STAT 330 Midterm Project

Item	Due	Points
Final Submission Due	Monday, October 26 by Midnight	100

Leveling Up Your Data Visualizations!

Our STAT 330, **Statistical Computing with SAS**, course is a wonderful introduction to the world of programming and computing with data. But it's just that…an introduction. A software package as vast and powerful as SAS contains much more than you can even be told about in a single term. In particular, the ability to visualize data in our course is only briefly touched on. In this project you are going to expand on your abilities to visualize data.

In particular, you are going to learn how to create animated graphics in .gif form. To help motivate this adventure, please check out the following website

- Gapminder.org

You will notice, if you click "Tools" at the top, that there is a fantastic data visualization tool you can use to explore global demographic data – over time no less! Check out the play button for a cool visualization across time. I've put together some of the data used by gapminder for your use in this project.

In this assignment you will create and tell an interesting story about the (changing) state of the world using the gapminder data provided. You will learn about and explore the process of creating .gif visualizations, and then write a SAS paper incorporating descriptive statistics, these .gif file(s) and other visualizations to tell your story.

A previous Cal Poly student wrote a paper for a SAS conference on the creation of these .gif files and it can be found here:

https://www.lexjansen.com/wuss/2016/115_Final_Paper_PDF.pdf

Final Submission

Posted on Canvas is a paper template that you should use for your final submission.

Please keep the rubric in mind as you put your final submission together.

It should be noted that a complete report is not guaranteed a high grade. It's, in some sense, easier to include simple examples involving relatively few variables that are consequently simpler to address/answer. **Higher grades will be given to reports which demonstrate creativity, thoughtfulness, and/or increased complexity in their examples and work.**

NOTE: The website, **lexjansen.com**, is a wonderful resource consisting of **_many_** SAS conference papers. Please be sure to properly cite any sources or information used in your report.

Grading Rubric

_____/100   Final Submission

      _____/5   Introduction

      _____/20   Motivation/Context for your story

      _____/20   Supporting descriptive statistics

      _____/20   Supporting data visualizations

      _____/20   At least one .gif created to support the story

      _____/5   References

      _____/10   Provides readable and commented SAS code in accompanying file

      _____/10   Overall quality (organization, grammar, explanation, etc.)

_____/100   Final Grade