



DESCRIPTION OF COURSEWORK

Course Code	AIT102
Course Name	Python and TensorFlow Programming
Lecturer	Zhang Yingqian
Academic Session	202509
Assessment Title	Group project (Code)

A. Introduction/ Situation/ Background Information

This project evaluates the students' ability to develop a complete python application and solve practical problems that illustrates understanding of core concepts from the course. It also will measure student's teamwork and communication skills.

B. Course Learning Outcomes (CLO) covered

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

CLO 1: Demonstrate ability to write, test, and debug Python code.

CLO 4: Solve practical problem through teamwork using good communication skills.

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 This includes incorporating published and unpublished material, whether in manuscript, printed or electronic form into your work without acknowledging the source (the person and the work).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

This final project is worth 30 marks. This project is a group project. Each group shall **contain 6-7 students**. It is not allowed to submit any project that you have submitted before to any other course.

Group leader should submit a zip file named as "YourgroupID_FinalProject.zip" containing:

1. Project cover named as "YourgroupID_Cover.pdf" and contains your project title, your names, students' id, declaration and marking rubrics.
2. A README.txt that acts as an instruction manual for your program. Explain how the program works and what are the requirements for the program from the user's perspective.
3. The entire project folder for your program, including all source code and assets (images, etc).
4. A main.py file that can be used to run your program properly (test it before you submit). Just put this file inside your project folder before you submit. If you have extra data file, the related files need to be added in the same folder.

Submit your final project on Moodle. The maximum file size on Moodle cannot exceed 20MB. If your work exceeds 20MB, you should put your files on OneDrive or XMU drive. and, the related link needs to be added to your project cover file.

The deadline is **18:00, 3th Jan 2026**. Overdue penalty will be given to the project that is submitted after the deadline.

E. Evaluation Breakdown

No.	Component Title	Percentage (%)
1.	Program Functionality	10
2.	Level of Effort	10
3.	Code Quality	5
4.	Team work	5
	TOTAL	30

F. Task(s)

You are to design and write a Python application. Here are some ideas of projects

<https://www.upgrad.com/blog/artificial-intelligence-projects-in-python/>

<https://careerkarma.com/blog/python-projects-beginners/>

Note that some Python code is provided in these. You may use some of this code but you must use comments to provide the URL where you found the code you modified.

1. Your program needs to have some interaction with the user, that is, it prompts and accept input from the user and has an outcome that is shown to the user. TensorFlow-related are preferred.
2. Provide a purpose to the user. Your project can be for a practical purpose or for fun. Expand your knowledge of Python and explore new ideas.
3. Use Python control constructs such as while, for, if, else.
4. Use variables as needed to retain information and to alter data as needed.
5. Make use of strings, list, dictionary and/or other collections of data.
6. Define functions and call functions as needed.
7. Clearly identify through comments the URL of where ideas and code were found.
8. If some portion of your Python code is from another web site or source, you must modify so that it is original for your program.

APPENDIX 1

MARKING RUBRICS

Component Title	Group Project (Code)					Percentage (%)	30
Criteria	Score and Descriptors					Weight (%)	Marks
	Excellent (10)	Good (8-9)	Average (6-7)	Need Improvement (3-5)	Poor (1-2)		
Program Functionality CLO 1	The program meets the listed specifications and does what it was designed to do with no issues.	The program meets the listed specifications and works most of the time with some issues.	The program meets the listed main specifications and works most of the time with some issues.	The program does not meet the listed specifications or works intermittently.	The program does not work at all	10	
Level of Effort CLO 1	The program is very challenging and ambitious and TensorFlow programming is used.	The program is moderately ambitious and takes some effort.	The program is a sense of ambitious and takes some effort.	The program is simple but is well designed.	The program is too simple and is poorly designed	10	
Criteria	Excellent (5)	Good (4)	Average (3)	Need Improvement (2)	Poor (1)		
Code Quality CLO 1	The code is well organized with perfect style (e.g., the code is non-repetitive, methods and variables are named appropriately, control and logical structures are used appropriately, etc.).	The code is well organized and has minor style issue.	The code is completely organized and has minor style issue.	The code is poorly organized or has major style issue	The code is a total mess.	5	
Team work CLO 4	Show clear evidence to assume alternate roles as a group leader and a group member demonstrated in practice	Able to demonstrate in practice the ability to assume alternate roles as a group leader and a group member to achieve the same goal	Able to demonstrate in practice the ability to assume alternate roles as a group leader and members with some effect(s) and require minor improvements.	Attempt to demonstrate in practice the ability to alternate roles as a group leader and group members but with limited effect and require improvements	No clear evidence of ability to assume alternate roles as a group leader and group members demonstrated in practice	5	
TOTAL						30	

Note to students: Please include the marking rubric when submitting your coursework