Statistics: The Science of Decisions Project Rubric

Overview:

This rubric is here to help you understand the specifications for how your project will be evaluated. It is the same rubric you should share with others who give you feedback. You should look at the rubric **before you begin** working on this project and **before you submit it**.

Before you begin:

1. Read the <u>final project instructions</u> and this document in detail.

Before you submit:

- 1. Read the rubric below in detail and do your best to evaluate where your project stands.
- 2. If you think your project "does not meet specifications" for **any** criterion, make necessary changes so that it "meets specifications".
- 3. When you are confident that your project meets or exceeds specifications in each criterion, share it with others for feedback

The Rubric:

Criteria	Does Not Meet Specifications	Meets Specifications
Responses to Project Questions		

Question 1: Identify variables in the experiment	The independent and dependent variables have not been correctly identified.	Question response correctly identifies the independent and dependent variables in the experiment.
Question 2: Establish a hypothesis and statistical test	The hypothesis test chosen or the statistical test chosen is not ideal for the structure of the experiment performed.	An appropriate hypothesis test has been stated along with an appropriate statistical test to apply to collected data, with appropriate justification.
Question 3: Report descriptive statistics	Descriptive statistics have not been reported or have been incorrectly calculated.	Descriptive statistics, including at least one measure of centrality and one measure of variability, have been computed for the dataset's groups.
Question 4: Plot the data	Visualizations have not been generated or have not been interpreted in the question response.	One or two visualizations have been created that show off the data, including comments on what can be observed in the plot or plots.
Question 5: Perform the statistical test and interpret your results	The statistical test has been performed, reported, or interpreted incorrectly. The test results have not been properly interpreted in terms of the experiment performed.	A statistical test has been correctly performed and reported, including test statistic, critical test statistic or p-value, and test result. The test results are interpreted in terms of the experimental task performed.
Question 6: Digging deeper and extending the investigation	This question is optional and does not need to be answered in order to meet project specifications.	Hypotheses regarding the reasons for the effect observed are presented. An extension or related experiment to the performed Stroop task is provided, that may produce similar effects.