MIS715 – Responsible Artificial Intelligence – Trimester 1 2025
Assessment Task 2 – Research Report and Video Presentation– Individual

DUE DATE:	**Friday, 30 May, by 8:00pm (Melbourne time)**
PERCENTAGE OF FINAL GRADE:	**Part A (40%), Part B (20%)**
WORD COUNT:	**Part A (2000 words, excluding a cover page and reference list), Part B (7 minutes).**

Description

Purpose

In this individual assignment, you will complete two tasks: A research report and a video presentation. The written research report (Part A) will be prepared for a large organisation and will justify selected responsible AI principles and address the organisation's interests. The video presentation (Part B) will be prepared for AI users and the organisation's stakeholders and justify that the ethical principles will address their interests.

This task provides you with opportunities to learn specific knowledge (GLO1, ULO2, and ULO3) and skills (GLO2, GLO4 & ULO4). By completing this task, you will develop skills in researching, understanding, applying, and presenting information required by business professionals.

Context/Scenario

SecureBank is a leading financial institution that processes millions of transactions daily. To enhance security and protect customers from fraud, the bank is implementing an AI-powered fraud detection system. This system analyses transaction patterns in real time, flags potentially fraudulent activities, and automatically takes preventive measures such as blocking suspicious transactions or alerting customers.

While this AI system has the potential to significantly reduce financial fraud, the bank's Chief Risk Officer, David Chen, is concerned about the ethical implications of its use. Key issues include the accuracy of fraud detection algorithms (to avoid false positives that could inconvenience legitimate customers), transparency in decision-making, potential biases in detecting fraud across different customer demographics, and ensuring that automated security measures do not unfairly penalize certain users.

Assignment Tasks

PART A (Research report)
Imagine you are assisting SecureBank's executive management board with the project of deploying AI-powered fraud detection system ethically and responsibly. Your task is to advise the executive team on

the possible ethical and social implications of introducing these technologies into their services and provide principles of AI ethics and responsible AI to help address their concerns.

You will critically analyse and synthesize research resources on AI ethics and responsible AI guidelines and governance frameworks to identify and develop a specific ethical and responsible AI framework for SecureBank to use when deploying AI-powered fraud detection system.

As this is a research report, you are expected to leverage a mix of commercial and academic ethical frameworks relevant to AI and emerging technologies in the banking sector. This will involve examining the resources provided during the course as well as engaging with new materials that may be relevant to this context.

Part A Objectives

- Analyse and articulate the key ethical considerations involved in implementing AI for banking transaction services, including issues related to data privacy, algorithmic bias, and decision-making transparency.
- Develop a structured framework for the ethical and responsible use of AI technologies within SecureBank. This framework should address critical factors such as data confidentiality, fairness in fraud detection, and the accuracy of AI-driven recommendations.
- Provide actionable guidelines for SecureBank to implement an AI-powered fraud detection system. These guidelines should focus on ensuring accuracy of fraud detection algorithms, transparency in decision-making, minimizing biases in fraud detection across different customer demographics, and preventing automated security measures from unfairly penalizing legitimate users.

This assignment encourages you to critically examine the intersection of AI technology and banking services, fostering a deeper understanding of how ethical principles influence the responsible adoption of AI in high-stakes financial environments.

As this is a research report, we have selected the following sources to assist you in completing the task. These sources have been chosen as they offer a synthesis of commercial and academic ethical frameworks that are relevant to AI and emerging technologies. It's worth noting that the resources listed below include articles that we have studied over the past 10 weeks of the unit, as well as articles that may be new to you.

1. Ashok, M., Madan, R., Joha, A., and Sivarajah, U. (2022). Ethical framework for Artificial Intelligence and digital technologies. International Journal of Information Management, 62, 1-17. https://ezproxy.deakin.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edselp&AN=S0268401221001262&site=eds-live&scope=site
2. Blackman, R. (2020). A Practical Guide to Building Ethical AI. Harvard Business Review. https://ezproxy.deakin.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=heh&AN=146922131&site=eds-live&scope=site
3. Dawson, D., Schleiger, E., Horton, J., McLaughlin, J., Robinson, C., Quezada, G., Scowcroft, J., and Hajkowicz, S. (2019). Artificial Intelligence: Australia's Ethics Framework. Data61 CSIRO, Australia. (Retrieved online from https://www.csiro.au/en/research/technology-space/ai/ai-ethics-framework)
4. Jobin, A., Ienca, M., & Vayena, E. (2019). The global landscape of AI ethics guidelines. *Nature Machine Intelligence*, *1*(9), 389-399. https://www.nature.com/articles/s42256-019-0088-2

5. Mikalef, P., Conboy, K,. Lundström, J. E., & Popovič, A. (2022). Thinking responsibly about responsible AI and 'the dark side' of AI. *European Journal of Information Systems*, *31*(3), 257-268. https://ezproxy.deakin.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edswss&AN=000754428800001&site=eds-live&scope=site
6. New South Wales Government (2024). Artificial Intelligence Ethics Policy. (Retrieved online from https://www.digital.nsw.gov.au/policy/artificial-intelligence/artificial-intelligence-ethics-policy)
7. UNESCO. (2022). Recommendation on the Ethics of Artificial Intelligence. https://unesdoc.unesco.org/in/documentViewer.xhtml?v=2.1.196&id=p::usmarcdef_0000381137&file=/in/rest/annotationSVC/DownloadWatermarkedAttachment/attach_import_e86c4b5d-5af9-4e15-be60-82f1a09956fd%3F_%3D381137eng.pdf&locale=en&multi=true&ark=/ark:/48223/pf0000381137/PDF/381137eng.pdf#1517_21_EN_SHS_int.indd%3A.8926%3A6

PART B (Video)

Following the development of an ethical and responsible AI framework for deploying AI-powered fraud detection system within SecureBank, there is a need to communicate and demonstrate the effectiveness of these principles to a broader audience. This includes customers, bank employees, regulators, cybersecurity experts, and consumer advocacy organisations. The goal is to ensure that all stakeholders understand how AI can be used safely and responsibly to enhance fraud detection services, addressing any concerns about the accuracy of fraud detection algorithms, transparency in decision-making, biases in fraud detection across different customer demographics, and automated security measures from unfairly penalizing legitimate users etc.

For Part B, imagine that you are required to assist SecureBank with developing a comprehensive communication strategy aimed at persuading the bank customers and external stakeholders about the benefits and safeguards of using AI-powered fraud detection system. The objective is to demonstrate how the ethical framework and principles outlined in Part A effectively address the ethical challenges and concerns stakeholders might have when engaging with AI in banking transactions. This task focuses on building trust and transparency around the use of AI technologies in banking services.

Part B Objectives

- Develop a 7-minute video presentation that outlines how SecureBank will **inform** and engage with *customers, bank employees, regulators, cybersecurity experts, and consumer advocacy organisations* about the introduction of AI-powered fraud detection system.
- Create key messages that highlight the benefits of AI in enhancing fraud detection while addressing potential ethical concerns, such as the accuracy of fraud detection algorithms, transparency in decision-making, biases in fraud detection across different customer demographics, and the risk of automated security measures unfairly penalizing legitimate users.
- Propose strategies for ongoing engagement and feedback collection from stakeholders to ensure that the AI tools continue to meet ethical standards and are responsive to the needs of the society.

Specific Requirements

What to include in the Research Report (Part A):

You will write an individual Research Report comprising the following:

- A cover page with assignment title ('Assessment 2 – Research Report'), unit code and name, your full name and student ID, and the word count. This cover page is included in the word count.

- A maximum of 2000 words for the report on the topic above for the **director** of SecureBank and executive management board. You are encouraged to use examples, tables, graphics, diagrams, illustrations, to support arguments in the report.
- The report should have a very short introduction (approximately 100 words), multiple sections/subsections (based on your analysis, synthesis, and findings), and very short conclusion (approximately 100 words). Note that in-text citations for the research sources listed above are included in the word count. However, a reference list is not included in the word count. Cited sources and a reference list should use APA7 Referencing Style.

In the Research Report, you are expected to:

- utilize the aforementioned resources to identify responsible AI principles that SecureBank should adhere to when deploying the AI-powered fraud detection system project in a responsible manner.
- explain what can go wrong if each principle is not followed, especially for the organisation (i.e., SecureBank). It is therefore important that you include all ethical principles which you can justify are relevant to the context of SecureBank.
- justify, with examples, why each ethical principle is critically important to SecureBank and the AI deployment project, including what can go wrong if each principle is not followed, for other stakeholders of such as customers, bank employees, regulators, cybersecurity experts and perspective of workers/trades unions and citizen/resident advocacy organisations.

Note: As this is a Research Report, we do not have a specific template for it. Please structure the report based on your analysis, synthesis and findings.

What to include in the video (Part B):

You will create an individual Video Recording, no more than 7 minutes, to post on SecureBank's website and to convince the general public on the safe use of AI in SecureBank. The video will be a slideshow of content and voice-over explaining each slide. GLO2 Communication and GLO4 Critical thinking will be assessed on the degree to which your arguments are justified convincingly.

Please note that you can use PowerPoint slides to support your video presentation. You are not required to include your body or face in the video, but you are free to do so if you feel it will improve GLO2 Communication. You must record a voice-over. You will cover the techniques and skills you need through the Oral Communication Toolkit in Assignment resources and Week 10 Learning materials.

In the video, you should:

- briefly discuss how the use of AI-powered fraud detection system can protect customers from fraud if it is used responsibly.
- briefly discuss the principles you proposed in your Research Report (i.e., Part A)
- advise and convince the public (including customers, bank employees, regulators, cybersecurity experts, and consumer advocacy organisations) on how the proposed principles that you identified in Part A can effectively address any ethical concerns they may have regarding the use of AI-powered fraud detection system in SecureBank. It is important that you use examples to persuade them.

Learning Outcomes

This task allows you to demonstrate your achievement towards the Unit Learning Outcomes (ULOs) which have been aligned to the Deakin Graduate Learning Outcomes (GLOs). Deakin GLOs describe the knowledge and capabilities graduates acquire and can demonstrate on completion of their course. This assessment task

is an important tool in determining your achievement of the ULOs. If you do not demonstrate achievement of the ULOs you will not be successful in this unit. You are advised to familiarise yourself with these ULOs and GLOs as they will inform you on what you are expected to demonstrate for successful completion of this unit.

The learning outcomes that are aligned to this assessment task are:

Unit Learning Outcomes (ULOs)		**Graduate Learning Outcomes (GLOs)**
ULO2	Explain and justify the implications of emerging ethical and regulatory concerns	GLO1: Discipline-specific knowledge and capabilities
ULO3	Critically examine, analyse, and apply ethical and governance perspectives to design, develop and deploy AI technologies responsibly.	GLO1: Discipline-specific knowledge and capabilities GLO4: Critical thinking
ULO4	Convincingly argue, orally and in writing to communicate perspectives to non-technical professionals, business decision-makers, and the community at large.	GLO2: Communication

Submission

- Submit your Research Report (Part A) to Assignment 2 Dropbox on the MIS715 unit site.
- Upload your video presentation (Part B) to Panopto platform in the Assessment 2 Dropbox. See the instructions for recording and submitting your video presentation here. You can also find the instruction document in the Assignment 2 resource folder on the unit site.

You must submit your assignment in the Assignment Dropbox in the unit CloudDeakin site on or before the due date. When uploading your assignment, name your document using the following syntax: **<your surname_your first name_your Deakin student ID number_[unitcode].doc (or '.docx')**. For example, 'Jones_Barry_123456789_ABC123.doc'.

Submitting a hard copy of this assignment is not required. You must keep a backup copy of every assignment you submit until the marked assignment has been returned to you. In the unlikely event that any of your assignments is misplaced you will need to submit your backup copy.

Any work you submit may be checked by electronic or other means for the purposes of detecting collusion and/or plagiarism and for authenticating work.

When you submit an assignment through your CloudDeakin unit site, you will receive an email to your Deakin email address confirming that it has been submitted. **You should check that you can see your assignment in the Submissions view of the Assignment Dropbox folder after uploading and check for, and keep, the email receipt for the submission.**

Marking and feedback

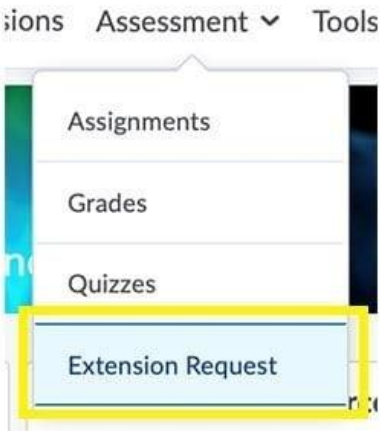
The marking rubric indicates the assessment criteria for this task. It is available in the CloudDeakin unit site in the Assessment folder, under Assessment Resources. The criteria act as a boundary around the task and help specify what assessors are looking for in your submission. The criteria are drawn from the

ULOs and align with the GLOs. You should familiarise yourself with the assessment criteria before completing and submitting this task.

Students who submit their work by the due date will receive their marks and feedback on CloudDeakin 15 working days after the submission date.

Extensions

Extensions can only be granted for exceptional and/or unavoidable circumstances outside of your control. Requests for extensions must be made by 12 noon on the submission date using the online Extension Request form under the Assessment tab on the unit CloudDeakin site. All requests for extensions should be supported by appropriate evidence (e.g., a medical certificate in the case of ill health).



Applications for extensions after 12 noon on the submission date require University level special consideration and these applications must be submitted via StudentConnect in your DeakinSync site.

Late submission penalties

If you submit an assessment task after the due date without an approved extension or special consideration, 5% will be deducted from the available marks for each day after the due date up to seven days*. Work submitted more than seven days after the due date will not be marked and will receive 0% for the task. The Unit Chair may refuse to accept a late submission where it is unreasonable or impracticable to assess the task after the due date. *'Day' means calendar day for electronic submissions and working day for paper submissions.

An example of how the calculation of the late penalty based on an assignment being due on a Thursday at 8:00pm is as follows:

- 1 day late: submitted after Thursday 11:59pm and before Friday 11:59pm– 5% penalty.
- 2 days late: submitted after Friday 11:59pm and before Saturday 11:59pm – 10% penalty.
- 3 days late: submitted after Saturday 11:59pm and before Sunday 11:59pm – 15% penalty.
- 4 days late: submitted after Sunday 11:59pm and before Monday 11:59pm – 20% penalty.
- 5 days late: submitted after Monday 11:59pm and before Tuesday 11:59pm – 25% penalty.
- 6 days late: submitted after Tuesday 11:59pm and before Wednesday 11:59pm – 30% penalty.
- 7 days late: submitted after Wednesday 11:59pm and before Thursday 11:59pm – 35% penalty.

The Dropbox closes Thursday after 11:59pm AEST/AEDT time.

Support

The Division of Student Life provides a range of **Study Support** resources and services, available throughout the academic year, including **Writing Mentor** and **Maths Mentor** online drop-ins and the SmartThinking 24-hour writing feedback service at **this link**. If you would prefer some more in depth and tailored support, **make an appointment online with a Language and Learning Adviser**.

Referencing and Academic Integrity

Deakin takes academic integrity very seriously. It is important that you complete your own work in every assessment task. Any material used in this assignment that is not your original work must be acknowledged as such and appropriately referenced. You can find information about referencing (and avoiding breaching academic integrity) and other study support resources at the following website:
http://www.deakin.edu.au/students/study-support

Your rights and responsibilities as a student

As a student you have both rights and responsibilities. Please refer to the document ***Your rights and responsibilities as a student*** in the Unit Guide & Information section in the Content area in the CloudDeakin unit site.