



MIS781 – Business Intelligence and Database – Trimester 1 2024

Assessment Task 2 – Individual Assignment: Business Intelligence Solution Development and Report

DUE DATE:	Thursday 16 May 2024 (Week 10) by 8:00pm AEST
PERCENTAGE OF FINAL GRADE:	30%
WORD COUNT:	3999 words

Description

Purpose

This task provides you with opportunities to learn the knowledge (GLO1 & ULO1) and skills (GLO 3 & ULO2) required in the study and practice of business intelligence and database. By completing this task, you will develop your skills in researching, understanding, applying, evaluating, and presenting business intelligence dashboards required of business intelligence professionals.

Context

In this practical assignment, students will apply their business intelligence knowledge and practical skills to develop business intelligence solutions.

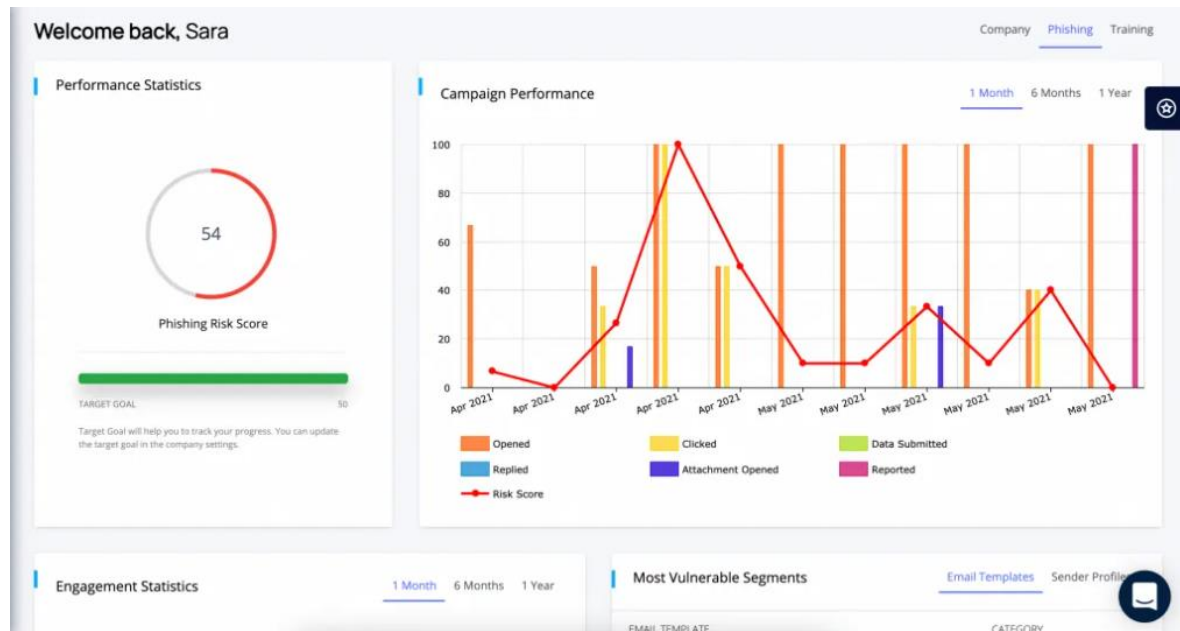
This practical assignment setting will be on the **simulated phishing campaigns dashboard**. As an analyst, your main task is to apply the MS Power BI tool and develop business intelligence solutions (i.e., simulated phishing campaign dashboards). You may use either real-world or artificial datasets.

Specific Requirements

1. Your task is to develop the relevant BI dashboards using the MS Power BI tool. Please present the BI dashboard first, then followed by an explanation of each chart of the dashboard. At least 3 different dashboards are expected.
2. Justify why these BI solutions could provide insights and why those attributes are laid out in the fashion you proposed (feel free to include all other relevant justifications). Note: To ensure that you discuss task (2) properly, you must include visual samples of the reports you produce (i.e., the screenshots of the BI charts/dashboards must be presented and explained in the written report; use 'Snipping tool'), and also include any assumptions that you may have made.
3. The BI report should include: 1) objectives and advantages of your BI solution, 2) BI dashboards screenshots and commentary, 3) overall findings and recommendations based on your analysis, etc.
4. Feel free to make reasonable assumptions or refine the data as needed. You may create your own artificial datasets. **Real-world dataset is not mandatory**. Note: Do refer to the assignment marking rubric & report outline example. See examples of simulated phishing campaigns dashboard: <https://support.phishingtackle.com/hc/en-gb/articles/360029323431-The-Phishing-Tackle-Dashboard>

5. Some useful links:

- <https://www.openml.org/search?type=data&sort=runs&id=4534&status=active>
- <https://community.mimecast.com/s/article/awareness-training-phishing-campaign-analytics>
- <https://github.com/randomaccess3/Awesome-BEC>
- <https://www.kaggle.com/datasets/shashwatwork/phishing-dataset-for-machine-learning>
- <https://www.kaggle.com/datasets/shashwatwork/web-page-phishing-detection-dataset>
- <https://data.world/datasets/hack>
- <https://www.cybsafe.com/solutions/phishing-usb-attack-simulations/>
- <https://phished.io/>
- <https://www.phishingbox.com/>
- <https://www.phriendlyphishing.com/>



NOTE:

- You must produce the actual dashboard visuals in the MS Power BI tool.
- You must include a screenshot of your '**Certificate of Completion for Power BI Essential**' and your **dataset** structure as an **appendix** within the assignment report (i.e., a screenshot of all your dataset columns and first 5 sample tuples/rows)
- If you think the best presentation/visualization is to use, say, a pie chart, then discuss using a pie chart and indicate what the pie chart would show, what are the benefits of using a pie chart, and discuss the chart's findings/insights in your commentary.
- At least 3 dashboards are expected; e.g., you may create one dashboard for individual user, one dashboard for the Phishing Campaign Manager, and one dashboard for the HR Manager.

Report guidelines

1. The body of the report should contain 'Table of Content', logically organised sections, and 'List of references'.
2. You may include figures, diagrams, tables, and charts, etc.
3. For this practical assignment, the length of the assignment excludes the Table of contents and reference list.
4. Reports should be written in Microsoft Word and submitted as a Word file only (PDF files will not be marked).
5. Assignments are to be submitted online to the CloudDeakin dropbox (see submission details below). Save your file as **first_lastname_unit code.docx** (e.g. **Peter Jones_MIS781.docx**)
6. Format: Times New Roman, font size 12 & single line spacing.

Learning Outcomes

This task allows you to demonstrate your achievement towards the Unit Learning Outcomes (ULOs), which have been aligned to the [Deakin Graduate Learning Outcomes](#) (GLOs). Deakin GLOs describe the knowledge and capabilities graduates acquire and can demonstrate on completion of their course. This assessment task is important in determining your achievement of the ULOs. If you do not demonstrate achievement of the ULOs, you will not be successful in this unit. You are advised to familiarise yourself with these ULOs and GLOs as they will inform you on what you are expected to demonstrate for the successful completion of this unit. The learning outcomes that are aligned with this assessment task are:

Unit Learning Outcome (ULO)	Graduate Learning Outcome (GLO)
ULO1: Explain and apply the business intelligence (BI) lifecycle concept, multidimensionality concept and database concept ULO2: Appraise and apply data warehousing architecture, technologies, and development methodologies and database for business intelligence.	GLO1: Discipline-specific knowledge and capabilities - students are required to demonstrate an understanding of the business intelligence context and explain the BI and database technologies and associated implementation issues. GLO3: Digital Literacy - students are required to apply BI and database technologies to find, use, and disseminate actionable information.

Submission

You must submit your assignment in the Assignment Dropbox in the unit CloudDeakin site on or before the due date. When uploading your assignment, name your document using the following syntax:

First_lastname_unit code.docx (e.g. Peter Jones_MIS781.docx)

Submitting a hard copy of this assignment is not required. You must keep a backup copy of every assignment you submit until the marked assignment has been returned to you. In the unlikely event that one of your assignments is misplaced you will need to submit your backup copy.

Any work you submit may be checked by electronic or other means for the purposes of detecting collusion and/or plagiarism and for authenticating work.

When you submit an assignment through your CloudDeakin unit site, you will receive an email to your Deakin email address confirming that it has been submitted. You should check that you can see your assignment in the Submissions view of the Assignment Dropbox folder after upload and check for, and keep, the email receipt for the submission.

Marking and feedback

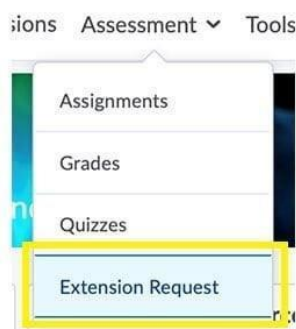
The marking rubric indicates the assessment criteria for this task. It is available in the CloudDeakin unit site in the Assessment folder, under Assessment Resources. Criteria act as a boundary around the task and help specify what assessors are looking for in your submission. The criteria are drawn from the ULOs and align with the GLOs. You should familiarise yourself with the assessment criteria before completing and submitting this task.

Students who submit their work by the due date will receive their marks and feedback on CloudDeakin **15 working days** after the submission date.

Extensions

Extensions can only be granted for exceptional and/or unavoidable circumstances outside of your control.

Requests for extensions must be made by 12 noon on the submission date using the online Extension Request form under the Assessment tab on the unit CloudDeakin site. All requests for extensions should be supported by appropriate evidence (e.g., a medical certificate in the case of ill health).



Applications for extensions after 12 noon on the submission date require University level [special consideration](#) and these applications must be submitted via StudentConnect in your DeakinSync site.

Late submission penalties

If you submit an assessment task after the due date without an approved extension or special consideration, 5% will be deducted from the available marks for each day after the due date up to seven days*. Work submitted more than seven days after the due date will not be marked and will receive 0% for the task. The Unit Chair may refuse to accept a late submission where it is unreasonable or impracticable to assess the task after the due date. *'Day' means calendar day for electronic submissions and working day for paper submissions.

An example of how the calculation of the late penalty based on an assignment being due on a Thursday at 8:00pm is as follows:

- 1 day late: submitted after Thursday 11:59pm and before Friday 11:59pm – 5% penalty.
- 2 days late: submitted after Friday 11:59pm and before Saturday 11:59pm – 10% penalty.
- 3 days late: submitted after Saturday 11:59pm and before Sunday 11:59pm – 15% penalty.
- 4 days late: submitted after Sunday 11:59pm and before Monday 11:59pm – 20% penalty.
- 5 days late: submitted after Monday 11:59pm and before Tuesday 11:59pm – 25% penalty.
- 6 days late: submitted after Tuesday 11:59pm and before Wednesday 11:59pm – 30% penalty.
- 7 days late: submitted after Wednesday 11:59pm and before Thursday 11:59pm – 35% penalty.

The Dropbox closes the Thursday after 11:59pm AEST/AEDT time.

Support

The Division of Student Life provides a range of [Study Support](#) resources and services, available throughout the academic year, including **Writing Mentor** and **Maths Mentor** online drop ins and the SmartThinking 24 hour writing feedback service at [this link](#). If you would prefer some more in depth and tailored support, [make an appointment online with a Language and Learning Adviser](#).

Referencing and Academic Integrity

Deakin takes academic integrity very seriously. It is important that you (and if a group task, your group) complete your own work in every assessment task. Any material used in this assignment that is not your original work must be acknowledged as such and appropriately referenced. You can find information about referencing (and avoiding breaching academic integrity) and other study support resources at the following website: <http://www.deakin.edu.au/students/study-support>

Your rights and responsibilities as a student

As a student you have both rights and responsibilities. Please refer to the document ***Your rights and responsibilities as a student*** in the Unit Guide & Information section in the Content area in the CloudDeakin unit site.