FIT5137 Assignment 2 - S2/2023 (Weight = 10%)

Due date: Week 8 - Wednesday, 13 September 2023, 11:55pm

Version: 1.1 –14/07/2023

A. General Information and Submission

- This is an individual assignment.
- Submission method: Submission is online through Moodle as a .mp4 file
- Penalty for late submission: 10% deduction for each day
- Assignment Coversheet: You will need to sign the assignment coversheet

B. Assignment Overview

For this assessment task, you are required to select one of the topics below for your presentation:

1. Topic 1: Data privacy

Sample discussion:

- The importance of data privacy in the digital age
- The risks associated with data breaches and unauthorised access to personal information
- The impact of data privacy incidents on public trust and brand reputation
- The need for transparency in data collection and usage practices

2. Topic 2: Public data or Third party data

Sample discussion:

- The advantages of utilising public data or third-party data for research and analysis
- The limitations and challenges of working with public data, including data quality and availability
- Strategies for integrating public or third-party data into existing data infrastructure
- o The potential risks associated with relying too heavily on external data sources

3. Topic 3: DW granularity

Sample discussion:

- The concept of data granularity and its importance in data warehousing
- o Examples of different levels of granularity, from transaction-level to

- summarised data
- o The impact of granularity on data analysis and reporting capabilities
- The role of data modelling in defining granularity levels

4. Topic 4: Data analytics of DW

Sample discussion:

- The role of data analytics in extracting insights and value from a data warehouse.
- The types of analytical techniques used in data warehouse analytics, such as descriptive, diagnostic, predictive, and prescriptive analytics.
- The importance of data quality and data cleansing in data analytics.
- Examples of data analytics use cases in different industries, such as customer segmentation, demand forecasting, and anomaly detection.
- The challenges of handling big data in data warehouse analytics.

5. Topic 5: Role of DW in data science pipeline

Sample discussion:

- The importance of a robust data warehouse in the data science workflow.
- The role of a data warehouse as a centralised repository for data storage and retrieval.
- How data warehouses facilitate data preprocessing and feature engineering for machine learning models.
- The integration of data warehouse data with external data sources for comprehensive analysis.

The sample discussion questions on each topic can be used as a guidance for your presentation. You are not limited to discuss those questions. You are, however, required to do thorough research on the topic you chose as you will be assessed according to the depths of your discussion on the topic. All your findings and opinions should be summarised and analysed through a **five-minute video presentation**. Therefore, you have to understand the topic well in order to be able to extract the key points without providing low level and technical details.

C. Marking criteria

The grading of the assignment presentation is based on the following criteria:

• The quality of the contents, extracting the key points, the practical application and

authentication.

- The depthness of the research and knowledge of the topic.
- The quality of the slides and list of references.
- The quality of the presentation in terms of preparedness and clarity.

 Note that you are required to record and show yourself in the video in order to show your preparedness. The video presentation will only be accessed by the teaching team for marking purposes.
- The amount of time spent in the presentation (5 minutes). Going overtime or below the required time will result in a penalty.
- The video quality.

D. Assignment Submission

The assignment must be submitted electronically through Moodle. Please ensure the following:

- 1. The video submission must be in the form of an .mp4 file saved as: FIT5137_TopicNo_studentID.mp4.
- 2. You are required to submit the assignment cover sheet in the submission.
- 3. You should zip all files (.mp4 file from #1 above and the coversheet from #2 above) and upload this zip file to Moodle. Please note that the maximum file submission size on Moodle is 500MB.
- 4. The assignment submission must be made through Moodle by the due date: Week 8 Wednesday, 13 September 2023, 11:55pm.
- 5. Submission Cut-off time: **Wednesday, 20 September 2023, 11:55 PM** (Submission link will be unavailable after the cut-off date).

You must ensure that you have all the files listed before submitting your assignment to Moodle. Failure to submit a complete list of files will incur mark penalties.

E. Authorship

This assignment is an <u>individual assignment</u> and the final submission must be identifiably your own work. Breaches of this requirement will result in an assignment not being accepted for assessment and may result in disciplinary action.

As per the University's <u>policy</u> on the guidelines and practice pertaining to the usage of Generative AI, this assignment restricts all use of generative AI. In this assessment, <u>you must not use generative artificial intelligence (AI) to generate any materials or content in relation to the assessment task. In addition, generative AI tools may produce inaccurate content or design, which could have a negative impact on students' understanding. Therefore, the use of generative AI is prohibited for this assignment.</u>

F. Late Penalty

Late assignments submitted without an approved extension may be accepted up to a maximum of seven days with the approval of the Chief Examiner and/or Lecturer but will be penalised at the rate of 10% per day (including weekends and public holidays). Assignments submitted more than seven days after the due date will receive a zero mark for that assignment and may not receive any feedback.

Please note:

- An inability to manage your time or computing resources will not be accepted as a valid excuse. (Several assignments being due at the same time are a fact of university life.)
- Hardware failures, whether of personal or university equipment, are not normally recognised as valid excuses. Failure to back up assignment files is also not recognised as a valid excuse.

G. Special Consideration

From this semester onwards, students will no longer seek extensions from the Chief Examiner/Unit Teaching Team. All extensions / special considerations will now be handled by the central Spec Con team. Please do not email teaching staff to request an extension or special consideration.

Extensions and other individual alterations to the assessment regime will only be considered using the University Special Consideration Policy. Students should carefully read the Special Consideration website, especially the details about what formal documentation is required.

All special consideration requests should be made using the <u>Special Consideration</u> <u>Application</u>.

Please do not assume that submission of a Special Consideration application guarantees that it will be granted – you must receive an official confirmation that it has been granted.

H. Getting help and support

What can you get help for?

Consultations with the Teaching Team

Talk to the Teaching Team: https://lms.monash.edu/course/view.php?id=162086§ion=2

• English language skills

Talk to English Connect: https://www.monash.edu/english-connect

Study skills

Talk to a learning skills advisor: https://www.monash.edu/library/skills/contacts

Counselling

Talk to a counsellor: https://www.monash.edu/health/counselling/appointments

I. Plagiarism and Collusion

Monash University is committed to upholding standards and academic integrity and honesty. Please take the time to view these links.

Academic Integrity Module

Student Academic Integrity Policy

Test your knowledge, collusion (FIT No Collusion Module)

All the best for your Video Presentation!