**Assessment Brief**

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| Module Title: | Deep Learning |
| Module Code: | B9AI104 |
| Module Leader: | Dr Shahram Azizi Sazi |
| Stage (if relevant) | Award |
| Assessment Title: | Deep Learning Model Development |
| Assessment Number (if relevant): | 1 |
| Assessment Type: |  |
| Restrictions on Time/Length : | N/A |
| Individual/Group: | Group |
| Assessment Weighting: | 60% |
| Issue Date: |  |
| Hand In Date |  |
| Planned Feedback Date |  |
| Mode of Submission | Moodle |

The assignment is a group assignment. All learners must submit the final group report as an appendix to the main report on Moodle. A Word document should include notes of group meetings and a note from each individual group member specifying the precise nature of their contribution to the final product, and estimated time of completion. This will represent the agreed group position. The right is reserved to vary the grade awarded to individual group members.

The report must include the following:

* Background of the model architecture for three Deep learning models. Scope including type of the Deep Learning models and mathematical requirements with the List of rules for each model (**30 marks).**
* Dataset implemented without error **(30 marks).**
* Deep Learning design, highlighting the strengths and weaknesses and artefact **(30 marks).**
* Conclusions and Bibliography. Screenshots and explanations must be provided where required **(10 marks).**

**Assignment objectives:**

1. Analyse the requirements according to the organisation’s goals and present a deep learning model.
2. Design a deep learning model.
3. Implement a deep learning algorithm for a typical real-world problem.
4. Demonstrate a deep learning model.

**Details of assignment:**

Total: 100 Marks (Weighting: 60%)

**Assessment criteria**

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| **Criteria/**  **Mark** | **< 40** | **40 – 49** | **50 - 59** | **60 – 69** | **70 +** |
| **Analysis (10/60)** | Insufficient or incomplete analysis with incomplete explanation. | Some but insufficient and poorly written analysis with poorly developed models | Sufficiently solves problem but lack of attention to technical writing skills | Well-structured analysis with good specifications and model | Excellent solution to problem – very well written |
| **Design (20/60)** | No completeness or design is unusable. | Little knowledge or understanding somewhat relevant model | Somewhat a useful model | Good model and good knowledge and understanding | model, excellent knowledge and under standing |
| **Implementation (20/60)** | Insufficient code or incomplete project | Some but barely sufficient and poorly written code | Sufficiently solves problem but lack of attention to programming practices | Well-structured code with good interface design and functions | Excellent solution to problems – very well written code |
| **Demonstration (10/60)** | Weak demonstration showing no evidence of original work | Demonstration showing some evidence of original work | Demonstration showing sufficient evidence of original work | Good demonstration providing explanation of the artefact | Excellent demonstration |