Task3.1: Case study of AI Solution

This document supplies detailed information on Assessment Task 1 for this unit.

Key information

- Due: **Monday 4 April 2022** by 8.00 pm (AEST)
- **You can submit this assignment only twice.**

Learning Outcomes

This assessment assesses the following Unit Learning Outcomes (ULO) and related Graduate Learning Outcomes (GLO):

Unit Learning Outcome (ULO)	Graduate Learning Outcome (GLO)
ULO1: Explain the process and key characteristics of developing an AI solution, and the contrast with traditional software development, to inform a range of stakeholders.	**GLO1 -** through the assessment of student ability to use data acquisition. techniques to obtain, manipulate and represent data. **GLO2 -** through the assessment of communicating the results in specific format. **GLO3 -** through student ability to use specific programming language and modules to obtain, pre-process, transform and analyse data.

Overview:

During week1, you have explored the differences between traditional software development and intelligent system and discovered what are the strengths and challenges of both traditional software applications and intelligent systems. We have provided you with some examples of AI solutions in different areas.

In this task you need to find out one of the applications of AI solutions in a domain (e.g., healthcare, business, sports, cyber security etc). For example, use of AI in Covid detection using CT imaging (AI in healthcare) or use of AI in monitoring your daily activity using your smartwatch (AI in sports). After selecting the topic, you need to answer the following questions.
This task will help you to understand why we need intelligent system.

To do this assignment, you need to refer to Week1 lecturer content and workshop recording.

Submission details to OnTrack:

- **Submit your answers as a PDF file into the Ontrack. Your answers must be relevant and precise.**

Answer the following questions:

1. What is the domain and specific application you have selected? (e.g., domain: Healthcare, application: COVID-19 detection using CT imaging. Please provide the application other than this example.).

2. Why is it important to have AI solutions in this domain? Provide the reason and justification (minimum 100 words)

3. What is the difference between traditional applications and AI based applications in this domain? (Minimum 100 words)

4. What are the challenges and Strength of AI in that domain? Please refer to **1.5 Strength and challenge of AI models in the unit site** and provide answer based on the strength and challenges discussed there. 10 items for strength and challenges are discussed, and you only need to discuss 6 out of 10 of them (Minimum 200 words)

Submission details

Deakin University has a strict standard on plagiarism as a part of Academic Integrity. To avoid any issues with plagiarism, students are strongly encouraged to run the similarity check with the Turnitin system, which is available through Unistart. A Similarity score MUST NOT exceed 39% in any case. **No marking on any submission after due date.**

Extension requests

Requests for extensions should be made to Unit/Campus Chairs well in advance of the assessment due date. If you wish to seek an extension for an assignment, you will need to submit a request using the OnTrack system as soon as you become aware that you will have difficulty in meeting the scheduled deadline, but at least 3 days before the due date. When you make your request, you must include appropriate documentation (medical certificate, death notice) and a copy of your draft assignment. Conditions under which an extension will normally be approved include:

Medical To cover medical conditions of a serious nature, e.g., hospitalisation, serious injury or chronic illness. Note: Temporary minor ailments such as headaches, colds and minor gastric upsets are not serious medical conditions and are unlikely to be accepted. However, serious cases of these may be considered.

Compassionate e.g. death of close family member, significant family and relationship problems.

Hardship/Trauma e.g., sudden loss or gain of employment, severe disruption to domestic arrangements, victim of crime. Note: Misreading the timetable, exam anxiety or returning home will not be accepted as grounds for consideration.

Special consideration

You may be eligible for special consideration if circumstances beyond your control prevent you from undertaking or completing an assessment task at the scheduled time. See the following link for advice on the application process: http://www.deakin.edu.au/students/studying/assessment-and-results/special-consideration

Assessment feedback

The results with comments will be released within 5 business days from the due date.

Referencing

You must correctly use the Harvard method in this assessment. See the Deakin referencing guide.

Academic integrity, plagiarism and collusion

Plagiarism and collusion constitute extremely serious breaches of academic integrity. They are forms of cheating, and severe penalties are associated with them, including cancellation of marks for a specific assignment, for a specific unit or even exclusion from the course. If you are ever in doubt about how to properly use and cite a source of information refer to the referencing site above.

Plagiarism occurs when a student passes off as the student's own work, or copies without acknowledgement as to its authorship, the work of any other person or resubmits their own work from a previous assessment task.

Collusion occurs when a student obtains the agreement of another person for a fraudulent purpose, with the intent of obtaining an advantage in submitting an assignment or other work.

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