MONASH University

GROUP OF EIGHT AUSTRALIA

FIT5145 Foundations of data science

[Rubric]

Assessment 1: Business & data case study - Proposal

Assessment 3: Business & data case study - Report

Assessment 1: Proposal (Rubric)

Criteria	Allocated percentage mark (Total: 15%)	High distinction	Distinction	Credit	Pass	Fail
Problem Clarity: **Is the problem well-articulated and clearly defined? Is the goal clearly stated?**	**2**	Provides a sophisticated description of the project, including the problem and goals.	Provides some description of the project, including the problem and goals.	Provides a limited description of the project, including the problem and goals.	Provides a minimal description of the project, including the problem and goals.	Provides no clear description or a very insufficient description of the project, including the problem and goals.
Problem Importance: Does the project have real-world applications? Does it address key social, environmental, or business challenges and demonstrate potential for significant social impact?	**4**	Provides a sophisticated description of the problem importance by discussing the real-world application and the social impact.	Provides some description of the problem importance by discussing the real-world application and the social impact.	Provides a limited description of the problem importance by discussing the real-world application and the social impact.	Provides a minimal description of the problem importance by discussing the real-world application and the social impact.	Provides no clear description or a very insufficient description of the problem importance by discussing the real-world application and the social impact.
Business Model Analysis: Is the role of data in the project clearly articulated in relation to the business model? Are the benefits and value of the project clearly outlined? Are the primary stakeholders identified and their needs addressed?	**2**	Provides a sophisticated description of the business model, including the role of data, benefits/values and stakeholders.	Provides some description of the business model, including the role of data, benefits/values and stakeholders.	Provides a limited description of the business model, including the role of data, benefits/values and stakeholders.	Provides a minimal description of the business model, including the role of data, benefits/values and stakeholders.	Provides no clear description or a very insufficient description of the business model, including the role of data, benefits/values and stakeholders.

Criteria	Allocated percentage mark (Total: 15%)	High distinction	Distinction	Credit	Pass	Fail
Novelty: **Does the project address an important and novel problem? Does it introduce a new or unconventional approach? Does it tackle an underexplored or emerging issue in data science?**	**4**	The project addresses a highly novel problem, introducing a unique or unconventional approach with significant potential impact.	The project addresses a relevant and novel problem, offering an original approach with clear contributions to the field.	The project addresses an important problem but with a conventional approach, showing moderate originality and creativity.	The project addresses a problem with a conventional approach and limited originality, meeting basic expectations.	The project lacks novelty, using a conventional or simplistic approach without original contributions.
Completing peer grading	**3**					

Assessment 3: Report (Rubric)

Criteria	Allocated percentage marks (Total: 30%)	High distinction	Distinction	Credit	Pass	Fail
Introduction, Related Work and Business Model: define the problem, provide background and significance, outline specific goals, analyze the business domain and its value creation, identify key stakeholders and their benefits, summarize existing research or industry solutions, highlight gaps in current approaches, and justify the project's novelty and potential impact.	**2**	Provides a sophisticated description of the project, including the problem, goals, the business domain, values, stakeholders, gaps, and novelty.	Provides some description of the project, goals, business domain, values, stakeholders , gaps, and novelty.	Provides a limited description of the project, goals, business domain, values, stakeholders, gaps, and novelty..	Provides a minimal description of the project, goals, business domain, values, stakeholders, gaps, and novelty.	Provides no clear description or a very insufficient description of the project, goals, business domain, values, stakeholders, gaps, and novelty.
Characterising and Analysing data: discuss potential data sources and analyze their characteristics (e.g., the 4 V's) and evaluate the required platforms, software, and tools for data processing and storage based on the specific characteristics of the data or consider potential options (e.g., platforms, software, and tools) if your project expands in the future.	**3.5**	Provides clear demonstration of the sources, characteristics of data, and data processing and data storage, and classification of the basic technologies in use.	Provides some demonstration of the sources, characteristics of data, and data processing and data storage, and classification of the basic technologies in use.	Provides limited demonstration of the sources, characteristics of data, and data processing and data storage, and classification of the basic technologies in use.	Provides minimal demonstration of the sources, characteristics of data, and data processing and data storage, and classification of the basic technologies in use.	No clear demonstratio n of the sources, characteristic s of data, and data processing and data storage, and classification of the basic technologies in use.

Criteria	Allocated percentage mark (Total: 30%)	High distinction	Distinction	Credit	Pass	Fail
Characterising and Analysing data: specify the data analysis techniques and statistical methods (e.g., decision tree or regression tree) applicable to the project. Provide a rationale for the selected methods and discuss the expected high-level outcomes.	**3**	Provides a distinct classification of the kinds of data analysis and statistical methods that are available.	Provides some classification of the kinds of data analysis and statistical methods that are available.	Provides a limited classification of the kinds of data analysis and statistical methods that are available.	Provides a minimal classification of the kinds of data analysis and statistical methods that are available.	No clear classification of the kinds of data analysis and statistical methods.
Demonstration: identify a usable dataset for the proposed project and perform some basic analysis on the identified dataset to demonstrate the feasibility of the project, using R (e.g., detailing the information/features contained in the dataset, analyse the basic characteristics of the dataset, etc), and report the analysis process and result in the demonstration section of a final report.	**3.5**	Provides clear demonstration on the project by using usable data and analysing it.	Provides some demonstration on the project by using usable data and analysing it.	Provides limited demonstration on the project by using usable data and analysing it.	Provides minimal demonstration on the project by using usable data and analysing it.	No clear demonstration on the project by using usable data and analysing it.
Standard for Data Science Process, Data Governance and Management: describe any standard used in your data science process, and practices for data governance and management in the project, e.g., how to address key issues such as data accessibility, security, and confidentiality, as well as potential ethical concerns related to data usage.	**1**	Provides clear description of standard, data governance and management	Provides some description of standard, data governance and management	Provides limited description of standard, data governance and management	Provides minimal description of standard, data governance and management	No clear description of standard, data governance and management

Criteria	Allocated percentage mark (Total: 30%)	High distinction	Distinction	Credit	Pass	Fail
Think critically and creatively, providing justification and analysis.	**2**	Thinks out of the box, creates or extends to a novel or unique idea. Provides a sophisticated critical analysis.	Collect ideas, solutions and other information in good ways. Provides detailed justification and analysis	Reformulates a collection of available information. Provide some justification and analysis.	Mostly repeats existing information. Provide limited justification and analysis.	Just repeats existing information. Do not provide any justification or analysis.
Provide a good quality of report in terms of structure, expression, grammar and spelling.	**2**	Well structured, with impressive fluency and flow. Appropriate use of sub-headings and relevant content sections. Adheres to specifications (e.g.: word limit, references, file format).	Well-structured and generally good links and flow. Adheres to specifications (e.g.: word limit, references, file format).	Satisfactory structure, mostly satisfactory links and flow. Adheres to specifications (e.g.: word limit, references, file format).	Overall basic structure is adequate but lacks links and flow. Adheres to specifications (e.g.: word limit, references, file format).	Poorly structured, lacking linkages and flow. Does not adhere to specifications (e.g.: word limit, references, file format).
Presentation, slide: structure, expression, grammar and spelling	**5**	Well structured, with impressive fluency and flow. Appropriate use of sub-headings, relevant content sections, and good quality of slides. Adheres to specifications (e.g.: slide format, duration).	Well-structured and generally good links and flow. Adheres to specifications (e.g.: slide format, duration).	Satisfactory structure, mostly satisfactory links and flow. Adheres to specifications (e.g.: slide format, duration).	Overall basic structure is adequate, but lacks links and flow. Adheres to specifications (e.g.: slide format, duration).	Poorly structured, lacking linkages and flow. Does not adhere to specifications (e.g.: slide format, duration).
Peer-review for presentation	**5**	Marks will be given based on peer-review				
Feedback from Assignment 1	**3**	• What feedback did your tutor provide for Assignment 1? • Briefly describe how you incorporated this feedback to improve your Assignment 3 submission (maximum 150 words).				