Continuous Assessment: Data Analytics, CRN: 26566

External Examiner: Dr. James Byrne, Internal Examiner: Ms. Fiona M. Walshe

Assignment 2 (60%) – Project & Report – Wk9: 7 weeks to complete.

The learner will be supplied a business case, data, and starter R code and they will be required to develop a solution to a business problem using data analytics. Learners can re-use code examples provided during the course and alter these code examples to suit their final project code file. The learner must report their data understanding, preparation, modelling, and evaluation phases that they have conducted. The learner must defend the choices that they have made for the analytics mini project by submitting a Word document with justifications for experiment steps taken.

Business case: An Iranian Construction Company wishes to employ data analytics to estimate construction costs based on physical and financial construction input variables. The model must perform within +/- 500,000 Iranian Rial to be of practical use.

Marking Rubric	**Mark Range (% of available marks)**			
	70-100%	**55-70%**	**40-54%**	**0-39%**
Weighting for total	Exceeds the criteria, with evidence of student exceeding the specified requirements.	Meets to an acceptable standard, with evidence of student meeting the specified criteria.	Meets to a basic standard, with limited evidence of meeting the specified criteria.	Does not meet the basic standard, no evidence presented of meeting the criteria.
Data Understanding & Presence of Code (20%). The learner correctly commented on the data format and data quantity. The learner correctly interpreted and provided commentary on the exploratory data analysis provided. The learner copied and pasted their code from the project into the report.				
Data Preparation (20%) The learner identified a data issue or improvement. The learner prepared the data to address this issue or implemented the data improvement correctly.				
Modelling & Evaluation (20%) The learner clearly used the appropriate partition for model				

training and/or validation and they did not bias their final test set result with data leakage. The learner accurately reported on model performance with an appropriate measure or measures. A final evaluation of model usefulness was made on test set data result.				