Project tips + resources

The project is very open ended. For instance, in creating a compelling visualization(s) of your data in R, there is no limit on what tools or packages you may use. You do not need to visualize all of the data at once. A single high quality visualization will receive a much higher grade than a large number of poor quality visualizations.

Before you finalize your write up, make sure the printing of code chunks is turned off with the option `echo: false`. In addition to code chunks, ensure all messages are turned off with the options `warning: false` and `message: false`.

Finally, pay attention to details in your write-up and presentation. Neatness, coherency, and clarity will count.

Tips

- Ask questions if any of the expectations are unclear.
- *Code*: In your write up your code should be hidden (`echo: false`) so that your document is neat and easy to read. However your document should include all your code such that if I re-render your qmd file I should be able to obtain the results you presented.

  - **Exception:** If you want to highlight something specific about a piece of code, you're welcome to show that portion.

- Merge conflicts will happen, issues will arise, and that's fine! Commit and push often, and ask questions when stuck.
- Make sure each team member is contributing, both in terms of quality and quantity of contribution (we will be reviewing commits from different team members).

  - All team members are expected to contribute equally to the completion of this assignment and group assessments will be given at its completion - anyone judged to not have sufficient contributed to the final product will have their grade penalized. While different teams members may have different backgrounds and abilities, it is

the responsibility of every team member to understand how and why all code and approaches in the assignment works.

Formatting + communication

Suppress code and warnings

- Include the following in the YAML of your `report.qmd` to suppress all code, warnings, and other messages.

```
execute:
  echo: false
  warning: false
```

Headers

Use headers to clearly label each section. Make sure there is a space between the previous line and the header. Use appropriate header levels.

References

Include all references in a section called "References" at the end of the report. This course does not have specific requirements for formatting citations and references. Optional: Use Quarto's citation support for generating your reference. See Citations & Footnotes on the Quarto documentation for more on that.

Appendix

If you have additional work that does not fit or does not belong in the body of the report, you may put it at the end of the document in section called "Appendix". The items in the appendix should be properly labeled. The appendix should only be for additional material. The reader should be able to fully understand your report without viewing content in the appendix. We will not grade your appendix.

Resize figures

Resize plots and figures, so you have more space for the narrative. Resize individual figures:
Set `fig-width` and `fig-height` in chunk options, e.g.,

```
#| echo: fenced
#| label: plot1
#| fig-height: 3
#| fig-width: 5
```

replacing `plot1` with a meaningful label and the height and width with values appropriate for
your write up.

Resize all figures: Include the `fig-height` and `fig-width` options in the YAML header as
shown below:

```
execute:
  fig-height: 3
  fig-width: 5
```

Replace the height and width values with values appropriate for your write up.

Arranging plots

Arrange plots in a grid, instead of one after the other. This is especially useful when displaying
plots for exploratory data analysis and to check assumptions.

If you're using ggplot2 functions, the patchwork package makes it easy to arrange plots in a
grid.

More to be added soon...