**21SQ MKTG 4910: Marketing Analytics**

**Individual Assignment Instruction: Sample Questions and Answers**

For all the individual assignment questions, you do not need to provide a separate JMP or Tableau file. However, you do need to **provide relevant visualization and/or results from statistical analyses**. You can do so by (1) exporting the images and tables an save them as separate files or (2) simply capturing the images and tables using a screenshot software. For Mac users, a software called “grab” is preinstalled on its OS. On PCs, you can use the “F12” button on your keyboard to capture the entire screen and paste it on MS Word or PowerPoint. All submission files for the homework assignment should either be in a **PDF or Docx format**.

Here are some sample answers to a few questions that are similar to those in Assignment 1.

**Box Office Data (JMP)**

1. **Summarize and briefly explain the variable “Genre.”**

**Potential Answer:**

A screenshot of a cell phone

Description automatically generated

Of the 161 movies in the dataset, 45 movies are action movies, 43 are comedy movies, 49 are kids movies, and 13 movies are unclassified, other movies. In terms of the percentage, action movies account for 34.78%, 26.71% of movies are comedy, 30.44% are kids’ movies, and the other movies account for the rest, 8.08%. In other words, based on the summary statistics, action seems to be the most popular genre, followed by comedy, kids, and other.

1. **Is the Opening Week Revenue significantly different between sequel and non-sequel movies?**

**Potential Answer:**

A screenshot of a cell phone

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Since the p-value is 0.0001 and is less than 0.05, we can reject the null hypothesis, which posits that OWR is not different between sequel movies and non-sequel movies. Specifically, we have enough statistical significance to claim that sequel movies on average have higher opening week revenue (M = 68.26 million dollars) than non-sequel movies (M = 38.13 million dollars).

**Health Expenditure Data (Tableau)**

1. **Plot the time series of sum of total expenditure at different levels of year.**

**Potential Answer:**

The total expenditure on health is growing every year. Globally, we are spending more and more on health.