Assessment (non-exam) Brief

UCL
SCHOOL OF MANAGEMENT

Module code/name	MSIN0231 Machine Learning for Business
Module leader name	Bart Vanneste
Academic year	2025/26
Term	2
Assessment title	Individual assignment
Individual/group assessment	Individual assignment

Submission deadlines: Students should submit all work by the published deadline date and time. Students experiencing sudden or unexpected events beyond your control which impact your ability to complete assessed work by the set deadlines may request mitigation via the extenuating circumstances procedure. Students with disabilities or ongoing, long-term conditions should explore reasonable academic adjustments. Students may use the delayed assessment scheme for pre-determined mitigation on a limited number of assessments in a year. Check the Delayed Assessment Scheme area on Portico to see if this assessment is eligible.

Return and status of marked assessments: Students should expect to receive feedback within 20 working days of their submission deadline, as per UCL guidelines. The module team will update you if there are delays through unforeseen circumstances (e.g. ill health). All results when first published are provisional until confirmed by the Examination Board.

Academic Misconduct: Academic Misconduct is defined as any action or attempted action that may result in a student obtaining an unfair academic advantage. **Academic misconduct includes plagiarism, self-plagiarism, obtaining help from/sharing work with others be they individuals and/or organisations or any other form of cheating that may result in a student obtaining an unfair academic advantage.** Refer to Academic Manual Chapter 6, Section 9: Student Academic Misconduct Procedure - 9.2 Definitions.

Referencing: You must reference and provide full citation for ALL sources used, including articles, text books, lecture slides and module materials. This includes any direct quotes and paraphrased text. If in doubt, reference it. If you need further guidance on referencing please see UCL's referencing guide for students. Failure to cite references correctly may result in your work being referred to the Academic Misconduct Panel. For guidance on how to acknowledge the use of Artificial Intelligence (AI) please see next section.

Use of Artificial Intelligence (AI) Tools in your Assessment: Your module leader will explain to you if and how AI tools can be used to support your assessment. In some assessments, the use of generative AI is **not permitted** at all. In others, AI may be used in an **assistive** role which means students are permitted to use AI tools to support the development of specific skills required for the assessment as specified by the module leader. In others, the use of AI tools may be an **integral** component of the assessment; in these cases the assessment will provide an opportunity to demonstrate effective and responsible use of AI. See page 3 of this brief to check which category use of AI falls into for this assessment. Students should refer to the UCL guidance on acknowledging use of AI and referencing AI. Failure to correctly acknowledge the use of AI in assessments may result in students being reported via the Academic Misconduct procedure. Refer to the section of the UCL Assessment success guide on Engaging with AI in your education and assessment.

Content of this assessment brief

Section	Content
A	Core information
B	Coursework brief and requirements
C	Additional information
D	Module learning outcomes covered in this assessment
E	Groupwork instructions (if applicable)
F	How your work is assessed

Section A: Core information

Submission date	27/02/2026
Submission time	10am
Assessment is marked out of:	100
% weighting of this assessment within total module mark	40
Maximum word count/page length/duration	500 words (you may use fewer if you wish)
Footnotes, appendices, tables, figures, diagrams, charts included in/excluded from word count/page length?	Everything included, except appendices and code.
Bibliographies, reference lists included in/excluded from word count/page length?	Everything included, except appendices and code.
Penalty for exceeding maximum word count/number of pages specified above	Penalty for exceeding specified word count/number of pages will be a deduction of 10 percentage points, capped at 40% for Levels 4, 5, 6 and 50% for Level 7). Refer to Academic Manual: Module Assessment – Word Counts.
Penalty for late submission	Standard UCL penalties will apply. Students should refer to Academic Manual: Module Assessment – Deadlines and Late Assessment.
Artificial Intelligence (AI) category	Integral
Submitting your assessment	Submit on Moodle
Anonymity of identity. Normally, all submissions are anonymous unless the nature of the submission is such that anonymity is not appropriate, illustratively as in presentations or where minutes of group meetings are required as part of a group work submission	Anonymity is required
Feedback release date (Students with extended deadlines may receive feedback later; multiple extensions may delay feedback to the cohort; ill health in the marking team may delay feedback; students will be alerted to any delays.)	Twenty working days following submission deadline.

Section B: Assessment Brief and Requirements

Goal

The goal is to build a market research assistant that provides a report on an industry chosen by the user. The report should be based on Wikipedia data that the assistant retrieves. The intended user is a business analyst who conducts market research at a large corporation.

Questions

[0] Q0. In the pdf, state the LLM that the streamlit app uses. In the streamlit app, include a sidebar with (a) a dropdown for selecting the LLM and (b) a text field for entering our API key. The final version should have only one LLM in the dropdown, though you may use multiple during development. Keep in mind that different LLMs can behave somewhat differently for the same prompt. Furthermore, this is not an exercise in picking the strongest LLM. Lighter and/or free models are perfectly fine (e.g., Gemini Flash, OpenAI Mini, Llama).

[25] Q1. In step 1, the user provides an industry. The assistant should check that an industry is indeed provided. If not, then the assistant should ask the user for an update. If yes, then proceed to the next step.

[25] Q2. In step 2, the assistant should return the urls of the five most relevant Wikipedia pages.

[25] Q3. In step 3, the assistant should return an industry report that is:

- Less than 500 words
- Based on the the five most relevant Wikipedia pages

[10] Q4. What approach did you take for testing the assistant's performance? Respond with less than 150 words.

[10] Q5. What steps did you take to improve the assistant's performance? You may list successful and unsuccessful steps. Respond with less than 150 words.

[5] Q6. If you were to implement your system at a large corporation, what would you change? Respond with less than 150 words.

Hints

- You can use the WikipediaRetriever (https://python.langchain.com/docs/integrations/retrievers/wikipedia/).
- When building the code, use a cheap LLM. When checking the performance of the system, you can use a more capable LLM.
- When building the code, KISS (keep it simple, stupid). Break down the task into subtasks. Build a working version for a subtask, then move on to the next subtask. Get a working version of the entire task. Then add refinements and extensions, as needed.

Streamlit

The assistant must be coded in Streamlit. This is an open-source Python framework for rapidly building interactive apps. It lets you create a simple UI directly from Python scripts, making it easy to wrap a retrieval + LLM pipeline in a browser-based interface with minimal front-end code.

Deliverables

A single zip file that contains:

1. A zip file with all code. We should be able to run the code as is. You may omit your API key (we can use our own).
2. A pdf with
    a. A url to a private, online version of the assistant. The assistant must be fully functional for us to assess Q1-Q3. One possibility is to host the app on streamlit.io. A free account

includes one privately hosted app, which you can share with us via sharewithucl@gmx.com

b. Answers to Q4-Q6. Follow the same order as above. Include the question numbers so we know where each answer begins (and can award points for your responses).

We are unable to accept other file formats.

Marking

Marking is out of 100. Each question will be assessed using this rubric:

0-1	Demonstrates little knowledge of the field. Demonstrates significant weaknesses in the knowledge base, and/or simply reproduces knowledge without evidence of understanding. Shows little or no critical ability. Poor, inconsistent analysis.
2	Demonstrates knowledge of the field and awareness of current evidence and issues, but with some notable weaknesses. Lacks knowledge and understanding of some key areas. Offers some appropriate analysis, but with some significant inconsistencies which affect the soundness of argument and/or conclusions. Demonstrates very limited critical ability.
3	Demonstrates a sound knowledge and understanding of material within a specialised field. Demonstrates an understanding of current theoretical and methodological approaches and how these affect the way the knowledge base is interpreted. Provides evidence of relevant and sound analysis within the specialised area, with some critical evaluation. Is able to analyse complex issues and make appropriate judgements.
4	Produces work with a well defined focus. Demonstrates a systematic knowledge, understanding and critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of the academic discipline, field of study or area of professional practice. Is able to evaluate methodologies critically and, where appropriate, to propose new hypotheses. Is able to deal with complex issues both systematically and creatively, making sound judgements in the absence of complete data.
5	Produces work of exceptional standard, reflecting excellent understanding. Displays mastery of a complex and specialised area of knowledge and skills, with notable critical awareness of current problems and/or new insights at forefront of field. Shows excellent ability to evaluate methodologies critically and, where appropriate, to propose new hypotheses. Deals with complex issues systematically and creatively, making excellent judgements.

Section C: Additional information from module leader

Happy learning!

(as appropriate)

Section D: Module Learning Outcomes covered in this Assessment

This assessment contributes towards the achievement of the following stated module Learning Outcomes as highlighted below:

Understand key concepts in AI

Evaluate the benefits and pitfalls of applying AI in businesses

Section E: Groupwork Instructions (where relevant/appropriate)

NA.

Section F: How your work is assessed

Within each section of this assessment you may be assessed on the following aspects, as applicable and appropriate to this assessment, and should thus consider these aspects when fulfilling the requirements of each section:

- The accuracy of any calculations required.
- The strengths and quality of your overall analysis and evaluation;
- Appropriate use of relevant theoretical models, concepts and frameworks;
- The rationale and evidence that you provide in support of your arguments;
- The credibility and viability of the evidenced conclusions/recommendations/plans of action you put forward;
- Structure and coherence of your considerations and reports;
- Appropriate and relevant use of, as and where relevant and appropriate, real world examples, academic materials and referenced sources. Any references should use either the Harvard OR Vancouver referencing system (see References, Citations and Avoiding Plagiarism)
- Academic judgement regarding the blend of scope, thrust and communication of ideas, contentions, evidence, knowledge, arguments, conclusions.
- Each assessment requirement(s) has allocated marks/weightings.

Student submissions are reviewed/scrutinised by an internal assessor and are available to an External Examiner for further review/scrutiny before consideration by the relevant Examination Board.

It is not uncommon for some students to feel that their submissions deserve higher marks (irrespective of whether they actually deserve higher marks). To help you assess the relative strengths and weaknesses of your submission please refer to SOM Assessment Criteria Guidelines. This information is also located on the Assessment tab of the SOM Student Information Centre Moodle site (Moodle log in required).
The above is an important link as it specifies the criteria for attaining the pass/fail bandings shown below:
At UG Levels 4, 5 and 6:
80% to 100%: Outstanding Pass - 1st; 70% to 79%: Excellent Pass - 1st; 60%-69%: Very Good Pass - 2.1; 50% to 59%: Good Pass - 2.2; 40% to 49%: Satisfactory Pass - 3rd; 20% to 39%: Insufficient to Pass - Fail; 0% to 19%: Poor and Insufficient to Pass - Fail.
At PG Level 7:
86% to 100%: Outstanding Pass - Distinction; 70% to 85%: Excellent Pass - Distinction; 60%-69%: Good Pass - Merit; 50% to 59%: Satisfactory - Pass; 40% to 49%: Insufficient to Pass - Fail; 0% to 39%: Poor and Insufficient to Pass - Fail.

You are strongly advised to review these criteria **before you start your work** and **during your work**, and **before you submit**.

Upon receipt of your mark, you are strongly advised to **not** compare your mark with marks of other submissions from your student colleagues. Each submission has its own range of characteristics which differ from others in terms of breadth, scope, depth, insights, and subtleties and nuances. On the surface one submission may appear to be similar to another but invariably, digging beneath the surface reveals a range of differing characteristics.

Students who wish to request a review of a decision made by the Board of Examiners should refer to the UCL Academic Appeals Procedure, taking note of the acceptable grounds for such appeals.

Note that the purpose of this procedure is not to dispute academic judgement – it is to ensure correct application of UCL's regulations and procedures. The appeals process is evidence-based and circumstances must be supported by independent evidence.