

Data Analysis & Visualisation – Coursework 2

Name HABIB MUNIN

Grade 30%

QUESTION	MERITORIOUS 5	HIGHLY COMPETENT 4	COMPETENT 3	PASS 2	FAIL 1
Dataset description (10%)	Provides descriptive statistics for the dataset	Identifies IV and DV	Makes inferences from the structure of the dataset about possible analysis types	Defines the data types	Incorrect, misleading or missing
Hypotheses (10%)	Multiple main hypotheses & multiple alternate hypotheses.	Single main hypothesis & multiple alternate hypotheses OR multiple main with single alternate hypotheses	Main hypothesis & alternate hypothesis	Single hypothesis	No hypothesis
Selection of appropriate techniques (15%)	Multiple relevant techniques selected and justified	Ideal technique selected and justified	Appropriate, if not ideal, technique selected and justified	Appropriate, if not ideal, technique selected	Inappropriate techniques chosen
Application of appropriate techniques (20%)	Multiple relevant techniques used correctly	Discussion of different levels of significance; correlation and causation	Technique applied correctly with confidence levels stated; correlation type	Technique applied correctly at a basic level; correlation identified	Technique(s) applied incorrectly
Interpretation of results (15%)	Full discussion of results	Discussion of multiple hypotheses;	Alternative hypothesis correctly accepted or rejected	Main hypothesis correctly accepted or rejected	Incorrect interpretation
Presentation of results (10%)	Reads like a technical article	Uses appropriate presentation forms with clarity and precision	Uses appropriate presentation forms	Major results can be identified within presentation	Difficult to identify major results
Consideration of other factors (10%)	Recalculates tests once outliers removed.	Detailed discussion of other factors	Considers outliers AND obvious other factors	Considers outliers OR obvious other factors	Not considered
Document presentation (10%)	Reads like a technical review article	Good use of signposting;	Clear sectioning of content; appropriately referenced; technical English	Basic use of introduction, body and conclusion; understandable language	No clear structure; poor language usage

Non-submission for a section will result in a mark of 0 for that section.

Comments

The university recommends the use of Calibri, Arial, Times New Roman or similar font rather than Comic Sans for submitted work.

There's no need to treat 1-20 and 21-40 differently - better to use the whole set 1-40. The analyses you have done show differences in the data, but not statistically significant differences. To test for these we need to use a t test, and calculate whether the calculated t parameter is greater than a critical value based upon the significance level. This, in turn, needs you to define a null hypothesis (there is no difference in sales) and an alternative hypothesis (there is a difference in sales). If the calculated t value is greater than the critical value then there is a statistically significant difference between means and the null hypothesis can be rejected and the alternate one accepted.