Midterm Project: R Package Overview

Overview:

The goals of this project are to allow students to practice communicating with Rmarkdown documents, to better understand package usage and to expose the class to various packages available inside the R ecosystem. Groups should select a package, that has not been covered in class (or loosely covered or not yet covered), and develop a standalone document that includes the following sections:

- ➤ Package Overview: In your own words describe in detail what problem(s) this package is intended to solve/why it was created. Be sure to include background information, if available, on version history, usage and dependency to other packages (these could all be subsections)
- Examples of Usage: Every package typically includes many functions. Provide examples and explanations for each of the "main" functions included in the package. If there is a logical order/sequence to function usage provide a narrative between examples that highlights this sequence. Feel free to use the examples in package documentation as references but please do not repeat these examples in your overview.
- ➤ Similar Packages: Provide a list and commentary on the similarities (differences to similar packages) your package has to other packages inside the R and/or in Python (Julia if you are adventurous!)
- ➤ **Reflection:** Include your opinion on the pros and cons of the package, feel free to make suggestions on features that could be added or tweaked.

Publish to Rpubs and GitHub: Groups should publish their overviews to Rpubs and to their personal GitHub accounts.

Grading: Grading will be conducted with a focus on the quality of the Rmarkdown document, the usability and detail provided in the examples, **creativity of the content** and scope of the chosen package.

Presentation and Ranking: All groups will present their work in class. After the presentations are complete you will be asked to rank the projects with the top package overview being selected using single transferable vote (<u>stv</u>). The rankings will have no impact on grades but the winners will be featured in the School of Data Science student newsletter.