

T2 2023 MIS710 Assignment 1 Rubric

Course: MIS710 - Machine Learning In Business

Criteria	N (0-29)	N (30-49)	P (50-59)	C (60-69)	D (70-79)	HD (80-100)	Criterion Score	
----------	----------	-----------	-----------	-----------	-----------	-------------	-----------------	--

Criteria	N (0-29)	N (30-49)	P (50-59)	C (60-69)	D (70-79)	HD (80-100)	Criterion Score
1. Business understandings and the business problem to address. Business solution and recommendations (based on the model), ULO1 & ULO2, GLO1, GLO3 & GLO5, (8 marks)	1.2 points The report has many errors and omissions. (0-2.3 marks)	3.2 points The report analyses the business case and articulates business problem to be addressed insufficiently. Clear errors or omissions. Business solution and recommended actions are unclear or not related to the machine learning model. (2.4-3.9 marks)	4.4 points The report analyses the business case and articulates business problem to be addressed. Some elements may be missing but the analysis is connected to the case study. Business solution and recommended actions are provided, and somewhat connected to the machine learning model. (4-4.7 marks)	5.2 points The report analyses the business case and articulates business problem to be addressed clearly in terms of BACCM. Business solution and recommended actions are clear, and connected to data analytics and machine learning model, and aimed at the business reader. (4.8-5.5 marks)	6 points The report analyses the business case and articulates business problem to be addressed comprehensively in terms of BACCM. Business solution and recommended actions are clear, specific, consistent with the problem, and connected to data analytics and machine learning model, and aimed at the business reader. (5.6-6.3 marks)	8 points The report analyses the business case and articulates business problem to be addressed comprehensively, extensively and clearly in terms of BACCM. Business solution and recommended actions are clear, specific, and insightful, consistent with the problem, and supported by data analytics and machine learning model, and aimed at the senior management reader. (6.4-8 marks)	/ 8

Criteria	N (0-29)	N (30-49)	P (50-59)	C (60-69)	D (70-79)	HD (80-100)	Criterion Score
2. Data understandings , data preparation, exploration, and visualisation, ULO1, GLO1 & GLO3, (8 marks)	1.2 points Not provided or provided with many errors and omissions. (0-2.3 marks)	3.2 points Data understandings are insufficiently provided. Data cleansing, exploration and preparation was poorly attempted. (2.4-3.9 marks)	4.4 points Data understandings were provided. Data preparation, exploration and visualisation were conducted with no/minimal interpretations and some errors. (4-4.7 marks)	5.2 points Data understandings were provided clearly and connected to the case study, connected to data exploration and visualisation. Data preparation (including cleansing), exploration and visualisation were conducted accurately with some interpretations. (4.8-5.5 marks)	6 points Data understandings were provided comprehensively and well connected to the case study, well connected to data exploration and visualisation. Data preparation (including cleansing), exploration and visualisation were conducted and interpreted accurately, correctly, meaningfully, and professionally. Data split and feature selection were described and justified based on data exploration. (5.6-6.3 marks)	8 points Data understandings were provided comprehensively, insightfully and well connected to the case study, well connected to data exploration and visualisation. Data preparation (including cleansing), exploration and visualisation were conducted and interpreted accurately, correctly, meaningfully, professionally, stimulating and with insights. Data split and feature selection were clearly described and well justified in	/ 8

Criteria	N (0-29)	N (30-49)	P (50-59)	C (60-69)	D (70-79)	HD (80-100) consistency with data exploration. (6.4-8 marks)	Criterion Score
----------	----------	-----------	-----------	-----------	-----------	---	-----------------

Criteria	N (0-29)	N (30-49)	P (50-59)	C (60-69)	D (70-79)	HD (80-100)	Criterion Score
3. Machine Learning Model development ULO2, GLO1, GLO3 & GLO5, (8 marks)	1.2 points Not provided or provided with many errors and omissions. (0-2.3 marks)	3.2 points The Machine Learning approach, algorithm and model are presented unclearly and poorly. Python notebook file does not run and poorly documented. (2.4-3.9 marks)	4.4 points The Machine Learning approach, algorithm and model are presented with minimal description and explanation. Python notebook file has minor errors and documents the code with basics comments. (4-4.7 marks)	5.2 points The Machine Learning approach, algorithm and model are clearly presented and justified, with minimal description and explanation. Python notebook can execute successfully, file provides most output cells and documents the code with basics comments. (4.8-5.5 marks)	6 points The Machine Learning approach, algorithm and model are clearly presented and justified, with some description and explanations. Python notebook file provides can execute successfully, output cells and prediction results, and clearly documents the code to replicate the model. (5.6-6.3 marks)	8 points The Machine Learning approach, algorithm and model are clearly presented and justified, with a detailed description and explanations consistent with the business problem and solution. Python notebook file can execute successfully, provides output cells and prediction results, and clearly, professionally, and sufficiently documents the code to replicate the model. (6.4-8 marks)	/ 8

Criteria	N (0-29)	N (30-49)	P (50-59)	C (60-69)	D (70-79)	HD (80-100)	Criterion Score
4. Model evaluation ULO2, GLO1, GLO3 & GLO5, (8 marks)	1.2 points Not provided or provided with many errors and omissions. (0-2.3 marks)	3.2 points Model evaluation was attempted but poorly documented. (2.4-3.9 marks)	4.4 points Model evaluation was applied on labelled data (split test data). Minimal performance metrics were documented with some explanation. Clarify needs to be improved. (4-4.7 marks)	5.2 points Model evaluation was applied on labelled data (split test data). Basic performance metrics, for example, Confusion matrix, ROC, AUV results, were documented with some explanation. Clarify needs to be improved. (4.8-5.5 marks)	6 points Model evaluation was applied on labelled data (split test data). Essential performance metrics, for example Confusion matrix, ROC, AUV results, were accurately documented with some explanation about pros and cons. (5.6-6.3 marks)	8 points Model evaluation was applied on labelled data (split test data). Essential performance metrics, for example Confusion matrix, ROC, AUV results, were accurately documented, and were clearly; pros and cons were thoroughly explained. (6.4-8 marks)	/ 8

Criteria	N (0-29)	N (30-49)	P (50-59)	C (60-69)	D (70-79)	HD (80-100)	Criterion Score
5. Report presents details in a format appropriate for business consultancy communication : business-relevant language, tone, structure (incl. logic & designated sections), executive summary with recommendations & referencing style. ULO1, GLOs1/5, (8 marks)	<p>1.2 points</p> <p>The report is poorly structured/incoherent.</p> <p>Executive summary is missing or poorly written or does not include recommendations .</p> <p>Multiple errors in the use of language and formatting.</p> <p>No/very limited adherence to referencing standards.</p> <p>(0-2.3 marks)</p>	<p>3.2 points</p> <p>The report lacks sufficient structure, coherence, and logic.</p> <p>Executive summary is insufficient in representing the report, and/or recommendations are insufficiently clear.</p> <p>Multiple errors in the use of language, formatting, and/or referencing standards.</p> <p>(2.4-3.9 marks)</p>	<p>4.4 points</p> <p>Adequate business report written with clear structure and minimal confusion/errors.</p> <p>Executive summary adequately represents the report, with clear and broadly relevant recommendations .</p> <p>May be some errors in structure, content, tone, and formatting, and use of language, and may be some minor errors in referencing.</p> <p>(4-4.7 marks)</p>	<p>5.2 points</p> <p>Well-presented business report with coherent structure, content, tone, and formatting.</p> <p>Executive summary is clear and coherent, and well-aligned to the details in the report, with clear, specific, and relevant recommendations .</p> <p>May be minimal minor errors (if any) in the use of language and referencing.</p> <p>(4.8-5.5 marks)</p>	<p>6 points</p> <p>Comprehensive and concise business report, with coherence, logic, structure, content, tone, and formatting to confidently convey a business consultancy level of communication.</p> <p>Executive summary is clear, coherent, well-aligned to and cross referenced with the details in the report, and convincing based on the analysis and findings in the report, with clear and specific recommendations aimed at the management reader.</p>	<p>8 points</p> <p>Exceptional quality, concise business report, with coherence, logic, structure, content, tone, and formatting to commandingly conveying a professional consultancy level of communication.</p> <p>Executive summary is clear, coherent, well-aligned to and cross referenced with the details in the report, and comprehensively, convincingly based on the analysis and findings in the report, with clear, specific, and insightful recommendations</p>	/ 8

Criteria	N (0-29)	N (30-49)	P (50-59)	C (60-69)	D (70-79)	HD (80-100)	Criterion Score
					Fluent use of language and adherence to referencing style including in-text citations. (5.6-6.3 marks)	aimed at the senior management reader. Persuasive and fluent use of language and all sources are accurately referenced and in-text cited. (6.4-8 marks)	

Total	/ 40
-------	------

Overall Score

N
0 points minimum

N
12 points minimum

P
20 points minimum

C
24 points minimum

D
28 points minimum

HD
32 points minimum