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Computer Science Principles-CS-1030-001

26 April 2023

Final Project: Khan Academy Lessons and Unit Test

* Data Tools:
  + When I first opened the lesson, I was in shock at how daunting the whole thing looked. To try and have some control over how I processed the information, I took notes on what seemed to be the most important information to remember. During this lesson I learned that, in a spreadsheet, the *COUNTA* function only counts from the second row and onwards. This is because the first row takes into account the columns and their titles. This is something I didn’t fully understand before the lesson. I also learned that once the spreadsheet is filled out, it is easy to access different functions to find answers I am looking for. Some of these functions included: finding sum and getting a count for a specific type of recording. This makes data analyzation nice and simple. I did have a little trouble understanding how to use some of the statistical functions, because we were only provided with a viewable version of the google sheet for the lesson, not necessarily an editable one. Putting that aside, I gained more knowledge about sheets from the lesson than I started with. This was proven by my 3/4 =75% on the “computing basic statistics” quiz. I got the same score on the “finding patterns in data sets” quiz.
* Big Data:
  + When I opened this lesson, I thought it would be quicker to get through. I turned out to be right. One thing that I learned at the very start was that data recordings can reach at least, the classification of zettabytes, if not higher. That’s an insane amount of data and storage space. Which means that we can no longer use traditional ways of processing. I’ve never had a reason to look into big data until this class, and now understand that most of the data collected is open to the public if they so choose to analyze it for their own research. Like Hannah Fry mentions in her book: *Hello World: Being Human in the Age of Algorithms*, the medical field collects an electronic health record to help treat patients. Which was also a mentioned source of data collection from this lesson. This just furthers the fact that technology is touching every part of our lives, like Fry tells us it is. By the end of this lesson, I felt as though I got a decent understanding of big data, since I got a 4/4=100% on the lesson quiz.
* Bias in Machine Learning:
  + Right from the start, I understood that this lesson was going to provide me with information on bias in computer systems. This bias is a result of the training data provided to algorithms be the human. Most of the time training data is biased because humans constantly live with unconscious bias. Out of the three areas that this lesson mentioned, where bias in the algorithm can exist, I found the area on “predictive algorithms” and criminal justice to be the most important. The Criminal Justice System is one that can have major affects on an individuals life. This can be based on the training data the algorithms received, which is constructed upon how humans behaved and expressed attitudes in the past. While reading through one of the last articles, I learned that even facial recognition algorithms can be biased, especially against darker skinned females. Which is something I never really considered before this lesson. By the end of this lesson I felt as though I had an okay understanding of the information being provided. This quiz was a little more difficult, proven by my 2/4=50% score.
* My Experience with the Unit Test:
  + Graphical user interface, application

    Description automatically generatedMy experience with the unit test was positive overall. On the questions that I got wrong, and after seeing the right answer, I realized how clear it would have been if I read the question a third time. That said, the test was not overly difficult, and showed me that I could remember basic information from the lessons, when asked a simple question. My performance was decent, I got 6/9 questions. I improved my skills in the “Bias in machine learning” category, and remained at the same level on the other three. These where the “Computing basic statistics”, “Finding patterns in data sets”, and “Big Data”. At the end of the test, it was nice to see that the unit recommends the lessons I could review if I wanted to increase my performance and understanding.