DESCRIPTION OF FINAL ASSESSMENT

Course Code	CIC6314
Course Name	Artificial Intelligence
Term	2430
Academic Session	Oct/Nov 2024
Assessment Title	Group Project

A. Introduction/ Situation/ Background Information

This course is to introduce the principles of various learning techniques. It covers topics such as the formulation of learning problems and various applications of AI. The concepts are practiced using the tools from Scikit-Learn, in exercises and a project. In this project, students work in teams to apply the AI knowledge and skills to solve a real-world problem, using Airbnb dataset.

B. University Policy on Academic Misconduct

1. Academic misconduct is a serious offense in Multimedia 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 This includes incorporating published and unpublished material, whether in manuscript, printed or electronic form into your work without acknowledging the source (the person and the work).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 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.

C. Instruction to Students

This is a group project for CIC6321, where a team of students implements AI solutions to Airbnb dataset. Students collaborate, discuss, formulate AI problems, code data processing pipelines, develop AI models, document findings, and perform poster presentations in the project.

Submission type:	A zip file that comprises Jupyter notebook, and poster.
Deadline for Project Submission:	Week 13, 31/01/25, 7 PM
Presentation:	Week 14

Only one team leader needs to perform the submission on behalf of the team. Please name the .zip using your team's name.

For the presentation, each group is given 10 minutes. No extra time will be given, so please plan your time wisely.

D. Evaluation Breakdown

No.	Component Title	Percentage (%)
1.	Group Project (Code, Report)	30
2.	Group Project (Presentation)	20
	TOTAL	**50**

E. Task(s)

In this project, students make use of the open dataset available on Kaggle, a data science competition platform. The details of the dataset can be found at: https://www.kaggle.com/datasets/airbnb/boston. Students should read the description of the dataset thoroughly.

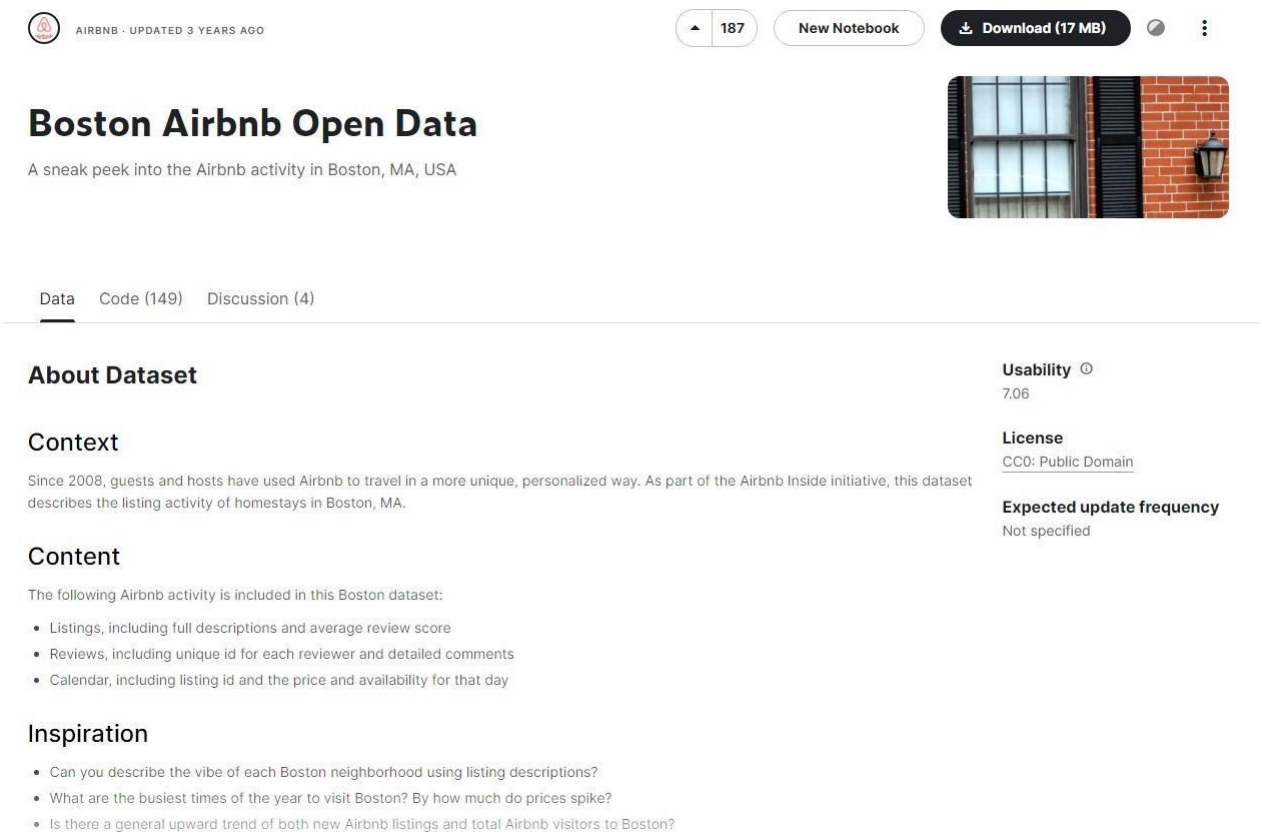

Figure 1 Kaggle Site

Please form a group with your classmates from the same lab group and work on the project. As this is a group project, careful project planning, delegation of work, effective communication between team members is important to complete this project with high quality successfully.

Students work closely with team members on the formulation of AI problems, design of data preparation and processing pipeline, development of AI models, experimental design, analysis of results, and documentation of project's findings.

Report

Please write your report and note using markdown cells in jupyter notebook, containing a precise description of the project. Most intermediate visualization and analysis should be provided in jupyter notebook. The report and presentation slides should include an Introduction, AI problem formulation, data preparation and processing pipeline, description of AI models applied, experiments, results, and discussion.

Code

Your code in jupyter notebook should be documented appropriately with explanations and justification of the analysis performed. The visualization should also be clearly described.

Presentation

Keep the poster presentation concise on what is actually being accomplished. Every team should present within the 10 min given. No extra time will be given, so please plan your time wisely. Each presentation is followed by 5 min Q&A.

APPENDIX 1

MARKING RUBRICS

Component Title	Group Project (Code, Report)				Percentage (%)	30	
Criteria	Score and Descriptors					Weight (%)	Marks
	Excellent (15-13)	Good (12-10)	Average (9-7)	Need Improvement (6-4)	Poor (3-0)		
AI learning knowledge and understanding	Students demonstrate excellent technical & practical understanding of AI learning knowledge and data science pipeline.	Students demonstrate a good practical understanding of AI learning knowledge and the data science pipeline.	Students demonstrate an average understanding of AI learning knowledge and the data science pipeline.	Students demonstrate an insufficient understanding of AI learning knowledge and the data science pipeline.	Students fail to demonstrate an understanding of AI learning knowledge and the data science pipeline.	15	
The quality of Code & Report	Excellent programming practice is followed with very detailed documentation. The report provides a concise summary of what is accomplished with very detailed explanations and discussion.	Good programming practice is followed by documentation. The report provides a concise summary of what is accomplished with detailed explanations and discussion.	Good programming practice is followed by simple documentation. The report provides a summary of what is accomplished with explanations and discussion.	Programming practice is followed by simple documentation. The report provides a summary of what is accomplished with little explanation and discussion.	Programming practice is not followed with documentation. The report provides an unclear summary of what is accomplished with little explanation and discussion.	15	
					TOTAL	30	

Component Title	Group Project (Presentation)				Percentage (%)	20	
Criteria	Score and Descriptors					Weight (%)	Marks
	Excellent (10-9)	Good (8-7)	Average (6-5)	Need Improvement (4-3)	Poor (2-0)		
Content Delivery and Q&A	Project content was delivered clearly with strong findings.	Project content was delivered clearly with findings. Students can	Project content was delivered clearly with findings. Students can	Project content was delivered clearly with inferior findings.	Project content was not delivered clearly with inferior	10	

	Students can answer all questions by the lecturer and students.	**answer questions by the lecturer and students.**	**answer most questions by the lecturer and students.**	**Students can answer most questions by the lecturer and students.**	**findings. Students cannot answer most questions by the lecturer and students.**		
Teamwork & Peer Assessment	**All team worked well together to achieve objectives. Each member contributed in a valuable way to the project since the group was formed.**	**Almost all team worked well together to achieve objectives. Each member contributed in a valuable way to the project.**	**The team worked well together most of the time, with only a few occurrences of communication breakdown or failure to collaborate when appropriate. Members were mostly respectful of each other**	**Few of the team worked together, with only a few occurrences of communication breakdown or failure to collaborate when appropriate. Few members were mostly respectful of each other**	**The team did not collaborate or communicate well since the group formed. Some members would work independently, without regard to objectives or priorities. A lack of respect and regard was frequently noted.**	**10**	
					TOTAL	**20**	

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