



**IN  
PARTNERSHIP  
WITH  
PLYMOUTH  
UNIVERSITY**

## **PUSL3110 - Advanced databases and their applications**

# **Coursework 2021 – 2022**

**Term: Term 1**

**Submission Deadline: <TBD>**

**Coursework Type: Group assignment**

**Element of Assessment:**

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## PUSL3110: Coursework specification

This assignment specification covers the entire coursework assessment for the module.

This is a group assignment.

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### Business Intelligence & Big Data Analytics

You are required to write a report (max 2500 words) discussing one of the following application area or any other relevant area in relation to business intelligence and big data analytics..

- Supermarket data analysis
- Healthcare data analysis
- Agricultural Data Analysis

Your discussion should make suitable reference to a real-life case study, and should discuss

- the application of different techniques such as data warehousing, data mining, big data analytics, knowledge management, reporting to make the corporate to become intelligent in effective decision making
- the tangible benefits that they harnessed out of it.
- the appropriateness of the applied techniques
- any specific issues that arise in their application in your chosen application area.

You need to include a summary and a conclusion at the end of the report.

Please note:

1. The report should be driven by (start from) the application/application area. You should discuss an actual case study (specific application area and specific company). So for example Data Mining as employed by Tesco, Fraud detection as employed by Lloyds TSB
2. You do not need to present textbook material describing the underlying techniques
3. You **should** describe the **application** of the techniques within the case study, and as above, discuss their appropriateness to the application area, and any specific issues that arise within the case study.
4. Depth and detail are important criteria that will be looked for.

Note that the above requires you to conduct your own research into possible application areas and real-life applications. The Internet is a good place to start, however please cite all your work.

## Detailed Assessment Criteria

Criteria		Weighting
1	Is the research carried out appropriate and enough in terms of breadth and depth?	20%
2	Does the report provide an overview of the information sources and describe the application of techniques such as data warehousing, data mining big data analytics, knowledge management and reporting (may not be limited to) to the company selected and is this clearly and explicitly based upon evidence and citations from the literature?	20%
3	Does the report identify specific data mining and big data analytics techniques (that are applicable to the company) and identify reasons for their applicability? Is this clearly and explicitly supported by evidence, examples and citations to the literature? Are such examples presented, discussed and/or described in depth and detail?	20%
4	Does the report describe the tangible benefits achieved by the selected company in employing technology driven process to manage the decision making process in sufficient depth and detail? Is this discussion clearly and explicitly supported by appropriate evidence, examples and citations to the literature?	10%
5	Does the report describe potential issues that might arise within an application of data mining to the company in sufficient depth and detail? Is this discussion clearly and explicitly supported by appropriate evidence, examples and citations to the literature?	10%
6	Is the report structured and presented properly and is there a summary and a set of conclusions, based upon the contents of the report?	10%
7	Is there a properly constructed reference list and are the elements of the reference list cited appropriately in the report? Are the relationships between the contents of the cited sources and the contents of the report made clear and are they appropriate?	10%

### Submission Deadlines:

This is a group assignment and the students are expected to submit the report as a Moodle e-submission through Plymouth Digital Learning Environment (DLE). **on or before <<TBD>>** Students are also expected to submit one spiral-bound printed report to the NSBM program office. Late submissions are not accepted by any means.

Students are warned that submissions may be checked using a plagiarism detection service and suspicions of academic dishonesty will be treated in accordance with University regulations. As a guide, we would expect you to spend minimum of 40 hours on this assignment.

### General Notes:

1. The group should be contained with 5 students
2. The length of the each should not be greater than 2500 words. Reports exceeding the word limit will be penalized. Your reference list and bibliography are not included in the word count.

3. Your work on this assignment should involve considerable reading and research from multiple appropriate sources (the Internet is a good place to start). Include a reference list (and optionally a bibliography if appropriate), and make sure that your report contains appropriate citations to the articles in your reference list
4. Your Report should be written entirely in your own words. If you use direct quotes or paraphrasing, ensure it is appropriately cited. Your essay should follow the University guidelines on referencing & plagiarism ... see the Writing Essay Guidelines posted on the portal.
5. Refer to the handbook to read more specific details regarding offences information
6. Please indicate the word count of the report on the cover page

### **Feedback**

Individual written feedback will be provided.