Assessment Brief

Assignment Details

Item	Description
Module Title:	Programming for Data Analysis
Module Code:	B9DA108
Module Lecturer (s):	Paul Laird and Alexander Victor
Programme/Cohort:	2425_TMD1
Method of Assessment:	Project and presentation
Percentage (%) Weighting:	60
MIMLOs being assessed:	3,4
Assessment Number:	2
Individual/Group:	Individual
Issue Date:	22/10/2024
Submission Date:	10/12/2024
Feedback Date:	In-class. On Moodle by 07/01/2025
Feedback Strategy:	In-class

Assignment Task

This is an individual project. Submission will be due in week 12 with presentations in the final class of week 12.

Please note that there is an assignment specification as well as critical assignment rubrics. Admissible submissions must adhere to the assignment rubrics.

Assignment task:
You are required to develop a Data Acquisition and Preprocessing Pipeline of your choice, including data acquisition (API, Web scraping, DB Extract etc.), Extraction of features and Transformations as appropriate, followed by loading into an appropriate database. The focus of the complexity of the pipeline is your choice.

Implement and test the System, and document your implementation thoroughly. Testing should at a minimum include unit tests of key transformation functions along one integration test where front and backend interact.

Google Colab MUST be used for this project to develop both the artefact and documentation, and any code or material uploaded as a fait accompli will not be credited. Furthermore, any such code not attributed or presented contrary to its originating licence will be the subject of Academic Impropriety investigations.
It must be shared as editor, and documentation should be as text cells in line with the code.

The notebook must be regularly active from week 7.

It is expected that appropriate resources, such as libraries, packages, frameworks and APIs will be integrated into the solution, therefore credit will be awarded for how such material is integrated and augmented with original code. The submitted code must be demonstrably

written by the student, so any complete code uploaded as a fait accompli will not attract any credit. Existing resources integrated into your solution must be attributed and presented in accordance with its originating licence (where relevant). Failure to attribute material will result in Academic Impropriety investigations. A summary of attributions must be included at the end of the documentation.
The following table illustrates the percentage allocation for each individual part of the assignment.

Overall marks will be awarded according to the following criteria:

Implementation:	**40%**
Documentation:	**20%**
Presentation (Including answers to technical questions):	**40%**

Within the above categories, marks will be awarded for:

Interim progress and presentation (Week 9):	**10%**
Requirements and Design of the System:	**10%**
Data Acquisition:	**20%**
Transformations:	**20%**
Loading to database:	**20%**
Additional Complexity:	**20%**

Resources

Software or tools required/ useful: Colab
Templates, files, data tables provided by the lecturer: Moodle resources

Generative Artificial Intelligence Assessment Scale

Can generative AI be utilised in this assignment?

1	2	3	4	5
NO AI	**AI-ASSISTED IDEA GENERATION AND STRUCTURING**	**AI-ASSISTED EDITING**	**AI TASK COMPLETION, HUMAN EVALUATION**	**FULL AI**
The assessment is completed entirely without AI assistance. This level ensures that students rely solely on their knowledge, understanding , and skills. **AI must not be used at any point**	AI can be used in the assessment for brainstorming, creating structures, and generating ideas for improving work. **No AI content is allowed in the final submission.**	AI can be used to make improvements to the clarity or quality of student created work to improve the final output, but no new content can be created using AI. **AI can be used, but your original work with no AI content must be provided in an**	AI is used to complete certain elements of the task, with students providing discussion or commentary on the AI-generated content. This level requires critical engagement with AI generated content and evaluating its output. **You will use AI to complete specified tasks in your assessment. Any AI created content must be cited.**	AI should be used as a 'co-pilot' in order to meet the requirements of the assessment, allowing for a collaborative approach with AI and enhancing creativity. **You may use AI throughout your assessment to support your own work and do not have to specify which content is AI generated**

during the assessment.		**appendix.**		
			The use of AI-generated content is treated in the same manner as the use of any other external resource such as libraries, packages or frameworks. It must be clearly identified and attributed, and credit will be limited to the student's own work, to the exclusion of such resources, except for how students' own code integrates all of these resources. Questions will be asked during the presentation.	

Grading Criteria

		Evaluative Criteria/Performance Level Descriptors (what does performance at this level look like?)				
Scale	**Grade Band**	Criterion 1 - "*Requirements and Design*"	Criterion 2 - "*Implementation*"	Criterion 3 - "*Documentation*"	Criterion 4 - "*Presentation*"	
Exceptional	**90-100%**	Comprehensive specification going far beyond required level of detail	Best practice exemplary implementation	Exemplary documentation	Presentation beyond expectations of level	
Outstanding	**80-89%**	Outstanding specification going beyond required level of detail	Design and implementation of solution exceeds required standard	Outstanding in clarity and content	Outstanding presentation with comprehensive responses to questions	
Excellent	**70-79%**	Excellent specification of all requirements to a high standard	Excellent solution appropriate for context	Excellent, with no areas of concern	Excellent presentation and responses	
Very Good	**60-69%**	Very good specification of a full set of requirements	Very good implementation of appropriate solution	Of a generally very high standard, complete coverage of work	Good presentation and adequate responses	
Good	**50-59%**	Most requirements well specified	Appropriate solution competently implemented	Most operations well documented	Good presentation, but limitations in questioning	
Sufficient	**40-49%**	Adequate but limited specification, which could include greater detail	Basic functioning storage solution	Some operations could be better documented	Adequate presentation and responses, but could improve	
Somewhat/ Unfulfilled	**30-39%**	Basic specification of some requirements	Non-functioning or inappropriate storage	Inadequate or incomplete	Poor presentation or responses to questions	
Unfulfilled	**0-29%**	Absent or poor requirements	Absent or broken	Ad-hoc or absent	Not presented or unable to present competently	
MIMLO Alignment (see Module Guide for Minimum Intended Learning Outcomes for Module)						
MIMLO to which criterion is aligned:		3	3	4	4	

General Requirements for Students:

1. All assignments must be submitted no later than the stated deadline (date and time).
2. Assignments submitted after the latest deadline specified (including any approved extension deadline) are considered late and penalised according to the Quality Assurance Handbook (QAH) **Part B Section 5.2.2.6** as follows:
    a. A penalty of 2 marks will be applied per day or part thereof (including weekends and public holidays) for an ongoing failure to submit beyond the submission deadline.
    b. An examiner has the right to refuse to mark the assignment if the submission instructions have not been observed.
    c. Where a late assessment is submitted within 14 days of the deadline, and is of a passing standard, the late penalty is capped (such that the minimum grade that can be awarded is 40% for the late submission).
    d. Where a late assessment is submitted more than 14 days after the deadline, it will receive 0%. The lecturer may, at their discretion, review the submission for feedback.
    e. Where the assessment is undertaken in a group, the piece of work should be submitted in its complete entirety, and any penalty for late submission incurred applies to all group members.
3. Extensions to assignment submission deadlines will not be granted, other than in exceptional circumstances. To apply for an extension please go to https://students.dbs.ie/dashboard/SCCM and open a ticket.
4. All relevant provisions of the Assessment Regulations must be complied with (see QAH B.5).
    a. Students are required to refer to the assessment regulations in their Programme Handbook, and on the Student Website.
    b. Dublin Business School penalises students who engage in academic impropriety (i.e. plagiarism, collusion and/or copying, ghost writing/ essay mills, improper use of Generative Artificial Intelligence software).
        i. Refer to the College's Generative AI Guidelines HERE for further information.
    c. Guides on referencing are available on the Library website: https://libguides.dbs.ie/referencing
    d. Text-matching analysis software is integrated in Moodle to generate a report regarding the degree of text-matching in a submission.
5. Students are required to retain a copy of each assignment submitted, until the issuing of a transcript indicating the mark awarded and the closure of the Appeal period (2 weeks following the release of final results).
    a. Results can only be appealed following the release of final results, and the Appeal form must be submitted to the Exams Office within the Appeal period.
    b. An appeal must be based on valid grounds (see the Appeals Policy QAH B.3.5), dissatisfaction with a grade is not sufficient grounds for an appeal.
    c. Assignments must be appropriately packaged and presented.
    d. All assignments should be submitted to your subject/course page on Moodle by the deadline date.
    e. Where a submission involves digital media (i.e formats other than Word, Powerpoint or PDF), it is the submitting students' responsibility to ensure the media is appropriately labelled, fully working and they must retain a copy[1].
    f. Components of an assessment which are not included in the final submission cannot normally be subsequently accepted for grading. It is the student's responsibility to ensure their file is uploaded correctly.
    g. Include an electronic **cover sheet** with the following details to the front of the assignment (see below)

[1]

6. Assignments that *breach* the word count requirements will be penalised. *There is a 10% discretion, either way, applicable in terms of word count.*

7. When you submit your assignment you will be asked to click on a button which will declare the following:

By ticking this box I am confirming that this assignment/exam is all my own work. Any sources used have been referenced. *I have read the College rules regarding plagiarism in the QAH Part B Section 3 and understand that penalties will be applied accordingly if work is found not to be my own. All work uploaded is submitted via Ouriginal, whereby a text-matching report will show any similarities with other texts.*

Assignment Cover Sheet

Please fill out and insert at the top of your README or Google Doc as preferred.

Student Name and Number as per student card:

Programme:

Lecturer Name:

Module/Subject Title:

Assignment Title:

By submitting this assignment, I am confirming that:

- **This assignment is all my own work;**
- **Any sources used have been referenced;**
- **I have followed the Generative AI instructions/ scale set out in the Assignment Brief;**
- **I have read the College rules regarding academic integrity in the QAH Part B Section 3, and the Generative AI Guidelines, and understand that penalties will be applied accordingly if work is found not to be my/our own.**
- **I understand that all work submitted may be code-matched report to show any similarities with other work.**

Note: Technical support is available to students between **0830- 2000 hrs (Mon-Fri), 0930-1630 (Sat) only**. There is no technical support after 2000 hrs. It is your responsibility to ensure that you allow time to troubleshoot any technical difficulties by uploading early on the due date.