

## Report Rubric

### 1. Methods (10 marks)

- Clarity of the Research Question
- Dataset Understanding
- Data Pre-processing
  - Appropriate and justified data processing techniques
  - Correct and meaningful implementation of the chosen technique
- Use of supervised/unsupervised method
  - Proper and justified application of machine learning methods
  - Accurate and meaningful execution of machine learning techniques
  - Adequate employment of suitable evaluation techniques

### 2. Analysis of Data and Results (10 marks)

- Quality and Variety of Results
  - Thorough exploration of various aspects of the data
  - Effective use of diverse visual representations to communicate findings.
  - Proper use of observation for interpretation
  - Thoughtful comparisons between different subgroups
  - Insightful examination of atypical data points
- Interpretation
  - Articulating well-founded links between analysis outcomes and dataset characteristics
  - Extracting novel, thought-provoking insights from the data
  - Discussing potential real-world implications of findings
- Limitations
  - Thoughtfully acknowledging and addressing limitations in data or methodologies
  - Insightful suggestion for analysis improvement

### 3. Report Quality (7 marks)

- Executive Summary
- No missing section
- Overall writing quality
  - Proper formatting (appropriate font, indenting, and sectioning)
  - Cohesive flow between different sections
  - Effective use of visual aids
  - Proper length of the report
- Logical Flow and Coherence
  - Smooth transition between ideas and sections
  - Clear progression from one point to the next

	<b>Methods (10 marks)</b>	<b>Analysis of Data and Results (10 marks)</b>	<b>Report Quality (7 marks)</b>
<b>H1 (80%+)</b>	<ul style="list-style-type: none"> <li>• Defines a clear, focused research question that sets a strong foundation for the entire analysis.</li> <li>• Demonstrates a deep understanding of the dataset's characteristics, nuances, and potential biases.</li> <li>• Expertly applies advanced data processing techniques, showcasing thoughtful consideration of appropriateness.</li> <li>• Selects and deploys suitable machine learning methods with strong justification, correct implementation of tuning techniques.</li> <li>• Strongly justified and perfect use of evaluation methods and metrics.</li> </ul>	<ul style="list-style-type: none"> <li>• Presents a rich and varied set of results with comprehensive exploration, using various visuals and analysis techniques.</li> <li>• Provides in-depth, well-grounded interpretations that draw meaningful connections between analysis outcomes and dataset characteristics.</li> <li>• Thoroughly acknowledges and discusses a wide range of limitations, showing astute awareness and insightful suggestions for improvement.</li> </ul>	<ul style="list-style-type: none"> <li>• Presents a concise yet comprehensive executive summary that effectively encapsulates the entire report.</li> <li>• Ensures all sections of the report are comprehensive and well-covered, within the given length, leaving no important aspect unaddressed.</li> <li>• Maintains an exceptional level of writing quality, featuring proper formatting, seamless sectioning, and an engaging narrative.</li> <li>• Ensures an impeccable logical flow with smooth transitions, offering a seamless journey through the report's content.</li> </ul>
<b>H2 (70%-79%)</b>	<ul style="list-style-type: none"> <li>• Formulates a well-defined research question that guides the analysis effectively.</li> <li>• Shows a strong grasp of the dataset's key attributes and how they might impact the analysis.</li> <li>• Skilfully employs a variety of data processing methods correctly with valid rationale.</li> <li>• Expertly applies suitable machine learning techniques, demonstrating a clear rationale for their use.</li> <li>• Correct and suitable use of evaluation methods and metrics.</li> </ul>	<ul style="list-style-type: none"> <li>• Displays a solid range of results with effective visual representations and insightful exploration.</li> <li>• Offers insightful interpretations that demonstrate a clear understanding of the analysis results.</li> <li>• Recognizes and addresses key limitations with thoughtful recommendations for refinement.</li> </ul>	<ul style="list-style-type: none"> <li>• Provides a clear executive summary that captures the key aspects of the report.</li> <li>• Provides a mostly complete report, within the given length, covering all necessary sections with a few minor gaps.</li> <li>• Demonstrates a high level of writing quality with good formatting and clear sectioning.</li> <li>• Maintains a strong logical flow with coherent transitions between sections.</li> </ul>
<b>H3 (65%-69%)</b>	<ul style="list-style-type: none"> <li>• Establishes a research question that provides adequate direction for the analysis.</li> <li>• Presents a satisfactory understanding of the dataset's basic features but lacks in-depth exploration.</li> </ul>	<ul style="list-style-type: none"> <li>• Offers basic results with limited diversity in visualization methods and surface-level insights.</li> </ul>	<ul style="list-style-type: none"> <li>• Offers a satisfactory executive summary with the main highlights.</li> <li>• Includes the essential sections of the report, though some may be briefly addressed.</li> </ul>

	<ul style="list-style-type: none"> <li>• Adequately utilizes common data processing techniques but may lack full justification for choices.</li> <li>• Adequately implements common machine learning methods but may lack detailed justification.</li> <li>• Use of some evaluation methods and metrics with limited justification and/or with some mistakes.</li> </ul>	<ul style="list-style-type: none"> <li>• Delivers satisfactory interpretations that connect some analysis outcomes to dataset aspects.</li> <li>• Identifies basic limitations and suggests straightforward improvements.</li> </ul>	<ul style="list-style-type: none"> <li>• Presents a satisfactory writing style within the given length, with appropriate formatting and acceptable organization.</li> <li>• Establishes an acceptable logical flow, though some transitions may be slightly abrupt.</li> </ul>
<b>P (50%-64%)</b>	<ul style="list-style-type: none"> <li>• Presents a vague or overly broad research question that may lack focus.</li> <li>• Displays an adequate understanding of some dataset aspects, but major gaps exist.</li> <li>• Utilizes basic data processing methods, with limited rationale and justifications.</li> <li>• Implements basic machine learning approaches with limited reasoning for their selection.</li> <li>• Limited use evaluation methods and metrics without justification and/or with some significant mistakes.</li> </ul>	<ul style="list-style-type: none"> <li>• Presents minimal results with limited visual support and shallow analysis.</li> <li>• Provides limited interpretations with minimal connection between analysis outcomes and dataset characteristics.</li> <li>• Mentions limitations superficially without comprehensive understanding, offering vague suggestions.</li> </ul>	<ul style="list-style-type: none"> <li>• Delivers a basic executive summary that may lack conciseness and clarity.</li> <li>• May omit or inadequately cover crucial sections, leading to a somewhat incomplete report. Some differ from the given word cont.</li> <li>• Demonstrates a basic writing style but may lack consistent formatting or organization.</li> <li>• Displays limited logical flow, resulting in disjointed or unclear connections between sections.</li> </ul>
<b>F (less than 50%)</b>	<ul style="list-style-type: none"> <li>• Provides a poorly defined research question.</li> <li>• Offers weak interpretations lacking in depth, clarity and/or accuracy.</li> <li>• Utilizes limited data processing methods with minimal explanation of choices.</li> <li>• Utilizes limited machine learning methods with unclear rationale.</li> <li>• Invalid or no use of evaluation methods and metrics.</li> </ul>	<ul style="list-style-type: none"> <li>• Presents rudimentary results with minimal analysis and visuals.</li> <li>• Offers weak interpretations that lack depth and clarity.</li> <li>• Fails to address or adequately acknowledge limitations.</li> </ul>	<ul style="list-style-type: none"> <li>• Presents an inadequate or unclear executive summary.</li> <li>• Omits key sections, resulting in a significantly incomplete report. Significant difference from the given word cont.</li> <li>• Displays poor writing quality, potentially leading to confusion or disorganization.</li> <li>• Presents a disjointed or incoherent structure.</li> </ul>