Austin Liu

STAT 331

Dr. Theobold

December 3, 2022

**Final Portfolio Reflection**

I think I have earned an A in the course.

**Working with Data**

I achieved (WD-1) in Challenge 4. I achieved (WD-2) in Lab 3 Question 7. I achieved (WD-3) in the Study Subjects part of Lab 3. I achieved the learning target (WD-4) in Lab 5 Q1 and 2, and Lab 3 Question 6. I demonstrated ability for mutating joins in Challenge 4 Boxplots Question (WD-5). I achieved (WD-6) in Lab 4 Question 2. I achieved (WD-7) in Lab 4 Question 6.

**Reproducibility**

I demonstrate proficiency in creating a reproducible analysis (R-1) in all Labs. I demonstrate the ability to write documented and tidy code in Lab 7 with code comments (R-2). I show that I am able to write robust programs resistant to change in Lab 7 Task 5 & 6 functions (R-3). I also use the here function to load in data in every lab.

**Data Visualization and Summarization**

In Lab 2 and 3, I create visualizations for a variety of variable types (DVS-1). In Lab 3 I used plot modifications to make my visualization clear for the reader (DVS-2). In Lab 3, I show creativity by creating my own visualizations with my personal spin of color, transparency, and fill color (DVS-3). In Lab 3, Question 7 I use summary to calculate numerical summaries of variables (DVS-4). In Lab 4 Question 3-5, I find summaries across columns for multiple groups (DVS-5). I achieved (DVS-6) in Lab 9 Question 1. I achieved (DVS-7) in Challenge 9 Part 3: Question 3.

**Program Efficiency**

I display understanding of writing concise and non-repetitive code in Lab 4 Question 3 with the filter step (PE-1). I achieve learning target (PE-2) in Lab 8, with functions that help build the 12 days of Christmas song. In that same question Lab 4 Q3, I use iteration over all columns to reduce repetition in my code (PE-3).

An example of utilizing modern tools (PE-4) is using pivot\_wider () instead of spread() and pivot\_longer() instead of gather() in Lab 4 Q6. I also used across function instead of superseded functions in Lab 7 Part 1 Task 1.

**Data Simulation & Modeling**

I achieved this learning target in Practice Activity 9 Part 2 using uniform, normal, and chi-squared distributions (DSM-1). I achieved this target in Lab 9 Question 6 and 7 (DSM-2).

I have demonstrated understanding of all the learning targets from Weeks 1-10. Since Week 3, I have been more active in group discussion, communication, and classroom participation. I have also done a few reflections and revisions to revise my thinking. I also have completed all the challenges to extend my thinking. I feel that I have met all laid out expectations.

From an outside perspective, I would have encouraged myself to contribute more on discord, as I was not as active as I could have been. I did contribute to a growing learning environment with peer code review and answering questions of not just my team members, but others sitting around me.

I show up to every class and take notes when Professor Theobold is lecturing, I complete the preview activities including the readings, tutorials, and lecture videos prior to coming to class on Tuesdays. I complete the practice activities in class or before Wednesday. I completed the labs and challenges before Sunday. I look through comments given by peers and keep their comments in mind when doing revisions and moving forward.

I also performed some revisions on questions even when attaining an S. I completed revisions on all suggested assignments. I also completed revisions on Challenge 9 and Lab 9, these revisions had not been done prior to the last due date, but I already earned a check on both. I believe they were still important to include in my portfolio. In terms of extending my thinking, I believe this is shows that I did more than what was asked of me. Also, the 2 challenges that I included in my portfolio show how I went above and beyond where I made modifications per the assignment and used outside research to solve the problems.

As a team member, I worked well with my group and enjoyed it. Although we were a small group, we were always available to help each other and answer questions. I have progressed in the sense that I am more comfortable voicing my opinions, without fear of being incorrect. I also feel comfortable in my group asking questions without fear of judgement from my group members for not knowing how to do something. In our group of three, we all work individually and then consult each other when we have questions.

In conclusion:

* I believe I have displayed understanding of all the learning targets
* I believe I have grown in my ability to work on teams
* I have pushed myself the extra distance on challenges
* I have taken time to reflect on mistakes and revise the way I approached problems
* I have been an active and positive contributor to the classroom
* I came to class ready in my preparation

With all that in mind, I believe for these reasons that I have earned an A in this class.