processing (ANLP)

### Detailed assessment brief for Assessment 2: End-to-end NLP project

For the second assessment task, students will work in groups to complete an end-to-end NLP project that applies machine learning or deep learning. Groups should be formed with 2-4 students (minimum 2, maximum 4 members) and can be self-selected. To finalise your group for AT2, all group member names should be added on to your selected Canvas group – accessed through the people tab (Instructions shared in ppt).

Students should work on all components of a NLP pipeline below. The end-to-end NLP pipeline starting from data acquisition to model evaluation can be derived for a problem of their choice. Students may choose to collect your own data (through web scraping etc.), or make use of existing data sets.

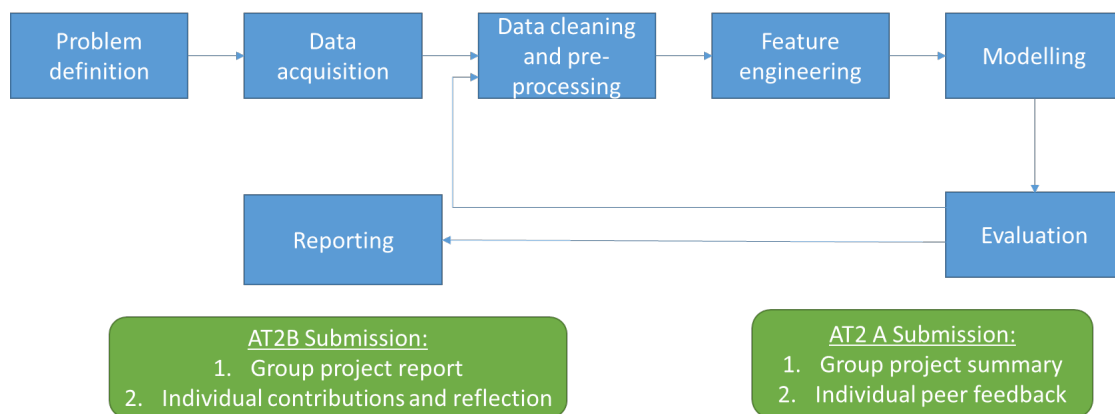


Figure: NLP pipeline steps required for Assignment 2 (with deliverables)

The assignment involves two parts, with submissions required on separate due dates (interim and final).

### AT2 Part A: Project summary for peer feedback

**Type:** Group assessment  
**Length:** 1-page ppt (template provided)  
**Weight:** 10%  
**Due:** Wednesday 19 April, 23:59 on Canvas

#### Task

For this assignment, student *teams* must submit a 1-page project summary based on their work done on the project so far (an interim report). It should include details of the project aims, data sources, ML/ DL techniques, expected outcomes and insights, project progress and team member

roles in the provided template in ppt format. Guiding questions are available on the ppt template. This project summary for AT2A is a group submission that can be submitted by *any one* representative for the team. This submission will not be marked by the teaching team for content, but will be sent out for peer feedback through Canvas for comment from other students. As part of this assignment, students should also provide comments on two other submissions individually.

### **Deliverables for AT2A:**

**1. Project summary (Group submission)** - To be submitted for peer feedback in provided 1-page ppt template

**2. Peer feedback (Individual)** -All students should review two other submissions in the coming week and provide feedback based on the questions below:

1. Summarize the main idea of the project in your own words and explain if the suggested approaches and outcomes seem justified to solve the problem (100- 150 words).

2. How would you grade the novelty of the project in terms of the data, models or problem? (Select one option from below)

Highly innovative/ Neutral/ Not innovative

3. Provide suggestions and feedback to improve the project outcomes or the writing

### **Assessment criteria for AT2A:**

The assignment will be marked according to the following criteria:

| Criteria  | Weight (%) | SLOs    | CILOs         |
|---|------------|---------|---------------|
| Timely submission of project summary in provided template               | 50         | 2, 3, 4 | 2.4, 3.2, 4.2 |
| Provision of timely and effective peer feedback to assigned submissions | 50         | 4, 5    | 2.3, 5.1      |

To get full marks for this assignment, students should ensure that they submit the Project summary on time on Canvas (no extensions can be provided), and provide feedback on two other submissions in the suggested format.

## AT2 Part B: Group project report, plus individual contribution and reflection

|                |  |
|----------------|--|
| <b>Type:</b>   | Group, Individual assessment   |
| <b>Length:</b> | Consolidated Project report (10-15 pages) + individual reporting of contributions and reflection (1-2 pages) |
| <b>Weight:</b> | 40%  |
| <b>Due:</b>    | Wednesday 10 May, 23:59 on Canvas  |

### Task

For the second part of the assignment, all students in the group are required to submit a consolidated project report (including data, code, outputs from the group project), and individual reporting of their contributions and reflections on the project.

Student teams will submit a detailed report on the project's aims, significance and novelty, technical approaches used, outcomes derived and how it addresses the problem statement identified earlier. It should include the work done in all phases of the NLP pipeline starting from data acquisition to delivering the end outcomes. Group members should make sure that everyone contributes to the report equally. The report should include the elements below, as appropriate:

- Project objectives and scope
- Data description
- NLP methods and techniques (including models, justification for usage, trials conducted, and ethical implications)
- Findings – insights from the data, model and evaluation
- Project delivery outcomes and value added
- Challenges faced and solutions
- Limitations and future steps
- Project progress timeline with milestones achieved
- References
- Appendix (for data sets, code, visualizations, and additional material requiring an extended number of pages)

In the second part of the submission, each individual student should further provide a breakdown of their contributions to the project with appropriate evidence where necessary (E.g. GitHub commits, teams chat, link to a section of the report, feedback from peers, etc.). They should also reflect on the process of working on the project with other team members. A good reflection should go beyond simply noting what happened and tracking progress. It should include deliberate thinking back on what happened, how you performed, and what you would do differently by identifying concrete action items for future improvements.

This AT2B report should be submitted by all members of the team on Canvas. Make sure that the same version is uploaded by everyone for the group project report, plus your additional individual contributions and reflection as the second part of the same document (at the end).

## Assessment criteria for AT1B:

In this task you will be assessed according to the following criteria:

| Criteria  | Weight (%) | SLOs | CILOs         |
|---|------------|------|---------------|
| Synthesis of rationale, NLP approaches used and outcomes for the project  | 30         | 1, 3 | 2.2, 2.4      |
| Communication of an engaging narrative with insights, value added, and ethical considerations using appropriate language and visuals  | 30         | 4, 5 | 3.2, 4.2, 5.2 |
| Demonstration of creative and innovative thinking in the choice of data, techniques and problem statement for real-world applications | 20         | 2, 4 | 2.4, 3.2      |
| Demonstration of critical thinking, teamwork, and deep reflection, with appropriate evidence for contributions made to the project    | 20         | 2, 5 | 2.3, 5.1      |