ACCG8076 Forensic and Data Analytics
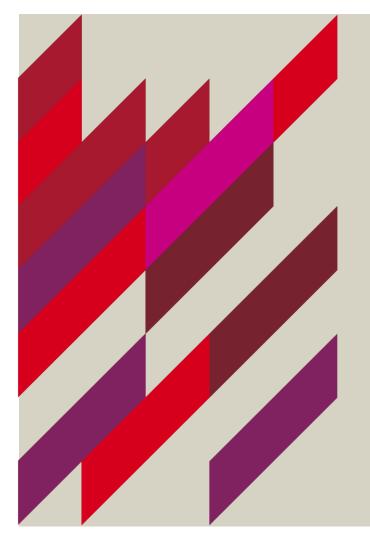
Assessment 3

Written Presentation
Weighting: 30%
Due Date: 9th September 2020

Learning Objectives

- **ULO1:** Evaluate the theory, and principles of application, of data analytics skills and techniques relevant to forensic accounting.
- **ULO2:** Investigate applications and strategies, including data mining, to enable collection, assessment, review, production and presentation of unstructured data.
- **ULO3:** Manage and interpret complex or disparate sets of data to underpin business development, interpret risk, understand behavioural patterns, and detect suspicious or irregular behaviour.

ASSESSMENT 3: QUESTION

Written Presentation

You are employed as a cadet within an international company that processes dental insurance claims on behalf of an insurance company. Your responsibility is to process all submitted insurance claim, and once the claims are approved, you send the relevant dental office a cheque for payment.

Within a short period of time of commencing your role, you suspect several of the insurance claims may be fraudulent. You believe the only way to validate the accuracy of the claims is to obtain documentary evidence. You speak to your manager who provides you with the following excel documents to commence your investigation:

1. ch08_dentists.csv
2. ch08_claims.csv
3. ch08_patients.csv

Written Presentation

Question 1:

A key indication of whether a dental practice is legitimate is through it's billing address. A real dental practice will need a physical address (that is, a street address) for clients to physically visit to obtain a dental service. Review the data provided and identify, if any, dental offices which are using a post office address.

Question 2:

A key indication of whether a dental practice is legitimate is through their business practice—each office should be submitting claims to various insurance companies. The company you work at is only one of many companies that processes insurance claims. Therefore the sequential numbers of the claims received by your office are important. For example, if the claims sent to you from a dentist are sequential (1, 2, 3 etc.) you can deduce that the dentist is only sending claims to you. Review the data provided and identify, if any, dental offices have submitted claims with sequential numbers.

Written Presentation

Question 3:

Due to the limited nature of the need for dental work, it is unusual for a client to seek treatment for multiple cavities in a few months. Review the data provided and identify the number of cavities submitted by each patient. Use your judgment and assess whether any patients have claimed excess dental work (keep in mind, it is possible to have more than one cavity in a tooth).

Question 4:

A key indication of whether a dental practice is legitimate is through assessing the client's residential address and comparing this with their dental office's billing address. This is because, clients tend to travel locally to their dentist. Using geographic information, such as 'google maps', assess the distance each client travels to their dentist. Use your judgment and assess whether any patients have an unusually long trip to their dentist.
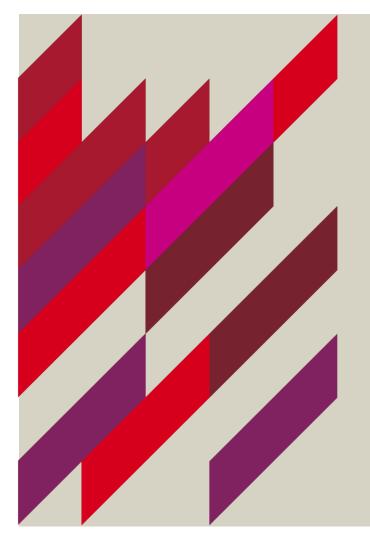
Written Presentation

Tasks:

1. Provide a written response for each of the four questions. In each of your responses, include an explanation of the steps you undertook to reach your findings **(24 marks).**
2. Provide a summary that specifies the dentist/s you believe are submitting fraudulent claims. In preparing your summary, clearly specify the reasons to support your conclusions **(6 marks)**.

The submission should not exceed 2,000 words. The assessment must be submitted to Turnitin by **2PM Wednesday, 9th September 2020**.

Please note there is an error in the Unit Outline. In the Unit Outline the stated due for this assessment is 28th October 2020—this is incorrect (this is the due date for the critical essay worth 40%). My apologies for the error.

Please write your response as a formal academic response, dividing your answer into Task 1 and Task 2.

ASSESSMENT 3:
MARKING RUBRIC

Marking Rubric

Criteria (20 MARKS TOTAL)	Fail	Pass	Credit	Distinction	High Distinction
Consolidate the theory and application of data analytics in a forensic accounting investigation. **(14 marks)**	Inappropriate consolidation of the theory and application of data analytics in a forensic accounting investigation.	Appropriate consolidation of the theory and application of data analytics in a forensic accounting investigation.	Substantially appropriate consolidation of the theory and application of data analytics in a forensic accounting investigation.	Good consolidation of the theory and application of data analytics in a forensic accounting investigation.	Excellent consolidation of the theory and application of data analytics in a forensic accounting investigation.
Demonstrate techniques to review and present unstructured data to advance a forensic accounting investigation. **(12 marks)**	Little or no evidence of understanding techniques to review and present unstructured data to advance a forensic accounting investigation.	Some evidence of understanding techniques to review and present unstructured data to advance a forensic accounting investigation.	Evidence of substantial understanding techniques to review and present unstructured data to advance a forensic accounting investigation.	Strong and clear evidence of understanding techniques to review and present unstructured data to advance a forensic accounting investigation.	Comprehensive and high-level critical understanding of techniques to review and present unstructured data to advance a forensic accounting investigation.
Clear, ordered, precise and appropriately referenced. **(4 marks)**	Little or no appropriate referencing. Language is frequently too informal for academic purposes. Errors in grammar make overall meaning unclear.	Predominantly appropriate use of referencing. Language is occasionally informal. Errors in grammar make meaning unclear in places.	Appropriate use of referencing. Language is generally appropriate for an academic assignment, with only occasional minor errors in grammar, spelling or presentation.	Accurate use of referencing. Writing style and presentation are of a high academic standard.	Accurate use of referencing. Writing style is exemplary and compelling, and is of a publishable academic standard.