# **Dublin Business School Assessment Brief**

#### **Assessment Details**

| Unit Title           | NLP                         |  |
|----------------------|-----------------------------|--|
| Unit Code            | B9AI109                     |  |
| Unit Leader          | Terri Hoare                 |  |
| Level:               | 9                           |  |
| Assessment Title     | CA01 (1 of 2)               |  |
| Assessment Number    | 1                           |  |
| Assessment Type:     | Individual                  |  |
| Assessment Weighting | 50%                         |  |
| Issue Date:          | 18 May 2022                 |  |
| Hand in Date:        | Sunday 26 June 2022 (23:55) |  |
| Mode of Submission:  | On-line Moodle              |  |

Assessment Task [100 Marks]

# **Exercise 1 (Individual)**

Select and read a recent journal paper on a topic in NLP and give a short presentation on it (10 Minutes) during the Friday class session in week 4 (8 June).

There are two main purposes in doing this assignment:

- (i) to develop further your ability to critically read a technical topic and summarise your view of it.
- (ii) to build on your awareness of state of the art in NLP research and
- (iii) to develop your presentation skills in conveying the main points of the topic to the rest of the class.

The selected research paper should be presented with an eye to how well it addresses the following seven aspects:

# Context

(topic, motivation; arising from literature review)

where is this paper coming from (what is the research topic)?

- what are the main issues/themes in this topic?
- what prior academic work is relevant to this research topic and have the authors adequately referenced it?
- where is the envelope or boundary between what is known and what is not known in this area?

# Gap

(point of departure, "what next?")

- does the paper identify a hole in the context/literature which it attempts to fill?
- does the paper extend the envelope to cover something previously unknown?

### **Question**

(research aim)

- states the problem / question that this paper attempts to solve / answer.
- have the authors rephrased the themes as questions to which an answer can be found (with reasonable certainty) using their chosen research instrument?

# How did they do the work?

(method(ology), research approach)

- what process did they use to solve the problem, that is, what was the academically valid way that they got from question to answer? Is the work technically sound?
- was it mathematical, empirical (survey or experimental) or some other method?
- if experimental, did they explain how the experimental design tests the research hypotheses, and is the work reproducible (enough detail is given so someone else could carry out the same work)

### What did they find?

(results)

• presents the "data"/argumentation the authors collected/created.

### What is the answer?

(analysis, discussion)

- what answer is suggested by the "data"?
- what is their meaning, in both academic and practical contexts?
- can they be sure: how do they validate their results; how would another person (reviewer/examiner) arrive at an objective assessment of this work?
- have they established or reinforced any principles, or can they make any generalisations?
- do the data allow them to give underlying causes? Or can they only observe statistical regularities (correlation)?
- does the paper achieve its stated objective (e.g., does it answer the research question)?

# **Significance**

("so what?", conclusion, value add)

- why is it this paper important: what does it contribute?
- how is the contribution original or innovative?
- what value does the answer have for business, academics?
- since the paper was published, what has been its impact on academia and/or practice? (Number of citations, quality of journal, etc., may be useful here.) This is less relevant to very recent papers.

# Exercise 2 (Individual)

Write a short (2 page) critique of the paper selected in Exercise 1 with a cover page containing title and hand-up date of assignment; full name and student number. The critique should be at most two pages of text containing your assessment and conclusion, no smaller than 10-point font. The cover page does not count towards the page limit. This deliverable may be in Word, Openoffice.org or pdf format.

(20)

# Exercise 3 (Individual)

Using the Bog Gender dataset provided to build a BLOG Gender Classifier. You may use any tool of your choice, for example, RapidMiner; Databricks Spark; Python; R or similar.

The CRISP-DM methodology should be applied on the data and the results presented in a written report under the six headings of the CRISP-DM Methodology.

# **Business Understanding**

Explore the domain use case.

# **Data Understanding**

Explore the dataset.

### **Data Preparation**

Apply appropriate Feature Extraction to prepare the data for modelling.

# Modelling

Apply appropriate Algorithm(s) to build a BLOG Gender Classifier.

### **Evaluation**

Interpret the performance of the Classifier in the context of your domain problem.

### **Deployment**

Explore how the insights could be deployed (operationalised) in an AI context.

**(70)** 

The grade assessment will be based on the DBS CA grading scheme which has been included at the end of this document. Your submissions should be submitted in a zipped folder to Moodle. Cite all references using Harvard Referencing.

# **DBS Grade Assessment Policy (B9AI109)**

| Module             | Mark   | Criteria  | Determinator                   |
|--------------------|--------|---|--------------------------------|
| Descriptor         | Band   |   | within grade band              |
| A<br>(Outstanding) | 80-100 | Displays a thorough and systematic                              | Originality and                |
| (Outstanding)      |        | knowledge of module content through                             | depth of insight and analysis. |
|                    |        | choice of scenario, solution and handover                       | analysis.                      |
|                    |        | process and documentation.                                      |                                |
|                    |        | <ul> <li>Clear grasp of the issues involved, with</li> </ul>    |                                |
|                    |        | evidence of innovative and original use of                      |                                |
|                    |        | learning resources.   |                                |
|                    |        | <ul> <li>Knowledge beyond module content.</li> </ul>            |                                |
|                    |        | <ul> <li>Clear evidence of independence of thought</li> </ul>   |                                |
|                    |        | and originality   |                                |
|                    |        | <ul> <li>Methodological rigour</li> </ul>                       |                                |
|                    |        | <ul> <li>High critical judgement and confident grasp</li> </ul> |                                |
|                    |        | of complex issues   |                                |
| A (Clear)          | 70-79  | Methodological rigour   | Methodological                 |
|                    |        | <ul> <li>Originality</li> </ul>                                 | rigour, insight                |
|                    |        | Critical judgement  |                                |
|                    |        | <ul> <li>Use of additional learning resources</li> </ul>        |                                |
| В                  | 60-69  | Very good knowledge and understanding of                        | Extent of use of               |
|                    |        | the module content.   | additional or non-             |
|                    |        | <ul> <li>Well-argued answer</li> </ul>                          | core learning                  |
|                    |        | <ul> <li>Some evidence of originality and critical</li> </ul>   | resources                      |
|                    |        | judgement   |                                |
|                    |        | <ul> <li>Sound methodology</li> </ul>                           |                                |
|                    |        | <ul> <li>Critical judgement and some grasp of</li> </ul>        |                                |
|                    |        | complex issues.   |                                |
| С                  | 50-59  | Good knowledge and understanding of the                         | Displaying an                  |
|                    |        | module content.   | understanding of               |
|                    |        | <ul> <li>Reasonably well-argued answer</li> </ul>               | the main issues,               |
|                    |        | <ul> <li>Largely descriptive or narrative in focus</li> </ul>   | sound approach                 |
|                    |        | <ul> <li>Methodological application is not</li> </ul>           |                                |
|                    |        | consistent or thorough  |                                |
| D                  | 40-49  | Lacking methodological application                              | Requirements met.              |
|                    |        | <ul> <li>Adequately argued</li> </ul>                           |                                |
|                    |        | <ul> <li>Basic understanding and knowledge</li> </ul>           |                                |
|                    |        | <ul> <li>Gaps or inaccuracies but not damaging</li> </ul>       |                                |
| E (Fail)           | 0-39   |   | Weakness of                    |
|                    |        |   | approach                       |

### **General Requirements for Students:**

#### PLEASE READ CAREFULLY

- 1. It is your responsibility to ensure your file is uploaded correctly.
- 2. Students are required to retain a copy of each assignment.
- 3. When an assignment is submitted, it is the student's responsibility to ensure that the file is in the correct format and opens correctly.
- 4. Students should refer to the assessment regulations in their Course Guide.
- 5. DBS penalises students who engage in academic impropriety (i.e. plagiarism,
- 6. Collusion and / or copying). Please refer to the referencing guidelines on Moodle for information on correct referencing.
- 7. All relevant provisions of the Assessment Regulations must be complied with.
- 8. Penalties for late submission of assignments are as follows:
  - a. 25% penalty for assignments submitted within 5 working days of the deadline.
  - b. No marks for assignments submitted more than 5 working days after the deadline.
- 9. Extensions to assignment submission deadlines will be granted in exceptional circumstances only. The appropriate "Application for Extension" form must be used and supporting documentation (e.g. medical certificate) must be attached. Applications for extensions should be made directly to the Head of Year or Programme Leader in advance of the deadline date.