ASSESSMENT GUIDE

MITS6002

Business Analytics

Semester 1 2021

Assessment overview

Assessments	Overview	Weight	Due date	Unit Learning Outcomes (ULO)
Assessment 1: Case Studies & Presentation	In this assignment you will be given a small case study and you will need to apply your knowledge to Identify, make critical analytics for a business project and prepare a presentation video of the important insights from the analytics.	10%	Session 6	1, 2, 3
Assessment 2: Research Study	In this assessment you will write a critique or report on an academic paper(s) approved by your lecturer in the field of Business Analytics, or a specific industry case study.	10%	Session 9	3, 4, 5
Assessment 3: Assignment	In this assessment you will need to apply your problem-solving skills to analyse a given case and to recommend insights and solution.	30%	Session 12	4, 5
Assessment 4: Final Assessment		50%	During the end of semester exam period	1, 3, 4, 5

Referencing guides

You must reference all the sources of information you have used in your assessments. Please use the IEEE referencing style when referencing in your assessments in this unit. Refer to the Library's referencing guides for more information.

- Guide 1.
- Guide 2.

Academic misconduct

VIT enforces that the integrity of its students academic studies follow an acceptable level of excellence. VIT will adhere to its **VIT Policies, Procedures and Forms** where it explains the importance of staff and student honesty in relation to academic work. It outlines the kinds of behaviours that are "academic misconduct", including plagiarism.

Late submissions

In cases where there are no accepted mitigating circumstances as determined through **VIT Policies, Procedures and Forms**, late submission of assessments will lead automatically to the imposition of a penalty. Penalties will be applied as soon as the deadline is reached.

Short extensions and special consideration

Special Consideration is a request for:

- Extensions of the due date for an assessment, other than an examination (e.g. assignment extension).
- Special Consideration (Special Consideration in relation to a Completed assessment, including an end-of-unit Examination).

Students wishing to request Special Consideration in relation to an assessment the due date of which has not yet passed must engage in written emails to the teaching team to Request for Special Consideration as early as possible and prior to start time of the assessment due date, along with any accompanying documents, such as medical certificates.

For more information, visit **VIT Policies, Procedures and Forms**.

Inclusive and equitable assessment

Reasonable adjustment in assessment methods will be made to accommodate students with a documented disability or impairment. Contact the unit teaching team for more information.

Contract Cheating

Contract cheating usually involves the purchase of an assignment or piece of research from another party. This may be facilitated by a fellow student, friend or purchased on a website. Other forms of contract cheating include paying another person to sit an exam in the student's place.

Contract cheating warning:

- By paying someone else to complete your academic work, you don't learn as much as you could have if you did the work yourself.
- You are not prepared for the demands of your future employment.
- You could be found guilty of academic misconduct.
- Many of for pay contract cheating companies recycle assignments despite guarantees of "original, plagiarism-free work" so similarity is easily detected by TurnitIn.
- Penalties for academic misconduct include suspension and exclusion.
- Students in some disciplines are required to disclose any findings of guilt for academic misconduct before being accepted into certain professions (e.g. law).
- You might disclose your personal and financial information in an unsafe way, leaving yourself open to many risks including possible identity theft.
- You also leave yourself open to blackmail - if you pay someone else to do an assignment for you, they know you have engaged in fraudulent behaviour and can always blackmail you.

Grades

We determine your grades to the following Grading Scheme:

Grade	Percentage
A	80% – 100%
B	70% – 79%
C	60% – 69%
D	50% – 59%
F	0% – 49%

Assessment details

Assessment 1: Case Studies & Presentation

Overview

Weight	Length	Due date	ULO
10%	3-6 Minutes Video Presentation	Session 6	1, 2, 3

Introduction

This assessment item relates to the unit learning outcomes as in the unit descriptor. Objective of this case study to assess the ability of students to understand large data sets and apply their knowledge in analytics to come up with useful insights. This assessment is designed to improve student presentation skills and to give students experience in researching a topic and presenting a report relevant to the Unit of Study subject matter.

Task

1. Find a data set from an open data website

Example:

https://data.gov.au/

https://www.springboard.com/blog/free-public-data-sets-data-science-project/

https://www.dataquest.io/blog/free-datasets-for-projects/

https://www.kaggle.com/datasets

The data source should be large enough (at least **10 columns and 250 rows**).

2. Present your insights including some basic analytics and at least **five different visualisations**.

3. This is now an **individual assignment**, not a group assignment.

4. You need to record your presentation, **3-6 minutes**. You and your slides should be clear in the **video file**.

5. Submit your video file of your presentation in the provided link by the due date. Only original file will be accepted; a link to your video file will not be marked.

Submission Instructions

All submissions are to be submitted through the Moodle. It is your responsibility to upload a quality and standard format file in the Moodle. **The link for video will not be accepted** and will not be marked. Submissions must be made by the due date and time (which will be in the session detailed above) and determined by your Unit coordinator. Submissions made after the due date and time will be **penalized at the rate of 10% per day** (including weekend days).

Marking criteria

You will be assessed on the following marking guide

Total Marks: 50

Task	Description	Marks
Introduction	Present an introduction and objective for the analysis.	5
Data Description	Brief overview and summary of the dataset. Clearly identify the data type, variables and their relationships relevant to the chosen dataset.	10
Insightful Information	Demonstrate and present the insightful information by applying different data analytic tools & techniques.	10
Visualization Tools	Develop at least five visualization graphs, charts or any other relevant visual representations.	10
Presentation	Successfully present the insights including some basic data analytics and different visualisations.	10
Conclusion	A summary, findings and/or recommendation of the analysis.	5

Assessment 2: Research Study

Overview

Weight	Length	Due date	ULO
10%	1500	Session 9	3, 4, 5

Introduction

This assessment item relates to the unit learning outcomes as in the unit descriptor. This assessment is designed to improve student research skills and to give students experience in researching a topic and writing a report relevant to the Unit of Study subject matter.

Task

Perform a literature review on a known topic in business analytics. It can be any topic on tools, methodologies or applications. Some examples include, but not limited to:

- Use of predictive analysis in healthcare industry
- Comparison of BI tools
- Techniques of predictive analysis
- Methods of representing multi-dimensional data in visualisations
- Analytics techniques to improve logistics management
- Security of data and privacy concerns in analytics

Please note that this is an **individual project**. The topic needs to be **chosen before week 7**.

Based on your review you need to submit a report in **IEEE format**; see the word file in the Moodle. Submit your report in a word or pdf format. Your report should be limited to 1200-1500 words.

The paper you select must be directly relevant to one of the above topics or another topic related to what we are studying this semester and be related to Business Analytics. The paper can be from any academic conference or other relevant Journal or online sources such as Google Scholar, or Academic department repositories. All students must select a different paper. You can discuss with your lecturer before week 7 to decide on a topic. The topic needs to be **chosen before week 7**. Students may discuss their chosen topics/papers in discussion forum and may avoid similar paper selected by multiple students. Please note that popular magazine or web-site articles are not academic papers. The paper you chose should be published in the last 5 years (**must be published 2015 or after**). Our report should be limited to approx. 1500 words (not including references). Though your paper will largely be based on the chosen article, you may use other sources to support your discussion or the chosen papers premises. Citation of sources must be in the IEEE style. Based on your review you need to submit a report in **IEEE format**; see the word file in the Moodle.

Report Content

Title Page: The title of the assessment, the name of the paper you are reporting on and its authors, and your name and student ID.

Introduction: Identification of the paper you are critiquing/ reviewing, a statement of the purpose for your report and a brief outline of how you will discuss the selected article (one or two paragraphs).

Body of Report: Describe the intention and content of the article. Document a critical analysis regarding business case, brief overview of the dataset, data type, variables and their relationships. You may assume such details of dataset if not considered in your chosen paper. Moreover, critically describe the adopted business analytics models and decision-making tools which has been used and applied in your chosen paper. In addition to that, report the outcomes of the recommend business directions. If such recommendation is not outlined in your chosen paper, discuss and justify your own view.

Conclusion: A summary of the points you have made in the body of the paper. The conclusion should not introduce any 'new' material that was not discussed in the body of the paper. (One or two paragraphs)

References: A list of sources used in your text. They should be listed alphabetically by (first) author's family name. Follow the IEEE style. The footer must include your name, student ID, and page number.

Note: reports submitted on **high plagiarisms** will be marked according to the VIT plagiarism rule.

Submission Instructions

All submissions are to be submitted through turn-it-in. Drop-boxes linked to turn-it-in will be set up in the Unit of Study Moodle account. Assignments not submitted through these drop-boxes will not be considered.

Submissions must be made by the due date and time (which will be in the session detailed above) and determined by your Unit coordinator. Submissions made after the due date and time will be **penalized at the rate of 10% per day** (including weekend days). The turn-it-in similarity score will be used in determining the level if any of plagiarism. Turn-it-in will check conference websites, Journal articles, the Web and your own class member submissions for plagiarism. You can see your turn-it-in similarity score when you submit your assignment to the appropriate drop-box. If this is a concern you will have a chance to change your assignment and re-submit. However, re-submission is only allowed prior to the submission due date and time. After the due date and time have elapsed you cannot make re-submissions and you will have to live with the similarity score as there will be no chance for changing. Thus, plan early and submit early to take advantage of this feature. You can make multiple submissions, but please remember we only see the last submission, and the date and time you submitted will be taken from that submission.

Your report should be a **single word or pdf document** containing your report.

Marking criteria

You will be assessed on the following marking guide

Total Marks: 50

Task	Description	Marks
Introduction	A statement of the purpose for your report and a brief outline of how you will discuss the selected article.	10
Business Domain Analysis	Document a critical analysis regarding business case, brief overview of the dataset, data type, variables and their relationships. You may assume the details of dataset if not considered in your chosen paper.	10
Analytical Tools/Techniques	Critically describe the adopted business analytics models and decision-making tools which has been used and applied in your chosen paper.	10
Interpret improvement/ recommendation	Report the outcomes of the recommend business directions. If such recommendation is not outlined in your chosen paper, discuss and justify your own view.	10
Conclusion and Reference (If any)	A summary of the points you have made in the body of the paper. If references have been used, a list of sources used in your text. They should be listed alphabetically by (first) author's family name. Follow the IEEE style.	10

Assessment 3: Assignment

Overview

Weight	Length	Due date	ULO
30%	2000-2500	Session12	4, 5

Introduction

This assessment item relates to the unit learning outcomes as in the unit descriptor. This assessment is designed to improve student analytic skills and to give students experience in problem solving in business analytics.

Task

Answer the **assignment questions** given in the Moodle and upload a word file. To answer question one, you will need to refer the provided **insights report** which is also given in the Moodle.

This is an **individual task**.

Submission Instructions

All submissions are to be submitted through turn-it-in. Drop-boxes linked to turn-it-in will be set up in the Unit of Study Moodle account. Assignments not submitted through these drop-boxes will not be considered. Submissions must be made by the due date and time (which will be in the session detailed above) and determined by your Unit coordinator. Submissions made after the due date and time will be penalized at the rate of 10% per day (including weekend days). The turn-it-in similarity score will be used in determining the level if any of plagiarism. Turn-it-in will check conference websites, Journal articles, the Web and your own class member submissions for plagiarism. You can see your turn-it-in similarity score when you submit your assignment to the appropriate drop-box. If this is a concern you will have a chance to change your assignment and re-submit. However, re-submission is only allowed prior to the submission due date and time. After the due date and time have elapsed you cannot make re-submissions and you will have to live with the similarity score as there will be no chance for changing. Thus, plan early and submit early to take advantage of this feature. You can make multiple submissions, but please remember we only see the last submission, and the date and time you submitted will be taken from that submission.

Your report should be a **single word or pdf document** containing your report.

Marking criteria

You will be assessed on the following marking guide

Total Marks: 30

Task	Description	Marks
Comm Bank Insight Report Analysis	Document a critical analysis on "*CommBank Retail Business Insights Report FY18*" and comment on overall features, quality of visualisations, usefulness of the key information on decision making, abstract and recommendations.	10
Regression Analysis	Report the applications of regression analysis and critically analyse the given task by formulating regression line equation, scatter diagram and goodness of fit. Additionally, compare the regression analysis values using other analytic tool.	10
Classification Methods & Discussion	Discuss the applications of classification method in business analytics domain including, the difference between classification and prediction, examples of classification methods, algebraic equation for neural network and the application of clustering techniques in business analytics.	10