

ASSIGNMENT COVER PAGE

Programme		Course Code and Title
Bachelor of Computer Science (Hons) Bachelor of Information Systems (Hons)		CES3013/N: Social and Current Issues in Computing
Student's name / student's id		Lecturer's name
0204677 Lim Zhe Yuan		Dr. Ng Fong Chiu
Date issued	Submission Deadline	Indicative Weighting
Week 4 - 24/02/2023	Week 10 - 07/04/2023 – Report	30%
Assignment [2] title	Assignment 2: Report writing (Individual work)	

This assessment assesses the following course learning outcomes

# as in Course Guide	UOWM KDU Penang University College Learning Outcome
CLO4	Evaluate the impact of computing in society.

# as in Course Guide	University of Lincoln Learning Outcome
CLO2	Demonstrate awareness of the nature of professionalism in context.
CLO3	Apply basic tools of case analysis to ethical and legal issues in the field of technology.

Student's declaration

I certify that the work submitted for this assignment is my own and research sources are fully acknowledged.

Student's signature:

Submission Date: **7/4/2023**

Zhe Yuan

TurnItIn Similarity Report

Asgn2TurnItIn

ORIGINALITY REPORT

5 %	5 %	1 %	3 %
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	www.chatbot.com Internet Source	1 %
2	bionyt.s807.sureserver.com Internet Source	1 %
3	Submitted to University of Nebraska at Omaha Student Paper	1 %
4	Submitted to CSU, Pomona Student Paper	1 %
5	nonproliferation.org Internet Source	1 %
6	www.tooltester.com Internet Source	1 %

Exclude quotes On
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ChatGPT - Opportunities and Ethical Issues

- **Introduction**

Chatbots have been a common implementation of AI ever since its recent uprising. With the advancement of machine learning in human perception and cognition, more companies are beginning to adopt conversational AI in handling customer interactions as chatbots are beginning to become an essential service that should be provided to average customers. According to Zabój (2022), research shows that around 62% of consumers prefer to use a customer service bot rather than wait for human agents to answer their requests. Nearly 70% of the consumers justified this point by stating that they felt comfortable handling issues without a human agent and also able to receive instantaneous responses while using chatbots. Companies reap the benefit from the increasing user demand as well as the chatbot market revenue is predicted to amount to 454.8 million dollars by 2027 (Zabój, 2022).

ChatGPT also falls into the category of chatbots. However, its capability to comprehend human language with frightening speed, accuracy and clarity makes it stand out from its predecessors. It was developed by OpenAI, an AI research and deployment company that engrosses themselves in AI-related product development (OpenAI, 2023a). According to an OpenAI blog post (2022b), ChatGPT is trained to interact with users in a more conversational way. The use of dialogue formats allows it to answer follow-up questions or statements, admit or challenge anomalies in premises, or detect inappropriate requests from users (OpenAI, 2022b). It is why ChatGPT obtained its recent popularity and reached 100 million monthly active users on its online demo platform in January 2023 (Chow, 2023). People are invested in toying around with this new technology to present opportunities of utilizing this AI in various industries, however they have also uncovered some ethical threats of using ChatGPT towards society while doing so.

- **Opportunities**

As ChatGPT assimilates itself into our daily operations, people begin to find plenty of opportunities for the advanced chatbot to be capitalized on to make processes easier and increase task efficiency. People also found that certain intangible aspects of current operation methods can generally be improved by using ChatGPT as well. Therefore, sound justifications have been made by the majority of the public to integrate the all-knowing chatbot into workflows despite the negative implications that experts already warned about regarding the over-dependence on AI.

Firstly, ChatGPT has seen a spike of usage in education sectors as people are frequently using it to prove or gain deeper understanding of newly obtained knowledge and concepts. Even if a topic of interest is provided vaguely, ChatGPT is still able to generate a seemingly perfect and comprehensive explanation detailing the workings or knowhows of a certain idea that students normally would not be able to grasp effortlessly. This behavior causes both students and teachers to rely on the chatbot's given answers as it helps cover up knowledge gaps that exist within a person's understanding of a particular subject. Not only does this allow teachers to leverage the power of ChatGPT to articulate ideas more clearly for students that are academically weaker, but it also promotes self-learning tendencies for students as more topics related to the interest are provided by the chatbot for students to look further into. Using ChatGPT, student learning experiences can be further enhanced by personalizing the chatbot's behavior and reconfiguring the chatbot's approach of providing answers, creating a fun and creative environment that tailors to every student's preference (Gupta, 2023).

ChatGPT is also capable of generating and presenting ideas or leads that can be inspirations for content creation (Haynam, 2023). ChatGPT's algorithm allows it to expand concepts that were fed into it to and return many adjacent ideas that relate to the user's context. Hence, it is not a surprise ChatGPT can brainstorm plausible product ideas that users can refer to and take into consideration. It can also generate inspirations by breaking down a large summary of user expectations, provided that the desired deliverable had been specified for the chatbot to generate its response from (Gandía, 2023). This behavior allows company leads to quickly identify foolproof strategies that they can use for production and marketing. In Craig's (2022) own words, menial tasks such as naming new products, writing product descriptions, or analyzing current trends for the benefit of the product can all be automated with the use of ChatGPT. It essentially allows users to skip the time and effort of coming up with new ideas and enable them to put more focus in refactoring results, which helps improve the overall quality and impression of the result to consumers.

As mentioned briefly earlier, ChatGPT's ability to personalize behavior and adapt to conversation settings situationally also presents an opportunity to enhance current customer services. Although existing chatbots were already developed to serve the cause, ChatGPT will be able to revolutionize current digital marketing methods as customer engagement became a priority for ChatGPT and customer queries are responded appropriately and meaningfully in real time (Altaf, 2023). It also means that clunky chatbots with extremely limited dialogue options that churn out painfully robotic lines will begin to phase out in favor of ChatGPT, removing the hassle for end users to deal with the chatbot's disruptive behavior (Albrecht, 2023). Successful interactions between consumers and chatbots trained using ChatGPT will eventually result in higher customer satisfaction and loyalty to a service, leading to higher revenue generation and better user conversion rates (Altaf, 2023) for companies.

Frankly, the opportunities mentioned above have only uncovered the tip of the iceberg that is ChatGPT, and many more opportunities will be discovered as this recent technology matures. As a side note, the use of ChatGPT also birthed the demand for prompt engineering. Prompt engineering is a technique used to properly communicate with conversational algorithms by understanding the inner workings of the algorithm and crafting specific prompts to obtain the desired result (Crossman, 2023). Prompt engineering is becoming a valued skillset to have for developers as it allows them to guide the AI to generate insightful content. Alongside the impending adoption of ChatGPT models in conversational AI, prompt engineers are slowly appearing as an essential role to manage ChatGPT applications and bring out their fullest potential (Kevin, 2023). In other words, job opportunities are being created with ChatGPT's release instead of destroying them.

- **Ethical Issues**

Although public hearsays indicate that ChatGPT adoptions are going to be an overall benefactor to the current society, they are still ideas that were obtained mostly from toying with the chatbot and have not been proven with solid, statistical evidence. In fact, there is a disparity in community standpoints regarding ChatGPT as AI engineers who are more well-versed in AI technologies may not agree that the chatbot is a major technological breakthrough. According to a prompt response about ChatGPT critiques by Bogost (2022), the enthusiasm for ChatGPT is misplaced, and the idea of relying on ChatGPT to generate responses raises serious concerns although it may be impressive on a technical standpoint. Even Sam Altman, the CEO of OpenAI, agrees with this point of view and implied that the current chatbot is still not ready to be used for any important tasks as progress is still being made to ensure the robustness and truthfulness of the chatbot (Castro and Moore, 2023). Ethical concerns of AI remain stagnant for ChatGPT

because ChatGPT is still a trained AI model and contains all shortcomings that are generally shared by other AI applications as well.

- **Issues**

Among the mutual ethical issues that surrounds AI applications, AI biasness is still a prominent issue for ChatGPT. AI biasness is defined as an anomaly in the output of machine learning algorithms due to the prejudiced assumptions made during the algorithm development process or prejudices in the training data (Dilmegani, 2022). According to Gatzemeier (2021), the cause of AI biasness usually stems from the training data itself, as AI models objectively reflect views of the data without understanding what the data mean in different contexts. The use of statistical math to make decisions based on data distributions, weightage or key features that can be used to associate data points into various categories in machine learning algorithms also downplay the significance of data minorities (Gatzemeier, 2021). In ChatGPT's case, users may not obtain neutral results when asking the chatbot about subjects that it learnt with biased data, and problems will arise when its response is regarded as acceptable by the community.

ChatGPT also aids in the dissemination of misinformation. The incapability of understanding contexts and nuances occasionally causes ChatGPT to provide random answers, which inevitably leads to awkward and incorrect responses. People who are unaware of the ChatGPT's mistakes may pass them off as accurate and mislead other people into believing fabricated facts. According to Rose (2022), StackOverflow, a forum for coding resources, even went to great lengths to ban ChatGPT as it was found that people are relying on ChatGPT to answer user questions without verifying the correctness of a solution, threatening the integrity of the platform. Malicious actors could also be motivated by this weakness and use ChatGPT to generate convincing conspiracies in pursuit of monetary gain, political agenda, or the desire to create chaos (Delouya, 2022).

In aspects of education, ChatGPT also poses as a potential threat against academic integrity. While students may use ChatGPT to ease the process of doing research, it may also be used to produce convincing answers for academic usages. According to Barnett (2023), educators have been struggling with handling a wave of student work that were produced with the help of ChatGPT, as they could not decide whether it is genuinely a research tool or a cheating engine. While some people suggests that plagiarism was already an existing academic challenge before the appearance of ChatGPT, it makes educators even more difficult to detect plagiarism even with the help of a plagiarism checker, like TurnItIn (University of Oxford, 2023). OpenAI is still working towards helping educators detect AI plagiarism, but they do not guarantee that ChatGPT will have full detection that curbs the issue (Mok, 2023).

Training ChatGPT for malicious activities also presents a huge risk towards cybersecurity. ChatGPT's language model presents an opportunity for malign users to exploit the AI to write code for cyberattacks. According to Getahun (2023), it has already been found that cybercriminals are harnessing the chatbot's power to create scripts for ransomware and social engineering attacks without needing to have the necessary technological knowledge to do so. In the past, cyberattacks that makes use of linguistic information, such as phishing attacks, may have easier to spot due to the attacker's poor grammar, unusual phrasing, or spelling errors. However, ChatGPT responses can now hide these telltale markers and avoid arousing a victim's suspicion (Trulove, 2023). This issue will slowly become a larger problem when the "underworld" becomes aware of ChatGPT's hacking potential (Damocles, 2023).

Data attributions is another alarming issue of ChatGPT. Ownership of information used by

the chatbot becomes vague and debatable as ChatGPT's model feed off data from intellectual properties of other creators. It is even more frustrating to intellectual property owners that the chatbot responses do not cite any sources of information, making it harder to locate the origin of the data. According to Gal (2023), it is a clear violation of data privacy as OpenAI have not asked for any user consent for the procurement and usage of personal data. Unfortunately, OpenAI have yet to offer procedures for individuals to check whether the company stores their personal information, or to request it be deleted (Gal, 2023).

- **Negative Implications**

Among the implications that over-reliance of ChatGPT can bring, the weakening of human self-sufficient capabilities is a major concern. Critical thinking will be diminished as a result of relying on the responses given by the chatbot and taking it for granted without considering the consequences of the action. People will start to treat ChatGPT responses as the ultimate truth over other sources of information, which is risky considering that ChatGPT sometimes act up and provide inaccurate responses (Dans, 2023). As a result, valuable employees who are actually skillful at their jobs are harder to find because people would depend on ChatGPT for solutions to hide their incompetence. For instance, it has been advised that employers should apply caution when reviewing employment documents to prevent mistaking their perfection for actual quality (Castro and Moore, 2023).

Due to the fact that the chatbot's responses are near perfect and most people rely on it for answers, there may also be an increasing rate of conflicting facts online. People would hold different opinions strongly about a particular subject either due to personal beliefs or because it was information provided by ChatGPT. This creates more division between communities and in the worst case, break out arguments or fights between conflicting parties. The inability to fact check ChatGPT responses also makes it harder for educators to justify the incorrectness of ChatGPT's answers (Haggart, 2023), making it inconvenient for knowledge seekers to choose a point a of view towards conflicting information.

It was also revealed that written content will lose its creativity and attractiveness if they are entirely dependent on ChatGPT. According to Bogost (2022), the bot's output, while fluent and persuasive as text, is consistently uninteresting as prose and is formulaic in structure, style, and content. ChatGPT integrates the standardized "five-paragraph essay" form of writing when formulating responses, and while the AI can produce sensible writing this way, generated AI content always appears more trope-like and unaspiring in the context of professional essays (Bogost, 2022). It greatly affects the production of fresh ideas, and content creators will have a harder time to ensure that their work is neither boring nor annoying to the reader.

There will also be difficulties when it comes to attaching accountability for problems caused by the chatbot. Without data attribution, it is impossible to identify who is liable when a crisis happens. The issue of training the AI's knowledge base by intertwining intellectual property from different individuals and organizations also makes it harder to produce solid evidence for justifying data ownership and apprehend parties that stole the property and reaped the benefits without consent (McKendrick, 2022). This further encourages the proliferation of anonymous attacks, such as identity fraud, as attackers know that they will not be held accountable for their behaviours as they cannot be proved using the chatbot's conversational data.

Finally, the unreliability of the chatbot may also jeopardize the success of a critical operation. According to Pan (2023), researchers have been aiming to develop natural language processing (NLP) tools for the optimization of nuclear facility operation and maintenance. It has

been mentioned that NPL algorithms in nuclear agendas helps evaluate maintenance reports generated by nuclear power plants in bulk for automation, anomaly detection and strategy analysis (Pan, 2023). Therefore, ChatGPT issues, such as cyberattacks or information inaccuracies, will expose vulnerabilities to the meticulous process and cause operational failures, which may endanger human lives.

- **Conclusion**

To summarize, ChatGPT still has a long way to go to be able to integrate itself into current industries without causing any complications, though it is too early to say so. Similarly to how all new technology are handled, experts should continue to monitor the chatbot's performance after its popularity phase and conduct methodological analysis to be able to reach a conclusion for further chatbot improvements and policy changing. Developers at OpenAI are aware of the existing ethical issues that were presented after undergoing public tests and are also finding ways to eliminate them. According to Truly (2023), OpenAI has finally announced the improvements of the AI in ChatGPT 4.0, allowing it to produce more safer and useful responses. It means that it can produce 40% more factual responses, while also being 82% less likely to respond to requests for disallowed content (Truly, 2023). It is crucial for the community to continue observing the progress of the chatbot as it matures over time, as more key areas can be identified for improvement or degradation and protect the harmonious relationship between humans and machines.

- **Recommendations**

For the sake of tackling current ethical issues around ChatGPT, some recommendations can be brought into light. Firstly, it is recommended that users should strike a balance between ChatGPT dependency and manual problem resolutions. Users should become aware of the occasional inadequacy of the chatbot and avoid themselves from solely depending on ChatGPT to complete their tasks. Before accepting AI answers, users should re-evaluate whether the result conforms to their desired outcome. The perceived usefulness of the chatbot will slowly become greater than its perceived failures if users start to take precautions and critically question the AI's capability to complete their tasks.

Next, the chatbot should also start citing the data sources used to generate its responses. The entire discussion about data privacy and accountability stems from the absence of proper citations in a chatbot's response. Therefore, these issues will be reduced if OpenAI developers allocate time and effort in distinguishing data sources and attribute them to their respective owners. This is because the act of referencing the authors gives them the necessary recognition they need to continue producing new content.

Lastly, it is also recommended that the capability to identify its operator should be introduced to the chatbot. Connections established to the AI should be recorded and distinguished using a unique characteristic, such as their IP addresses. This enables better activity monitoring and makes it easier to bust malign users who use the chatbot with the intention to conduct unethical activities. However, it is important to announce the integration of the feature to the public and rectify user terms and conditions as this concerns user privacy. Ultimately, developers must avoid accidental exposure of user locations if there are plans to implement this functionality to the chatbot.

References

- Albrecht, V. (2023) *ChatGPT and its implications for customer experience*. VentureBeat. Available from <https://venturebeat.com/ai/chatgpt-and-its-implications-for-customer-experience/> [accessed 31 March 2023].
- Altaf, Y. (2023) *5 Ways ChatGPT Will Impact Digital Marketing*. Entrepreneur. Available from <https://www.entrepreneur.com/growing-a-business/5-ways-chatgpt-will-impact-digital-marketing/446208> [accessed 31 March 2023].
- Barnett, S. (2023) *ChatGPT Is Making Universities Rethink Plagiarism*. Wired. Available from <https://www.wired.com/story/chatgpt-college-university-plagiarism/> [accessed 1 April 2023].
- Bogost, I. (2022) *ChatGPT Is Dumber Than You Think*. The Atlantic. Available from <https://www.theatlantic.com/technology/archive/2022/12/chatgpt-openai-artificial-intelligence-writing-ethics/672386/> [accessed 1 April 2023].
- Castro, A. and Moore, H. D. (2023) *ChatGPT Shows the Magic of AI — But Beware the Ghost in the Machine: 3 Caveats for Employers*. Fisher Phillips. Available from <https://www.fisherphillips.com/news-insights/chatgpt-shows-magic-ai-beware-the-ghost-in-the-machine.html> [accessed 1 April 2023].
- Chow, R. A. (2023) *How ChatGPT Managed to Grow Faster Than TikTok or Instagram*. Time. Available from <https://time.com/6253615/chatgpt-fastest-growing/> [accessed 30 March 2023].
- Craig, L. (2022) *How to use ChatGPT to generate product ideas & marketing campaigns*. Medium. Available from <https://lindsay-craig.medium.com/how-to-use-chatgpt-3-to-generate-product-ideas-marketing-campaigns-204dee40ab1d> [accessed 31 March 2023].
- Crossman, R. (2023) *What about the jobs ChatGPT could create?* Welcome to the Jungle. Available from <https://www.welcometothejungle.com/en/articles/jobs-created-by-chatgpt> [accessed 31 March 2023].
- Damocles (2023) *The Chilling Potential of ChatGPT for Criminal Activities*. Metaroids. Available from <https://metaroids.com/news/the-chilling-potential-of-chatgpt-for-criminal-activities/> [accessed 1 April 2023].
- Dans, E. (2023) *ChatGPT and the Decline of Critical Thinking*. IE University. Available from <https://www.ie.edu/insights/articles/chatgpt-and-the-decline-of-critical-thinking/> [accessed 1 April 2023].
- Delouya, S. (2022) *I asked ChatGPT to do my work and write an Insider article for me. It quickly generated an alarmingly convincing article filled with misinformation*. Insider. Available from <https://www.businessinsider.com/i-asked-chatgpt-to-write-insider-story-it-was-convincing-2022-12> [accessed 1 April 2023].
- Dilmegani, C. (2022) *Bias in AI: What it is, Types, Examples & 6 Ways to Fix it in 2023*. AIMultiple. Available from <https://research.aimultiple.com/ai-bias/> [accessed 1 April 2023].

Gal, U. (2023) *ChatGPT is a data privacy nightmare. If you've ever posted online, you ought to be concerned.* The Conversation. Available from <https://theconversation.com/chatgpt-is-a-data-privacy-nightmare-if-youve-ever-posted-online-you-ought-to-be-concerned-199283> [accessed 1 April 2023].

Gandía, R. (2023) *How to use ChatGPT 4 for lead generation?* FindThatLead. Available from <https://blog.findthatlead.com/en/generate-leads-with-chatgpt> [accessed 31 March 2023].

Getahun, H. (2023) *ChatGPT could be used for good, but like many other AI models, it's rife with racist and discriminatory bias.* Insider. Available from <https://www.insider.com/chatgpt-is-like-many-other-ai-models-rife-with-bias-2023-1> [accessed 1 April 2023].

Getahun, H. (2023) *It's not just you: Cybercriminals are also using ChatGPT to make their jobs easier.* Insider. Available from <https://www.businessinsider.com/chatgpt-cyber-crime-phishing-malware-artificial-intelligence-2023-2?op=1> [accessed 1 April 2023].

Gupta, P. (2023) *ChatGPT for Students: How can students use ChatGPT?* Writesonic. Available from <https://writesonic.com/blog/chatgpt-for-students/#personalized-experience> [accessed 31 March 2023].

Haggart, B. (2023) *Unlike with academics and reporters, you can't check when ChatGPT's telling the truth.* The Conversation. Available from <https://theconversation.com/unlike-with-academics-and-reporters-you-cant-check-when-chatgpts-telling-the-truth-198463> [accessed 1 April 2023].

Haynam, J. (2023) *Using ChatGPT to Generate Content Ideas and Write Blog Posts.* Interact. Available from <https://www.tryinteract.com/blog/using-chatgpt-to-generate-content-ideas-and-write-blog-posts/> [accessed 31 March 2023].

Kevin, D. (2023) *ChatGPT: Prompt Engineering 101, HustleGPT? Here's how to unlock the tool's full potential.* LinkedIn. Available from <https://www.linkedin.com/pulse/chatgpt-prompt-engineering-101-hustlegpt-heres-how-unlock-kevin-dang/> [accessed 31 March 2023].

McKendrick, J. (2022) *Who Ultimately Owns Content Generated By ChatGPT And Other AI Platforms?.* Forbes. Available from <https://www.forbes.com/sites/joemckendrick/2022/12/21/who-ultimately-owns-content-generated-by-chatgpt-and-other-ai-platforms/?sh=5b89bb955423> [accessed 1 April 2023].

Mok, A. (2023) *CEO of ChatGPT maker responds to schools' plagiarism concerns: 'We adapted to calculators and changed what we tested in math class'.* Insider. Available from <https://www.businessinsider.com/openai-chatgpt-ceo-sam-altman-responds-school-plagiarism-concerns-bans-2023-1?op=1> [accessed 1 April 2023].

OpenAI (2022a) *About.* Available from <https://openai.com/about> [accessed 30 March 2023].

OpenAI (2022b) *Introducing ChatGPT.* Available from <https://openai.com/blog/chatgpt> [accessed 30 March 2023].

Pan, Y. (2023) *ChatGPT: Opportunities and Challenges for the Nuclear Agenda.* Middlebury Institute of International Studies at Monterey – James Martin Center for Nonproliferation Studies. Available from <https://nonproliferation.org/chatgpt-opportunities-and-challenges-for-the-nuclear-agenda/> [accessed 1 April 2023].

Rose, J. (2022) *Stack Overflow Bans ChatGPT For Constantly Giving Wrong Answers*. Vice. Available from <https://www.vice.com/en/article/wxnaem/stack-overflow-bans-chatgpt-for-constantly-giving-wrong-answers> [accessed 1 April 2023].

Trulove, P. (2023) *ChatGPT Opens New Opportunities for Cybercriminals: 5 Ways for Organizations to Get Ready*. DARKReading. Available from <https://www.darkreading.com/vulnerabilities-threats/chatgpt-opens-new-opportunities-for-cybercriminals-5-ways-for-organizations-to-get-ready> [accessed 1 April 2023].

Truly, A. (2023) *GPT-4: how to use, new features, availability, and more*. DigitalTrends. Available from <https://www.digitaltrends.com/computing/chatgpt-4-everything-we-know-so-far/> [accessed 1 April 2023].

University of Oxford (2023) *Four lessons from ChatGPT: Challenges and opportunities for educators*. Centre for Teaching and Learning. Available from <https://wwwctl.ox.ac.uk/article/four-lessons-from-chatgpt-challenges-and-opportunities-for-educators> [accessed 1 April 2023].

Zabój, D. (2022) *Key Chatbot Statistics You Should Follow in 2023*. ChatBot. Available from <https://www.chatbot.com/blog/chatbot-statistics/> [accessed 30 March 2023].

[CES3013/N: Social and Current Issues in Computing]
MARKING RUBRIC
ASSIGNMENT [2]
(30%)

REPORT COMPONENT (100%)

LEARNING OUTCOMES	MARKING CRITERIA	SCALE						YOUR MARKS	
		Fail (0-49)	3 rd Class (50-59)	2 nd Lower Class (60-69)	2 nd Upper Class (70-79)	1 st Class (80-100)			
CLO4: Evaluate the impact of computing in society	1. Presentation of report structure and development of current social/ legal judgment on a social issues related to computing technology (20%)	Poor report structure in the write-up pertaining to the development of the current social/ legal judgment on social issues related to computing technology.	Fair report structure in the write-up pertaining to the development of the current social/ legal judgment on a social issue related to computing technology.	Good report structure in the write-up pertaining to the development of the current social/ legal judgment on a social issue related to computing technology.	Very good report structure in the write-up pertaining to the development of the current social/ legal judgment on a social issue related to computing technology. The write-up of the current social/ legal judgment on a social issues related to computing technology is equipped with detail discussions.	Excellent report structure in the write-up pertaining to the development of the current social/ legal judgment on social issues related to computing technology. The write-up of the current social/ legal judgment on a social issues related to computing technology is insightful.	Weightage 20%	Actual Mark	
	2. Identification and justification of social and ethical issues of the selected topic and its implications to the computing society (40%)	Poor identification and justification of social and ethical issues of the selected topic and its implications to the computing society. Lacking of Research components.	Fair performance in identification and justification of social and ethical issues of the selected topic. The implications of the selected topic to the computing society require further consideration.	Good coverage in identification and justification of social and ethical issues of the selected topic. The implications of the selected topic to the computing society is well considered.	Very good coverage in identification and justification of social and ethical issues of the selected topic. The implications of the selected topic to the computing society are very well evaluated.	Excellent coverage in identification and justification of social and ethical issues of the selected topic. The implications of the selected topic to the computing society are fully justified with excellent evaluation.	Weightage 40%	Actual Mark	
	3. Evidence of research and wider reading with appropriate in-text citation and referencing using Harvard Style (20%)	Poor evidence of research.	Little evidence of research with little in-text citation and referencing using Harvard Style.	Average evidence of research with appropriate in-text citation and referencing using Harvard Style.	Good evidence of research with clear in-text citation and referencing using Harvard Style.	Excellent evidence of research with outstanding efforts in organizing the in-text citation and referencing using Harvard Style.	Weightage 20%	Actual Mark	
	4. Quality of summary/ conclusions (20%)	Poor summary of social and ethical issues of the selected topic and its implications to the computing society.	Some attempt to summarize the social and ethical issues of the selected topic and its implications to the computing society.	Average summary in social and ethical issues of the selected topic and its implications to the computing society.	Good summary in social and ethical issues of the selected topic and its implications to the computing society.	Excellent summary in social and ethical issues of the selected topic and its implications to the computing society.	Weightage 20%	Actual Mark	
		Total (100%)							