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Reflection

I think the TB Data Project did a great job at covering several different aspects of statistics including hypothesis testing, confidence intervals, using proportions for categorical data, using means and/or medians for quantitative data, and emphasizing meeting the criteria in order to run tests and analyze data. I feel like every single topic that was introduced and covered in class was somehow incorporated into this project.

Prior to taking this class, I did not know very much about the field of statistics or how to interpret statistical data. I had heard that it's easy to make numbers say what you want them to say rather than what they actually mean, but I had no idea what that meant until taking this class. Now I know that you can get wildly different results based on things like not meeting test criteria but running numbers anyway, using replacement or conditional probability in calculations, failing to account for outliers, etc…

I think that statistics is a very important field, and as a computer scientist I have frequently worked with things like probabilities in the past. In the past I would try to intuitively think through calculations without really knowing how or why I did something a certain way, but this class was eye-opening and gave me many lightbulb moments that I was able to connect back to previous experiences and even other classes. I am in Discrete Structures (CSIS-2430) right now and there has been a lot of overlap between these two classes, which has helped to give me a solid understanding of the subject matter. Prior to this class I felt like I had decent problem-solving skills and was able to examine most situations from an objective standpoint, but this class gave me many opportunities to examine my bias (heh) and trust the process and the math instead of making assumptions or just going with a gut feeling.