Nilai
UNIVERSITY

Bachelor of Information Technology (Hons)
Assignment Cover Sheet

CourseCode: DS3006_____   Course Title: Critical Thinking_____
AssignmentTitle: Assignment I_____   Due Date:04/13/2023_____
Date Submitted: 04/13/2023_____   Lecturer Name: Mr.Sarad S. Dhungel_____

To be completed if this is an individual assignment

I declare that this assignment is my individual work. I have not worked collaboratively nor have I copied from any other student's work or from any other source except where due acknowledgement is made explicitly in the text, nor has any part been written for me by another person.

StudentName:Yubraj khatiwada_____   Student ID:_00019440_____

Signature: _____

To be completed if this is a group assignment

We declare that this is a group assignment and that no part of this submission has been copied from any other student's work or from any other source except where due acknowledgement is made explicitly in the text, nor has any part been written for us by another person.

Student ID	Student Name	Signature
_____	_____	_____
_____	_____	_____
_____	_____	_____

Lecturer's comments: _____
_____
Total Marks: _____   Lecturer's
Signature:_____

Feedback to Student:

I/We acknowledged receiving feedback from the lecturer on this assignment.
Student's Signature: _____ _____ _____ _____

Extension certification:

This assignment has been given an extension and is now due on _____.

Lecturer's Signature: _____

Coursework Coversheet for Essay

Name	Yubraj Khatiwada	ID		00019440

Course Code	DS3006	Course Title	Critical Thinking
Course Guide's name		Sarad S. Dhungel	

Extract from the Student Code of Conduct:

ACADEMIC INTEGRITY

Academic integrity is vital to the quality of the academic environment. Cheating, in any form, is a very serious offence which could lead to severe disciplinary action. Cheating includes:

- using unauthorised materials in tests and examinations;
- letting another person take tests or examinations on one's behalf OR taking tests or examinations on another person's behalf;
- working jointly, copying or sharing another student's work and presenting it as one's own piece of work;
- inventing, copying or altering data, quotations or references;
- plagiarising, i.e. taking or using another person's work without attributing the source and thus, giving the impression that it is one's own work.

If you do not understand what any of these terms mean, you should ask your lecturer or tutor to clarify them for you. The full regulations are available in the programme handbook.

STATEMENT OF ORIGINALITY
Except for those parts in which it is explicitly stated to the contrary, this work is my own work. It has not been submitted for assessment for credit previously at this or any other academic or professional institution.

Student signature ……Yubraj Khatiwada……………… Date…………………..

CHECKLIST
Please check the following statements are true and initial each box.

I have included a full reference list using the Harvard style of referencing.	
I have provided Harvard style references for all the ideas, empirical evidence and other materials I have used in the main body of this piece of work.	
I have used quotation marks and referenced all passages (including page numbers) taken word for word from my source material.	
I can make available evidence of the originality of my work, including notes, photocopies, drafts, primary data and computer files.	
I completed this work without any unauthorised help.	

Acknowledgement:

I would like to express my deep and sincere gratitude to my lecturer Mr. Sarad S.Dhungel sir for his guidance and encouragement to providing essential information regarding the assignment. My completion of this assignment could not have been accomplished without the support of my respected sir. I am extending my heartfelt thanks to my parents and friends too, for their encouragement for the completion of this project.

Contents:

Question:

Students are required to submit an argumentative essay of not less than 1000 words. The students can choose their own topic; however, the topic needs to be finalized with the course guide beforehand. The topic must be argumentative, relevant, contextual and debatable. In the essay, the student must develop valid and strong arguments on the selected issue both by responding to the arguments and put forwarding his/her own reasons. The essay should include an introductory paragraph, an argument summary (standardization), a critical evaluation and a concluding paragraph.

It is important to note that it is a research essay. Therefore, students are required to find the relevant arguments and cite the sources accurately. Any act of plagiarism found will not be entertained. Do note that Nilai University uses the Harvard Referencing Style. Examples are as follows:

i. Book:

Author. (year). Title of book. Place of Publication: Publisher.

E.g. Smith, J. (2007). Quantum mechanics. New York: Longman Pearson.

ii. Journal:

Author. (year). Title of Article. Title of Journal volume number (issue number): pages of article.

E.g. Smith, J. I. (2007). Gender Studies: A Necessity. Journal of Social Science 10(4), pp. 25-37.

Is it ethical to use artificial intelligence for decision-making processes?

Introduction:
Artificial intelligence (AI) is becoming more common in decision-making processes across a wide range of industries, from healthcare to finance. The ethical implications of utilizing AI for decision-making, on the other hand, have been a subject of debate. AI is a common tool in modern society, with applications ranging from personal assistants to self-driving cars. One of the most significant areas of development has been in the use of AI for decision-making processes. While AI can provide numerous benefits, including increased efficiency and accuracy, there are also concerns about the ethical implications of using such technology.

Where as AI is self created by human being and all the necessery resources, capabilities of human is fitted on AI through algorithm and programmed to be objective base decisions simly on data and algorithms. Where human can do mistakes such issues can easily be cought by using AI. Humans are imperfect and can make mistakes, and the use of AI can eliminate or minimize these errors. Furthermore, AI can process and analyze large amounts of data much more quickly and accurately than a human could, allowing for better and more informed decisions. This can be particularly important in fields such as healthcare, finance, and law enforcement, where decisions can have life-altering consequences.In this essay, I will argue that using AI for decision-making is ethical under certain conditions.

One of the most significant advantages of using AI for decision-making is the increased speed and efficiency it can offer. Another argument in favor of using AI for decision-making is that it can reduce bias and discrimination. Human decision-making can be influenced by personal biases and prejudices, whether conscious or unconscious. AI, on the other hand, can be programmed to be objective and to base decisions solely on data and algorithms. This can help to ensure that decisions are fair and equitable, and that no individual or group is unfairly disadvantaged.

However, there are also concerns about the ethical implications of using AI for decision-making. One of the most significant of these is the potential for AI to perpetuate or even amplify existing biases and discrimination. AI systems are only as unbiased as the data they are trained on, and if this data is biased or discriminatory, the AI system will be too. This has been seen in numerous cases, including facial recognition technology, which has been found to be less accurate in identifying people with darker skin tones.

Another ethical concern is the potential for AI to undermine human autonomy and agency. If decisions that have a significant impact on people's lives are being made by AI, individuals may feel like they have no control over their own lives. This can be particularly concerning in areas such as healthcare, where AI may be used to make decisions about treatments or surgeries. Individuals may feel like they are being reduced to a set of data points, rather than being treated as individuals with unique needs and preferences.

To address these ethical concerns, it is essential to ensure that AI systems are developed and implemented in an ethical and responsible manner. This includes ensuring that data used to train AI is diverse, representative, and free from bias, and that AI systems are transparent and explainable. It is also important to ensure that humans remain in control of decision-making processes and that individuals are able to understand and contest decisions made by AI.

Arguments:

1st argument: Increased Efficiency and Accuracy.
2nd argument: Reduction of Bias and Discrimination.
3rd argument: Mitigation of Existing Unfair.
4th argument: Human Autonomy and Agency.
5th argument: Ethical Development and Implementation.

Argument and Premises:

1. Increased Efficiency and Accuracy:

AI can process and analyze large amounts of data much more quickly and accurately than humans, enabling better-informed decisions. This can be particularly important in fields such as healthcare, finance, and law enforcement, where decisions can have life-altering consequences. AI can perform tasks that typically require human intelligence, such as visual perception, speech recognition, decision-making, and language translation. AI algorithms can process large volumes of data and identify patterns and insights in a matter of seconds or minutes, which would take humans hours or even days to accomplish. This increased efficiency means that AI can carry out tasks faster and more reliably, without getting tired or making errors due to fatigue or human unfair.
AI chatbots can provide 24/7 customer support, answering frequently asked questions and providing personalized assistance, improving customer satisfaction. AI-powered robots that can perform repetitive tasks with precision and accuracy, increasing productivity and reducing errors. (Mittelstadt et al., 2019)

2. Reduction of Bias and Discrimination:

AI can also be trained on diverse datasets, which can help reduce bias in decision-making. By using a diverse dataset, an AI system can learn to make decisions that are more inclusive and representative of different groups of people. Additionally, AI can be programmed to detect and correct for bias in its decision-making process. For exampl, an AI system can be designed to identify and flag decisions that are likely to be biased and allow human reviewers to intervene and correct those decisions AI can be programmed to be objective and to base decisions simply on data and algorithms, reducing the influence of personal biases and prejudices in decision-making. (Jobin et al., 2019)

3. Mitigation of Existing Unfair:

 AI can reduce bias and discrimination in decision-making by providing a more objective and data-driven approach to decision-making. Traditional decision-making processes may be influenced by conscious or unconscious biases of humans, leading to discriminatory outcomes. AI systems, on the other hand, are designed to process large amounts of data, identify patterns, and make predictions based on those patterns.AI can help mitigate existing unfairness by identifying and addressing biases in the data and decision-making processes that lead to discrimination.AI can be used to analyze lending data and identify patterns of discrimination in lending decisions. This information can be used to develop more inclusive lending practices that are less likely to discriminate against certain groups of people. For example, an AI system can be used to analyze past hiring decisions and identify patterns of discrimination against certain groups. Based on this analysis, the AI system can suggest changes to the hiring process to reduce bias and increase diversity
AI can also be used to monitor and detect unfair practices in real-time. For instance, an AI system can monitor social media and identify instances of hate speech or other discriminatory behavior. This information can be used to take corrective action and mitigate the spread of such behavior.appropriate training data and development of ethical AI algorithms can mitigate this effect. (Caliskan et al., 2017)

4. Human Autonomy and Agency:

Human autonomy and agency, on the other hand, refer to the ability of individuals to make independent choices and act on their own behalf.When it comes to AI, there are concerns about how it may impact human autonomy and agency. One concern is that as AI becomes more advanced, it may replace human decision-making and reduce our ability to exercise autonomy and agency. For example, if an AI system is making decisions for us, we may feel that we have less control over our lives and choices. There are also ways in which AI can enhance human autonomy and agency. For example, AI can be used to help individuals make more informed decisions, by providing them with relevant information and data. Additionally, AI can be used to automate certain tasks, which can free up time and resources for individuals to pursue other goals and interests.Ultimately, the relationship between AI and human autonomy and agency is complex and multifaceted. While there are certainly concerns about how AI may impact our ability to make independent choices and act on our own behalf, there are also opportunities for AI to enhance our autonomy and agency in meaningful ways.Concerns exist regarding the potential for AI to undermine human autonomy and agency, but transparency and explainability of AI systems can help individuals understand and contest decisions. (Mittelstadt et al., 2019)

5. Ethical Development and Implementation:

AI Ethical Development and Implementation refers to the process of designing, building, and deploying AI systems that are aligned with ethical principles and values. This includes ensuring that AI systems do not violate basic human rights, respect privacy, promote fairness and transparency, and do not cause harm to society or individuals. Ethical AI development should prioritize human values and needs. AI systems should be designed to serve human needs, promote human welfare, and respect human dignity. This requires involving diverse stakeholders in the design process, including experts in ethics, social sciences, and humanities.

Fairness and non-discrimination are key principles of AI ethics.AI systems should be free from bias and discrimination, and should promote equal opportunities for all individuals, regardless of their race, gender, ethnicity, or other personal characteristics.Transparency and accountability are necessary for ethical AI. AI systems should be transparent in their decision-making processes and algorithms, and their developers should be accountable for any unintended consequences or harms caused by the systems.Privacy and data protection are essential for ethical AI: AI systems should respect individuals' privacy rights and protect their personal data, including using secure data storage and processing techniques.AI systems must be developed and implemented in an ethical and responsible manner, including ensuring data used to train AI is diverse, representative, and free from bias, and that humans remain in control of decision-making processes. (Jobin et al., 2019)

Brief Summary:

The use of artificial intelligence (AI) for decision-making processes raises complex ethical questions. On one hand, AI has the potential to improve decision-making by removing bias, improving accuracy, and enabling faster analysis of large data sets. For example, AI can be used to predict medical diagnoses, identify potential fraud in financial transactions, and improve traffic flow in cities. The difficulty of holding AI systems accountable for their decisions. Unlike human decision-makers who can be held responsible for their actions, it can be challenging to identify who is responsible for an AI decision, especially when the system is complex and dull. This lack of accountability can lead to mistrust and suspicion of AI systems, which in turn can undermine public support for their use. there are broader ethical considerations around the impact of AI on society. For example, some argue that the increasing use of AI for decision-making could lead to job displacement and worse existing inequalities. Additionally, there are concerns about the potential for AI to be used for criminal purposes, such as surveillance or autonomous weapons. the ethical implications of using AI for decision-making depend on the specific context and application. While AI has the potential to improve decision-making, it is important to carefully consider and mitigate the potential risks and biases associated with its use. This requires a combination of technical expertise, transparency, and stakeholder engagement to ensure that AI is developed and deployed in a way that maximizes its benefits while minimizing its potential harms.

Conclusion:

In conclusion, the ethical use of AI for decision-making is dependent on several factors, including appropriate development and implementation of AI systems, appropriate use cases, and transparency and explainability of decision-making processes. while there are ethical concerns associated with using AI for decision-making, I believe that it can be ethical to do so under certain conditions. The benefits of increased speed, efficiency, and objectivity can outweigh the potential risks, as long as AI systems are developed and implemented in an ethical and responsible manner. As AI continues to play an increasingly significant role in society, it is crucial that we remain alert and ensure that its use aligns with our values and principles. While there are concerns surrounding AI's ability to preserve biases and undermine human autonomy, the benefits of increased efficiency, accuracy, and reduction of bias make ethical AI implementation. For example, AI can be used to predict medical diagnoses, identify potential fraud in financial transactions.

For example, in the medical field, AI can be used to analyze large amounts of patient data and assist doctors in making diagnoses and treatment decisions. However, the use of AI must be carefully monitored to ensure that it does not emphasize existing health disparities or lead to incorrect diagnoses or treatments.

References:

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Marking Scheme:

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Marking Scheme/

	CRITERIA	A	A-	B+	B	B-	C+	C	C-	Fail
1	Introductory Paragraph	9.0-10.0	8.0-8.5	7.5	7.0	6.5	6.0	5.5	5.0	0 – 4.5
	Good background information; brief summary of writer's position, and clear conclusion of the argument									
2	Argument(s)	9.0-10.0	8.0-8.5	7.5	7.0	6.5	6.0	5.5	5.0	0-4.5
	List of Premises in logical order									
	Analysis	45.0-50.0	40.0-44.0	35.0-39.0	30.0-34.0	25.0-29.0	20.0-24.0	15.0-19.0	10.0-14.0	5.0-9.0
3	Type of argument used and analysis to clarify the type of argument used									
4		15	14	13	11.0-12.5	9.0-10.5	7.5-8.5	6.0-7.0	5.0-5.5	0-4.5
	Concluding Paragraph									
	Restatement of conclusion; opinion of article									
5		9.0-10.0	8.0-8.5	7.5	7.0	6.5	6.0	5.5	5.0	0-4.5
	Language Use									
	Quality of language used in terms of vocabulary, grammar and appropriateness.									
6		5.0	4.5	4.0	3.5	3.0	2.5	2..0	2.0	0-1.0
	References									