FIT3003 S2 2022 - Advanced DW Video Presentation (5%)
Due date: Week 12, Monday, 17 October 2022, 11:55pm

A. General Information and Submission

- o   This is an individual assignment.
- o   *Submission method*: Submission is online through Moodle as a **.mp4** file.
- o   *Penalty for late submission*: 10% deduction for each day.
- o   *Assignment Coversheet*: You will need to sign the assignment coversheet.
- o   *Topic selection*: You must submit your topic selection through this form before **Friday, 14 October 2022 at 5PM**.

B. Assignment Overview

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

1.   *Topic 1: ETL process*
     Sample discussion:
     - ○   Explain the ETL process used in the industry.
     - ○   What are the processes involved? How are data cleaning, integration, and transformation done?
     - ○   Where does the ETL sit in the Enterprise Data Warehousing?
     - ○   What is the tool used in ETL?
     - ○   Explain the challenges encountered during the ETL process.
     - ○   Where does the ETL sit in the context of operational databases?

2.   *Topic 2: BI dashboard*
     Sample discussion:
     - ○   Explain your experience in building a dashboard.
     - ○   What is the dashboard used for, what are the objectives?
     - ○   What is the tool that you used, and what was the data?
     - ○   Did the data come from an operational database or from data warehousing?
     - ○   Explain the challenges encountered during the building of the dashboards.

3.   *Topic 3: Data Lake*
     Sample discussion:
     - ○   What is data lake? Explain the difference between data lake and data warehousing.
     - ○   Explain the tools used for data lake.
     - ○   What are the benefits, and challenges/risks of a data lake?
     - ○   Explain a case example where data lake is used.
     - ○   What is the relationship between data lake and data warehousing?

4. *Topic 4: BI Tools*
   Sample discussion:
   - Compare and contrast two BI tools.
   - Explain how each BI tool is used.
   - Explain the relationship between the BI tools and data warehousing.
   - Show some examples of the results from the BI tools.

5. *Topic 5: Data Warehousing and Its Applications*
   Sample discussion:
   - Explain the use of data warehousing in a scientific or engineering application.
   - Did you use Level-0 or upper Level of data warehousing?
   - Does data warehousing help the analytics that you performed on this application?
   - What was the tool that you used to implement the data warehousing for this application?

6. *Topic 6: Data Warehousing and Data Science*
   Sample discussion:
   - Explain the relationship between Data Warehousing and Data Science.
   - Where does data warehousing sit in the context of data science? Explain with an example.
   - Explain how data warehousing helps in data science exploration and algorithms.
   - Explain how data science algorithms and methods can be applied to data warehousing.

The sample discussion questions on each topic can be used as 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 marked 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 depths 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: **FIT3003_TopicNo_studentID.mp4**.
2. You are required to submit the assignment coversheet 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.

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 **individual assignment** 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.

F. 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=140811&section=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

G. Extensions:

If you are experiencing difficulties that you think will impact your ability to meet this deadline, you may apply for an assignment extension. You must apply **no later than two University working days after the due date** of this assignment.

The extension application can be found on *Moodle > Assessments > How to Apply for an Extension*. Please allow two business days for your application to be processed.

Please ensure your application is supported by appropriate documentation. You can find more information about assignment extensions at the Special Consideration website.

H. Special Considerations:

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 Special Consideration Application.

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.

I. 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:

1. 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.)

2. 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.

J. 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!