

Main CW Assessment Brief COMP1810-Academic session.

COMP-1810	Data and Web Analytics	Master CRN:	Individual coursework is 50% of overall assessment
Module leader Dr Solomon H. Eбенуwa	CW Data analytics		Deadline Date:
Feedback and grades are normally made available within 15 working days of the coursework deadline			
Learning Outcomes: 1 Identify challenges in data and web analytics; be able to critically evaluate and select appropriate solutions. 3 Analyse and manipulate clickstream data to extract statistics and features and provide analytic insights. 4 Critically evaluate, select and employ appropriate tools, technologies and data models to provide answers to analytic questions			

Plagiarism

Is presenting somebody else's work as your own. It includes copying information directly from the Web or books without referencing the material; submitting joint coursework as an individual effort; copying another student's coursework; stealing or buying coursework from someone else and submitting it as your own work. Suspected plagiarism will be investigated and if found to have occurred will be dealt with according to the procedures set down by the University. All material copied or amended from any source (e.g. internet, books) must be referenced correctly according to the reference style you are using. Your work will be submitted for electronic plagiarism checking. Any attempt to bypass our plagiarism detection systems will be treated as a severe Assessment Offence

Coursework Submission Requirements

Your work should be submitted on or before 23:30 p.m. on the Deadline Date of using the link on the coursework Moodle page for COMP-1810.

- For this coursework, you must submit a single Acrobat PDF document.
- In general, the document should be text and screenshot properly annotated and labelled where necessary and saved as pdf format.
- Make sure that any files you upload are virus-free and not protected by a password or corrupted otherwise they will be treated as null submissions.
- Your work will be marked online and comments on your work and a provisional grade will be available from the Coursework page. The grade will be made available in the portal.
- You must NOT submit a paper copy of this coursework.
- All coursework must be submitted as instructed above

Detailed Specification

This coursework must be completed individually. Please read this entire specification very carefully so that you are fully aware of the requirements.

The University website has details of the current Coursework Regulations, including details of penalties for late submission, procedures for Extenuating Circumstances, and penalties for Assessment Offences. See <http://www2.gre.ac.uk/current-students/regs>

Detailed Specification

his coursework must be completed individually. All submitted course work must show a clear annotated screenshot of charts or graphs, tables or any other figure as required.

This coursework is worth half of the total marks of the module.

Scenario for task (a, b and c)

You are to demonstrate the knowledge of challenges associated with data and critically evaluate and select appropriate tools and solutions to solve data analytics problem. Hence, you have been provided with a click stream dataset “e-shop clothing 20081.txt” and “shop clothing infor 2008.txt”, which is from an online retail shop that deals with general merchandise (<https://your.googlemerchandisestore.com/>). The purpose is to use it to provide an analytic insight for the owners of the website to enable them optimise it to generate more traffic and revenue.

You have to check the dataset for errors and clean them accordingly. Use the dataset to complete the task in Task a, b and c.

Task:

From the dataset provided show the process of extracting the column relevant to the analysis a. (c and d) below and explain why those columns are relevant. [10 Marks]

b. Using the datasets provided and appropriate chart show the sales by months and provide an explanation as regard to your analysis. [20 Marks]

c. Using the datasets provided and appropriate chart show total revenue for each month and explanation as regard to your analysis. [20 Marks]

d. You have been provided with small dataset “input .csv”, upload it into the R and carry out some descriptive analysis by finding the mean, median mode, standard deviation and variance of the salary column.

[20 marks].

e. Get the starwars dataset in the dplyr package. Use the dataset to carry out the following task

i. Extract actors whose eye color is not black, and height is over 150m [10 marks]

ii. Show the process of adding a column of Body mass index (BMI) using $(\text{BMI} = \text{mass}/((\text{height}/100))^2)$ To the starwars dataset and extract. Then plot a graph of height against BMI, and provide an explanation for your graph. [20 marks]

All answers to task a, b, c, d and e must be evidenced through clear labelled annotated screen shots and appropriate explanation and saved as pdf documents.

Deliverables

A PDF report submitted by the due date containing the following sections IN THE ORDER given below. Do not include any other information. Do not include any of your source code in the report.

1. A cover page.
2. Table of Contents

Task a, b, c and d

Main Marking Scheme: CW Assessment Brief COMP1810-2022/23 Academic session

Marking Scheme.

Coursework: Level 5- This rubric for CW							
0	0-29% Fail	30-39% Fail	40-49% Satisfactory	50-59% Good	60-69% Very Good	70-79% Excellent	80-100% Exceptional
D1 Knowledge Demonstrate the knowledge of proffering solution to the scenario analysis of the datasets. Clear Business scenario understanding	No knowledge of scenario business understanding for data analytics. No meaningful answer provided. work submitted almost empty.	Did not demonstrate any understanding and abilities to interpret the context Scenario and proposed solution, unable to demonstrate the knowledge of the business scenario context, not the right solution.	Demonstrate satisfactory understanding and abilities to interpret the context Scenario and proposed solution, able to demonstrate the knowledge of scenario and case study analysis in other to use the relevant and correct techniques to understanding the business scenario and right solution	Demonstrate good understanding and abilities to interpret the context Scenario and proposed solution, able to demonstrate the knowledge of scenario and case study analysis in other to use the relevant and correct techniques to understanding the business scenario and right solution.	Demonstrate very good understanding and abilities to interpret the context Scenario and proposed solution, able to demonstrate the knowledge of scenario and case study analysis in other to use the relevant and correct techniques to understanding the business scenario and right solution.	Demonstrate excellent understanding and abilities to interpret the context Scenario and proposed solution, able to demonstrate the knowledge of scenario and case study analysis in other to use the relevant and correct techniques to understanding the business scenario and right solution.	Demonstrate exceptional understanding and abilities to interpret the context Scenario and proposed solution, able to demonstrate the knowledge of scenario and case study analysis in other to use the relevant and correct techniques to understanding the business scenario and right solution.
D2 Research Research into exploratory for the data understanding, Design and Synthesis the right solutions and procedures for evidence-based context solution.	No indication of any knowledge did not show any understanding of the context. No meaningful answers shown.	Unable to show any ability in the understanding and interpreting the exploratory data analysis. Did not show any convincing design and Synthesis of the right solutions and procedures, no significant evidence produced. Work full of errors.	Showed satisfactory ability in understanding and interpreting the exploratory data analysis and understanding, Design and Synthesis the right solutions and procedures for evidence-based context solution granularity, some errors noticeable.	Showed good ability in understanding and interpreting the exploratory data analysis and understanding, Design and Synthesis the right solutions and procedures for evidence-based context solution granularity, some errors noticeable.	Showed very good ability in understanding and interpreting the exploratory data analysis. Design and Synthesis the right solutions and procedures for evidence-based context solution. few errors noticeable.	Showed an excellent ability in understanding and interpreting the exploratory data analysis. Design and Synthesis the right solutions and procedures for evidence-based context solution.	Showed exceptional ability in understanding and interpreting the exploratory data analysis, for understanding the context. Design and Synthesis the right solutions and procedures for evidence-based context
D3 Evaluation Clear analysis, appropriate data preparation, Implementation of the solution and Evaluation, and testing. Show insightful charts and conclusions.	Did not show any indication of interest, no testing of any kind, no substantial knowledge of the module shown. No meaningful answer provided.	Demonstrated poor and unclear analysis, poor data preparation, poor implementation of the solution, Un insightful charts and conclusions, evaluation, and testing, some errors noticeable.	demonstrated satisfactory and clear analysis, appropriate data preparation, implementation of the solution insightful charts and conclusions, evaluation, and testing, some errors noticeable.	demonstrated good and clear analysis, appropriate data preparation, implementation of the solution insightful charts and conclusions, evaluation, and testing, some errors noticeable.	demonstrated very good analysis, appropriate data preparation, implementation of the solution, exceptional insightful charts and conclusions, evaluation, and testing, few errors noticeable.	demonstrated an excellent clear analysis, appropriate data preparation, implementation of the solution, exceptional insightful charts and conclusions, evaluation, and testing.	Demonstrated exceptionally clear analysis, appropriate data preparation, implementation of the solution, exceptional insightful charts and conclusions, evaluation, and testing.
D4 Communication Proficiency in the use of English language in the Report, and presentations	Very poor communication did not show any interest, very poor usage of English language. No meaningful statement made	Poor usage of English language, sentences are gibberish., very poor documentation. Having no or few required pages. Few usages of terminology, totally unclear screenshot and annotations, evidence provided is unclear or full of errors Showed no or poor knowledge referencing. Evidence totally omitted.	satisfactory usage of English language, some errors nothing, good documentation having some of the required pages and some usage of the conventional, technical terminology. Clear screenshot and annotations, presentations of clear evidence. some good citation and Harvard referencing. Significant omission in the evidence provided. serious.	Good usage of English language, some errors nothing, good documentation having some of the required pages and some usage of the conventional, technical terminology. Clear screenshot and annotations, presentations of clear evidence. some good citation and Harvard referencing. Significant omission in the evidence provided. serious.	Very good usage of English language, few errors nothing serious., Very Good documentation having all the required standard pages and usage of conventional, technical terminology. Clear screenshot and annotations, presentations of clear evidence. good citation and Harvard referencing, some omission in the evidence provided.	Excellent proficiency in the use of English language, Excellent documentation having all the required standard contents pages and usage of conventional, technical terminology. Clear screenshot and annotations, presentations of clear evidence. Excellent citation and Harvard referencing, few omissions in the evidence provided.	Exceptional proficiency in the use of English language, exceptionally excellent documentation having all the required standard contents pages etc and usage of conversational, technical terminology. Clear screenshot and annotations, Presentations of clear evidence. Excellent citation and Harvard referencing,

D5 Referencing	no meaningful referencing, work submitted almost empty, no substantial knowledge of the module shown. Dis not indicate any knowledge of referencing at all.	Very poor citation and referencing. Did not demonstrate any significant knowledge of Harvard referencing style. The documentation complying with academic writing standards and full of errors.	satisfactory citation and proper referencing using Harvard referencing style, display some knowledge of academic writing standards. Significant number of errors.	good citation and proper referencing using Harvard referencing style, display some knowledge of academic writing standards. Significant number of errors.	Very good citation and proper referencing. Clear evidence of using Harvard referencing style, documentation shows evidence of complying with academic writing standards. A few noticeable errors.	Excellent citation and proper referencing. Clear evidence of using Harvard referencing style, documentation shows evidence complying with academic writing standards, very few noticeable errors	Exceptional and clean citation with the proper referencing. Clear and flawless evidence of using Harvard referencing style, documentation shows evidence complying with academic writing standards, no errors
D6 Employability Employability-Soft skills, time management independence and ownership	Very poor soft skills. Did not submit on time, incomplete or empty work.	Poor demonstration soft skills, lateness submission, poor timekeeping. etc	demonstrate satisfactory soft skills, like timekeeping, working independently and in group. Noticeable some lateness etc.	demonstrate good soft skills, like timekeeping, working independently and in group. Noticeable some lateness etc.	demonstrate very good soft skills, like timekeeping, working independently and in group, complying to all instructions and abilities to carryout individual research-etc.	demonstrate excellent soft skills, like timekeeping, working independently and in group, complying to all instructions and abilities to carryout individual research-etc.	demonstrate exceptional soft skills, like timekeeping, working independently and in group, complying to all instructions and abilities to carryout individual research-etc.

Marking Scheme

	Task and marks allocation	Total Mark	
a	Steps in extracting the right column for a, b and c [10 Marks] Loading 2marks extracting for (a, b and c) [minus 2 marks if not correct]	10	
b	Using the datasets provided and appropriate chart show the sales by months and provide an explanation as regard to your analysis. [20 Marks]. Chart of the sales by months 12 marks Explanation of the analysis 8 marks	20	
c	Using the datasets provided and appropriate chart show total revenue for each month and explanation as regard to your analysis. [20 Marks]. Chart of the sales by months 12 marks Explanation of the analysis 8 marks	20	
d	finding the mean, median mode, standard deviation and variance [4*5 = 20 marks].	20	
e			
	i. Extract actors whose eye color is not black, and height is over 150m [10 marks]	10	
	ii. Show the process of adding a column of Body mass index (BMI) using $BMI = mass / ((height/100))^2$ To the starwars dataset and extract. The plot a graph of height against BMI, provide explanation for your graph. [20 marks] Implementing the $BMI = mass / ((height/100)) =$ [10 mark] The plot a graph of height against BMI, provide explanation for your graph [10 marks]	20	
	Total	100 marks	

The work on this paper is a total of 50 marks

End: