## CMP9781M Big Data Analytics and Modelling Assessment1 2024-2025

| <b>Learning Outcome</b>  | Criterion   | Pass (50-59)  | Merit (60-69)  | Distinction (>= 70)  |
|--|---|---|--|--|
| [LO1 Critically evaluate and apply the theories, algorithms, techniques and methodologies involved in Big Data Analytics and Modelling | Section 1.1.: Description of Distributed Big Data Processing Ecosystem (20%). This section should contain a clear description of all required components. Each component should be approached critically and go into enough detail on its purpose, including technical details. | You have provided a basic description of most, but not all points listed. Your description for some points is unclear and are lacking motivation. | You have provided a basic description of all points listed. Your description for most points is clear, but often lacking motivation. | You have provided an excellent description of all listed points. Your description of all points is very clear and all components are well motivated. Technical concepts are also explained with equations, which are well defined. |

Section 1.2: Describe a use case for big data analytics (30%). This section contains a detailed description of a use case of big data analytics in everyday life. It should be critically approached, and you should also expand upon the tools available, why distributed learning is needed and what it can offer to business decision making processes.

You have provided a use case study. Some of the concepts have been addressed, but it lacks critical approach as well as enough detail to cover all the aspects needed to realise the benefits of big data analytics and distributed learning.

You have provided a use case study. All concepts have been addressed, and some level of critical approach has been attempted. There has been a very good amount of detail provided, covering the majority of the aspects needed to realise the benefits of big data analytics and distributed learning.

You have provided a use case study. All concepts have been addressed at an outstanding level, with a very good level of critical approach has been attempted. There has been a very good amount of detail provided, covering all the aspects needed to realise the benefits of big data analytics and distributed learning. Appropriate references/citations are provided.

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Section 1.3: Develop a linear regression model (50%). This section should describe and critically approach the implementation of a linear regression model. All the steps involved, including graphs and various metrics should be included in the report.

You have provided a basic implementation covering most but not all the steps required to get the algorithm working on distributed mode. Some errors might also exist in the implementation. The code has not been described and commented adequately.

You have provided a very good implementation covering all the steps required to get the algorithm working. No errors or mistakes exist in the implementation. The code has been described and commented appropriately.

You have provided an exceptional implementation covering all the steps required to get the algorithm working. No errors or mistakes exist in the implementation. The code has been described and commented in much detail. There is a very strong critical element included in the descriptions.

Weighting is 50% of the module