

Project 1: Calendar Query - Proposal Template

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Due by midnight Thursday February 17th

Calendar Query Proposal

What questions are you planning to focus on?

What course do I spend the most time on (including both homework and in-class time)?

How much time do I spend on work on an average weekday vs. on an average weekend?

Is there a significant relationship between the amount of personal time I take per day and the amount of time I spend on schoolwork per day?

Describe two visualizations (type of plot, coordinates, visual cues, etc.) you imagine creating that help address your questions of interest.

To investigate how much time I spend on different courses, I could calculate the average time I spend per week on each course and then plot this using a bar chart, with my various courses on the x axis and the average time spent per week (or per day) on the y axis. The relative size of each bar would be the cue that would represent these differences.

In order to look at the relationship between personal time and schoolwork time, I could use a scatterplot that looks at the amount of time I spent on personal work in a day vs the amount of time I spent on schoolwork in a day. I'd use a Cartesian coordinate system and line of best fit if one was appropriate.

Describe one table you imagine creating that helps address your questions of interest (what summary statistics will you present? what will the rows be? what will the columns be?).

In order to investigate which part of the week I spend the most time doing homework on, I could create a table with rows representing the weekdays vs weekend and columns with information about the amount of time I spend on schoolwork: mean amount of time spent on work in each category, the standard deviation of this value, the median, quartiles, and the results of a one sample t-test comparing the average amount of time spent on weekdays vs weekends on work. This would include a t value and p value.

Do you have any questions for me as we get started with this project?

Does it make sense to start on the analysis as I collect the data if I have to eventually add more data? In other words is it easy to add in more data or would I need to rewrite the analysis portions?