DESCRIPTION OF COURSEWORK

Course Code	AIT102
Course Name	Python and TensorFlow Programming
Lecturer	Ashwaq Qasem
Academic Session	2023/09
Assessment Title	Group project

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 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 This includes incorporating published and unpublished material, whether in manuscript, printed or electronic form into your work without acknowledging the source (the person and the work).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 50 marks. This project is a group project. Each group shall contain 3-5 students. Group leader should submit a zip file named as "YourgroupID_FinalProject.zip" containing:

1. Project cover named as "YourgroupID_Cover.pdf" and contains your names, students' id and declaration.
2. A .pptx file for your project presentation, named as "YourgroupID_Presentation.pptx".
3. A README.txt that acts as an instruction manual for your program. Explain how it works from the user's perspective!
4. The entire project folder for your program, including all source code and assets (images, etc).
5. 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. and, the related link needs to be submitted as a separate file on Moodle.

The deadline is 18:00, 20 Dec 2023. Overdue penalty will be given to the project that is submitted after the deadline. Presentation date will be on Week 15.

E. Evaluation Breakdown

No.	Component Title	Percentage (%)
1.	Presentation	10
2.	Program Functionality	30
3.	Code Quality	15
4.	Level of Effort	15
5.	Team work	15
6.	Communication Skills	15
	TOTAL	**100%**

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**				**Percentage (%)**	**100**	
Criteria	**Score and Descriptors**					**Weight (%)**	**Marks**
	Excellent (10)	**Good (8-9)**	**Average (6-7)**	**Need Improvement (3-5)**	**Poor (1-2)**		
Presentation	The presentation is well organized with clear structure, good logic and solid content	The presentation is completed with required content.	The presentation is completed with most required content.	The presentation is not well organized.	very poor presentation or no presentation is submitted.	**10**	
Criteria	**Excellent (25-30)**	**Good (22-24)**	**Average (17-21)**	**Need Improvement (7-16)**	**Poor (1-6)**		
Program Functionality	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	**30**	
Criteria	**Excellent (13-15)**	**Good (11-12)**	**Average (8-10)**	**Need Improvement (4-7)**	**Poor (1-3)**		
Code Quality	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.	**15**	
Level of Effort	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	**15**	

Team work	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 group 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	**15**	
Communication Skills	Start, maintain and end a presentation naturally. Use appropriate eye contact and body language. Take turn to talk with respect.	Start, maintain and end a presentation in a friendly manner. Maintain good eye contact. Take turn to talk with respect	Take the initiative to start a presentation. Appropriate eye contact. Take turn to talk	Take part in presentation when initiated by others. Limited eye Contact. Interfere presentation	. Less interest to participate in presentation No eye contacts. Always disrupt presentation	**15**	
					TOTAL	**100**	

Note to students: Please print out and attach this appendix together with the submission of coursework.