

Applied Customer Analytics MS5108 2022-2023 Individual Assignment 3

Objective	The objective of this assignment is to access your understanding of the basics of R programming language.			
Lecturer	Name	Office	E-mail	
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Marks Awarded	This assignment carries 60% of the overall marks for the module.			
Submission Process	You should submit your completed assignment through Blackboard's Assignment tool. If you are unable to submit your assignment via Blackboard, please email it to your lecturer whilst also copying business@universityofgalway.ie in the same email and clearly state the issue that you have faced while uploading to Blackboard.			
Assignment Deadline(s)	 6th April 2023 at 5:00pm Irish time: R code file Report (max 5 pages) To avoid technical issues, it is strongly advised that you upload your submission well in advance of the deadline. You may submit at any time on any day prior to the deadline. You will have multiple attempts to submit, and last submitted version will be graded. 			
Late or No Submission	Blackboard will record late submissions. Except in extenuating circumstances, late submissions will carry a penalty up to 24 hrs after the deadline, after which time any submissions will not be marked. Non submission of assignment will carry a mark of zero in determination of overall marks for this sitting. There is no opportunity to resubmit continuous assessment before the next offering of the module, should student(s) fail to submit by specified deadlines.			
Deliverables	The R code file, as "MS5108_Assignment3_YOURNAME_code.R" file. Include your student name, ID, and module code in the start of your code. A report of results that discusses you visualizations and outputs, as "MS5108_Assignment3_YOURNAME_report.docx" file. Include your student name, ID, and module code at the start your report. Limit the report size to 5 pages with font size not more than 11 points.			
Academic Integrity	Each module instructor reserves the right to follow up with a student by interview if there is any concern in relation to the integrity of the assignment.			

	For any assignments not submitted via Turnitin, we reserve the right to check it using Turnitin where required.		
Plagiarism	Plagiarism is the use of another person's ideas or work without appropriate acknowledgement or credit. Plagiarism may be intentional or unintentional. Intentional plagiarism is the clear intent to pass off another person's work or ideas as your own for your own gain. Unintentional plagiarism may occur if you do not understand the appropriate way to acknowledge the source of your ideas and information. If you are unsure of the acceptable methods of acknowledgment you should refer to the University of Galway Code of Practice for Dealing with Plagiarism, consult with your lecturer or the library staff. Proven plagiarism is a very serious matter which may result in severe disciplinary action and/or exclusion from the University. Ensure all assignment submissions include a signed plagiarism statement.		
Referencing & Citation	Correct referencing and citation avoids plagiarism. There are varying referencing styles available but the most popular is the Harvard Referencing Style. Details on how to reference journal articles, books, electronic information and various other supports is available from the NUI, Galway Library at the following link: http://libguides.library.nuigalway.ie/c.php?g=543943&p=4591416		
Blackboard Ally	Blackboard Ally supports you to access more user-friendly file formats. Please contact the lecturer if you experience any accessibility issues for this module material. Should you have a visual impairment and require the document in another format, please contact the lecturer to explore alternative format options.		
Special Requirements	If you are registered with the Disability Support Service (DSS), you will find recommended accommodations listed on your Learning and Educational Needs Summary (LENS) report. If the alternative assessment offered for this module does not fully meet the recommendations in your LENS report, please email your lecturer as well as whilst also copying business@universityofgalway.ie , stating clearly how you feel the recommendations are not being met. Please ensure you attach a copy of your LENS report to this email.		

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You have been given a survey and dataset of peoples' satisfaction levels with the services provided by the CrossFit Ridgeline. The survey document explains what each of the headers in the dataset refer to.

Using R, and any aspect of the dataset you wish, you are required to prepare the following;

- 1. One boxplot analysis. Provide a short paragraph (max 200 words) describing what the analysis you provide represents.
- 2. One other visualization of your choosing. Provide a short paragraph (max 200 words) describing what the analysis you provide represents.
- 3. One regression model, with one dependent variable and at least three independent variables. The model should make logical sense i.e. do not pick variables at random to see if they are related. Write the code in R to test if there are significant relationships in your model. Run the analysis and record the findings. Provide a short paragraph (max 300 words) describing what the analysis you provide represents.
- 4. A second regression model, with one dependent variable, one independent variable, and one interacting variable. Write the code in R to test if the independent variables <u>interact</u> to predict the dependent variable. Run the analysis and record the findings. Provide a short paragraph (max 300 words) describing what the analysis you provide represents.