Final Grade Reflection

Fiona Norton

In this document, you make a data-based argument for the grade you've earned in this course. Your argument should include evidence from the supporting artifacts you've provided.

The output document should be a PDF or a Word Document, as it should be a **maximum** of 2-pages.

Week 6 Grade Reflection

Accomplishment of Learning Targets

Over the past six weeks I have strengthened my knowledge of R and R Studio through each preview activity, practice activity, lab assignment, and challenge problem. I have shown my proficiency in the majority of the learning targets and shown my desire to do better in areas that I do not feel as strong in. Beginning with the "Working With Data" learning targets, I can import data from a variety of formats which can be seen at the beginning of almost every assignment in the "setup" section, specifically in Practice Activity 4, Practice Activity 5.2, and Lab 3. I can select necessary columns from a dataset, filter rows from a dataframe, modify existing variables and create new variables in a dataframe for a variety of data types, as shown in Practice Activity 3, Practice Activity 5.1, and question 6 on Lab 3. I can use mutating joins to combine multiple dataframes and filtering joins to filter rows from a dataframe; this can be seen in Lab 4 questions 2, 5, and 6.

I am also proficient in data visualization and summarization, and I believe I have made a lot of progress in this area since my week 3 reflection. I can create visualizations for a variety of variable types, I use plot modifications to make my visualization clear to the reader, and I show creativity in my visualizations. All of these skills can be seen in my plots on recent labs, specifically Lab 4 questions 6 and 7, Lab 2 questions 9, 10, and 12, and almost all of Lab 5. I've shown that I can calculate numerical summaries of variables in Lab 4 question 6 and the "Familiar Words" section of Lab 3. I can find summaries of variables across multiple groups as I showed in Challenge 3 parts 2 and 3. I can create tables which make my summaries clear to the reader like in Lab 4 question 5 (finding top 5 regions), and Challenge 3 parts 2 and 3.

Finally I have shown proficiency in reproducibility and efficiency of my code. I have shown that I can create a reproducible analysis using RStudio projects, Quarto documents, and the here package at the beginning of each lab by importing the data with the "here" package and including the correct libraries. I can write well documented and tidy code which I try to always do but can be seen specifically in Lab 4 question 4. I can use iteration to reduce repetition in my code, like in Challenge 3 parts 2 and 3.

Evidence of Continued Learning

Extending My Thinking

Each week I show my willingness and ability to extend my thinking through the completion of challenge problems. In all of my challenge problems I dive deeper into a specific aspect of what we are learning that week and try to further my understanding of the topic. One example of this is the customization/challenge section of Lab 2 where I attempted to create and easier to read side by side box plot of the weights of different rodents by species including a color and label for the genus of that species as well as a customized color pallet. I am proficient in the learning targets discussed in the previous section because of the ways in which I am extending my thinking.

Revising My Thinking

I am constantly revising my thinking by going back to old assignments and making improvements and working through preview activities multiple times to try to gain a better understanding of topics before coming to class. Each week I submit revisions to my labs and challenges based on the feedback provided by professor Theobold and my peers as well as the new knowledge I have gained in the time since the original submission. Along with these revisions, I write reflections about what I have learned from the changes and how I will use that knowledge moving forward. Good examples of how I have revised and extended my thinking include my Lab 3 and Lab 4 revision reflections. The revision process has helped me learn much more about R than I would have without receiving any feedback.

Growth as a Team Member

Collaborative Group Work

My growth as a team member throughout this course has mainly come as a result of our in class collaborative group work. Every Tuesday we work on a practice activity as a team. Our group has created an environment where everyone feels safe to ask questions and speak their minds. Our completion of these practice activities is a reflection of how well we are working together. Although we do not explicitly assign roles each week, there is a natural rotation of

the roles depending on who is feeling strongest in the topic for that week. That person often emerges as the leader/captain for the week and the rest of us are happy to fall into other roles. I have realized that it can be difficult for me to ask questions when I feel behind because I do not want to hold back the group but I have come to understand the importance of working as a team and to realize that explaining things to other people is helpful for everyone's learning so it is always good to ask questions.

Peer Code Review

I have completed each assigned peer code review carefully and with thought. I understand the importance of being kind to my peers but also realize that feedback is helpful so I try to give in depth reviews with words of encouragement. This can be seen in my peer reviews throughout the quarter.

Attention to Personal Goals

At the beginning of this course I thought about my personal goals and decided to focus on improving my data visualization skills. I feel that I've made drastic progress in this area over the past 6 weeks and I hope to continue doing so. I have learned how to add colors and labels to a graph, how to create many different kinds of graphs with ggplot, how to customize a legend or exclude it all together, and how to graph only certain specific aspects of the data by combining the use of ggplot with dplyer functions. Additionally I wanted a general sense of "knowing R". Although this is very difficult to measure, I do feel like I am getting closer and closer each week.