

# T2 2023 MIS710 Assignment 1 Rubric

Activity: T2 2023 MIS710 Assignment 1

Course: MIS710 - Machine Learning In Business

Name: TAHSIN AFROZ

Criteria	N (0-29)	N (30-49)	P (50-59)	C (60-69)	D (70-79)
1. Business understandings and the business problem to address. Business solution and recommendations (based on the model), ULO1 & ULO2, GLO1, GLO3 & GLO5, (8 marks)	The report has many errors and omissions.  (0-2.3 marks)	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)	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)	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)  ✓	The report business case articulates problem to comprehend of BACCM.  Business solution and recommended actions are clear, and connected to data analytics and machine learning model, and aimed at the business reader.  (5.6-6.3 marks)

## Criterion Feedback

Your understanding of the business context is good, and you've provided a clear articulation of the business problem. While your business solutions and track, there's potential for a more integrated approach with the machine learning model. Focus on drawing direct correlations between the model's findings and the business problem. However, you could have analysed the business case and articulated the business problem to be addressed clearly using BACCM.

2. Data understandings, data preparation, exploration, and visualisation, ULO1, GLO1 & GLO3, (8 marks)	Not provided or provided with many errors and omissions.  (0-2.3 marks)	Data understandings are insufficiently provided.  Data cleansing, exploration and preparation was poorly attempted.  (2.4-3.9 marks)	Data understandings were provided.  Data preparation, exploration and visualisation were conducted with no/minimal interpretations and some errors.  (4-4.7 marks)	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)  ✓	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)  Data split and selection were justified and data exploration was conducted correctly, and professional.  (5.6-6.3 marks)
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#### Criterion Feedback

**Data Understanding:** Your understanding of the data and its connection to the VicCrashAnalytics case study is good. You could further explore and interpret to provide a richer, more integrated analysis.

**Data Preparation:** The foundational steps in data preparation align with the case study's requirements.

**Exploration & Visualisation:** The insights derived are relevant to the case study. A more comprehensive exploration can provide richer insights and a better context.

**Data Split & Feature Selection:** Your approach aligns with the basic requirements of the case study. Data split and feature selection could have been clearer, with consistency with data exploration.

3. Machine Learning Model development ULO2, GLO1, GLO3 & GLO5, (8 marks)	Not provided or provided with many errors and omissions. (0-2.3 marks)	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)	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)	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)	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. (5.6-6.3 marks)
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#### Criterion Feedback

**Machine Learning Model:** Your understanding of the machine learning approach is good, with connections to the VicCrashAnalytics case study that can be improved. The algorithm and model are presented, and with more detailed explanations, the relevance to the business problem and solution can be improved.

**Python Notebook Execution:** Your Python notebook provides the necessary output cells and prediction results but many errors in the code. While the code is functional, a more detailed and professional approach can enhance the clarity and replicability of the model.

4. Model evaluation ULO2, GLO1, GLO3 & GLO5, (8 marks)	Not provided or provided with many errors and omissions. (0-2.3 marks)	Model evaluation was attempted but poorly documented. (2.4-3.9 marks)	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)	Model evaluation was applied on labelled data (split test data).  Basic performance metrics, for example, Confusion matrix, ROC, AUC results, were documented with some explanation.  Clarify needs to be improved. (4.8-5.5 marks)	Model evaluation was applied on labelled data (split test data).  Essential performance metrics, for example, Confusion matrix, ROC, AUC results, were documented with some explanation.  Clarify needs to be improved. (5.6-6.3 marks)
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#### Criterion Feedback

Your understanding of the model evaluation using the split test data is good. Enhancing the depth of this evaluation can provide a richer context in relation to the business problem. The performance metrics are documented, offering insights into the model's performance. A more detailed exploration of the trade-offs between precision and recall, and their relevance to the case study, can enhance the analysis.

	The report is poorly structured/incoherent.  Executive summary is missing or poorly written or does not include	The report lacks sufficient structure, coherence, and logic.  Executive summary is insufficient in	Adequate business report written with clear structure and minimal confusion/errors.  Executive summary	Well-presented business report with coherent structure, content, tone, and formatting.  Executive summary is	Comprehensive business report with clear structure, content, and format, and presented confidently
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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)	recommendations.  Multiple errors in the use of language and formatting.  No/very limited adherence to referencing standards.  (0-2.3 marks)	representing the report, and/or recommendations are insufficiently clear.  Multiple errors in the use of language, formatting, and/or referencing standards.  (2.4-3.9 marks)	adequately represents the report, with clear and broadly relevant recommendations.  May be some errors in structure, content, tone, and formatting, and use of language, and may be some minor errors in referencing.  (4-4.7 marks)	clear and coherent, and well-aligned to the details in the report, with clear, specific, and relevant recommendations.  May be minimal minor errors (if any) in the use of language and referencing.  (4.8-5.5 marks)	business co level of cor  Executive s clear, cohe aligned to a referenced details in th convincing analysis an the report, specific recommend at the man: reader.  Fluent use and adhere referencing including ir citations.  (5.6-6.3 ma
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Criterion Feedback

Business Report Quality: Good business report with a clear structure and content. Some areas could benefit from enhanced alignment with professional Executive Summary: The executive summary provides a general overview and is somewhat aligned with the report's details. Recommendations are pres management.  
Language & Referencing: Language use is clear, and most sources are referenced.

Overall Score

N

N

P

C

D