DESCRIPTION OF COURSEWORK

Course Code	SOF106
Course Name	Principles of Artificial Intelligence
Lecturer	Dr Abdulrab Hakim Qaid Abdullah
Academic Session	2025/04
Assessment Title	Project (Final Assessment)

A. Introduction/ Situation/ Background Information

This task assesses students' proficiency in Artificial Intelligence (AI) programming and research. The students are free to choose any AI-related topic and apply their skills to develop AI-based applications or conduct AI research. There are no restrictions on programming languages, libraries, frameworks, IDEs, or technical settings. The project outcomes can take various forms such as console applications, windows applications, websites, mobile applications, research papers, or any other format that best suits the project. However, **PLAGIARISM** is strictly prohibited.

B. Course Learning Outcomes (CLO) covered

At the end of this assessment, students are able to:

CLO 1 Describe broad knowledge of the basic principles of AI.

CLO 2 Differentiate the related AI algorithm and programming.

CLO 3 Demonstrate ability to analyse and improve the algorithm.

CLO 4 Share knowledge and skills for solving practical problems using suitable AI algorithm.

[CLO1,C2, PLO1], [CLO2, C4, PLO2] , [CLO3, C3, PLO7], [CLO4, A3, PLO5]

C. University Policy on Academic Misconduct

1. Academic misconduct is a serious offense in Xiamen University Malaysia. It can be defined as any of the following:

i. **Plagiarism** is submitting or presenting someone else's work, words, ideas, data or information as your own intentionally or unintentionally. This includes incorporating published and unpublished material, whether in manuscript, printed or electronic form into your work without acknowledging the source (the person and the work).
ii. **Collusion** is two or more people collaborating on a piece of work (in part or whole) which is intended to be wholly individual and passed it off as own individual work.
iii. **Cheating** is an act of dishonesty or fraud in order to gain an unfair advantage in an assessment. This includes using or attempting to use, or assisting another to use materials that are prohibited or inappropriate, commissioning work from a third party, falsifying data, or breaching any examination rules.

2. All assessments submitted must be the student's own work, without any materials generated by AI tools, including direct copying and pasting of text or paraphrasing. Any form of academic misconduct, including using prohibited materials or inappropriate assistance, is a serious offense and will result in a zero mark for the entire assessment or part of it. If there is more than one guilty party, such as in case of collusion, all parties involved will receive the same penalty.

D. Instruction to Students

Students are required to form groups consisting of **SIX (6)** members each. The students are encouraged to explore topics related to artificial intelligence, including various methods and algorithms, for their project or research. There are no limitations based on the content covered in the course. It is essential to note that the evaluation will focus primarily on **TWO (2)** components: Component 1: Project Development and Component 2: Project Report with Demonstration. Your project report are required to conduct **Turnitin**.

The deadline for this assessment is **20th June, 2025 by 5pm**. Submissions after this date will receive a **0 Grade**. Only group leaders are responsible for submitting the files on the Moodle platform. The files should be named with your Group Number. If your file is too large to be submitted in Moodle, submit in Moodle you Word file containing the OneDrive link.

E. Evaluation Breakdown

No.	Component Title	Percentage (%)
1.	Project Development	25
2.	Project Report + Project Demonstration	25
	TOTAL	**50**

F. Task(s)

Component 1 : Project Development (25%) [CLO1,CLO2,CLO3,CLO4]

Students are expected to apply the knowledge acquired or explore further. The coursework deadline is on **20th June, 2025 by 5pm**. Submissions should be made to your respective lecturer via the Moodle platform. Late or no submission will result in 0 marks for your final assessment. All submissions are through Moodle platform. Submit a fully completed project together with the fully completed project source code that demonstrate the following:

a) Code Quality (10%)

b) Implementation of artificial intelligence methods and algorithms relevant to your project or research (10%)

c) Completeness and complexity of your project (5%)

Component 2: Project Report + Project Demonstration (25%) [CLO1,CLO2,CLO3,CLO4]

You are required to write a report on your practical project with a limit of 30 pages (excluding the Appendix and Front Pages). The report needs to be clear, concise and well-structured. The deadline of this coursework is on **20th June, 2025 by 5pm.** Submissions should be made to your respective lecturer via the Moodle platform. Late or no submission will result in 0 marks for your final assessment. All submissions are through Moodle platform. Your project presentation and demonstration will be conducted on Week 13 through Week 15 during your class hours.

Your report must have the following items:

a) Title: Provide a clear and descriptive title that represents the topic and focus of your project.

b) Abstract: Offer a concise summary of your project, including its objectives and outcomes.

c) Introduction: Present an overview of the topic you have chosen for your project and explain why you selected it. Discuss its significance and relevance to your field of study or interest.

d) Methodology: Describe the steps and techniques used to identify, select, process, and analyze information related to your chosen topic. Outline how tasks among your team members were divided.

e) Validation/Verification: Explain the methods used to test and validate the outcomes of your project. Discuss any experiments, simulations, or evaluations conducted to ensure the accuracy and effectiveness of your developed project.

f) Conclusion: Provide a summary of your project, highlighting its key findings, achievements, and contributions. Reflect on the overall experience and discuss any insights gained during the process/future works.

Write a concise technical report of the fully completed application of not more than 30 pages which fulfill the following:

a) Project Report (10%)

b) Presentation (10%)

c) Demonstration (5%)

APPENDIX 1

MARKING RUBRICS

		Score and Descriptors				
No.		**Poor**	**Average**	**Excellent**	**Weight (%)**	**Mark**
Component 1: Project Development						
		0 - 4	**5 - 7**	**8 - 10**	**10**	
1	Code quality	Codes are poorly structured. Not fully functional. Not documented.	Codes are sufficiently documented and mostly functional. Satisfactorily structured	Codes are fully functional and well structured and documented		
		0 - 4	**5 - 7**	**8 - 10**	**10**	
2	Implementation of algoritm related to AI	Incomplete development of the method.	Complete development of method.	Completed\ enhanced the developed methods.		
		0-2	**3**	**4-5**	**5**	
3	Completeness and complexity of your project	The functionalities that are implemented are non-functional	All functionalities are implemented and functional	All the functionalities are fully implemented and functional Implemented extra functionalities.		
				Subtotal	**25**	
Component 2: Project Report + Project Demonstration						
		0 - 4	**5 - 7**	**8 - 10**	**10**	
1	Project Report	Poor writing quality Poor or no formatting / presentation Lack of technical content	Satisfactory writing quality, grammar and flow. Substantial technical content with used method.	Good writing quality, grammar and flow Well formatted and good presentation Demonstrate excellent technical content based the method used		
		0 - 4	**5 - 7**	**8 - 10**	**10**	
2	Presentation	Poor quality slides Poor time management Speech that is unclear	Satisfactory quality slides Speech that is satisfactory and understandable	High quality slides Good time management Speech that is clear and impactful		
		0-2	**3**	**4-5**	**5**	
3	Demonstration	Poor demonstration that is unclear The developed application/research is not functioning/implemented fully	Satisfactory demonstration The developed application/research is partially functioning/implemented fully	Good demonstration The developed application/research is fully functioning and logical		
				Subtotal	**25**	
				Grand Total	**50**	

Note to students: Please attach this appendix together with the submission of coursework