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CS49901

Date: 8/17/2016

### **My Contributions:**

Initially we as a team wanted to work on every aspect of the project together, but quickly found that this was inefficient. We decided to separate the work and gave each other a detailed explanation of our completed tasks. I was responsible for all the scripts needed for data cleaning and how to deal with missing and unformatted data. I worked on data analyzing on the outputs for the machine learning algorithm that Weka produced. Also, I gathered information did research for the topic we chose.

I had a big idea when it came to the data file and ways to improve our results from bad to good. My idea was to index the semesters the students had taken in college. This resulted with favorable outcomes for our prediction models and we were happy with the outputs. Additionally, I came up with the idea to use admission scores and student age for our hypothesis.

I had some difficulties along the way. The data preprocessing was the first. I had written a few scripts but it all took an incredible amount of time to run, however with some research and testing I found a solution to this problem. I began this project with no prior knowledge of machine learning and the software tool, Weka. I had to do a great deal of self-learning and found it very rewarding.

We had plans to include a prediction model for students *next semester GPA*. We built the model on the 30% of data and it worked fairly well. However, when we ran it on 100% of the data, the results were poor and could not be used for the prediction model. We had hoped this worked because it would have contributed greatly with the project, but this had to be dropped.

### **Teamwork:**

Our team consisted two people, so there was no management involved. We each understood what needed to be completed and the due date for each. However, I would say that I took on the role of the organizer by scheduling tasks on a weekly basis and became the data expert. While my teammate filled in certain gaps for machine learning concepts in addition to having knowledge about Weka. Even though, we were in charge of different aspects of the project, we both equally contributed to every part of the project. Whether it was my teammate advising me on what I should change in the data file or myself advising her what machine learning algorithm we should consider. We had great teamwork and it was pleasant experience.

### **Course Feedback:**

The course was pretty straight forward. We presented a project and the professor decided which project would move forward. I like most parts of this course, the best part of this course was the exposure to the new technology and the challenges I was faced with. I liked the presentation, it gave me a sense of the people I wanted to work with before the teams were formed and it improved my presentation skills. One thing I did not like was that idea portion of the class. Coming up with an idea that is feasible and given the amount of time we had was fairly difficult. I think for future summer classes all students should come up with an idea. Then, when it is time for them to choose which idea they wish to work I feel that the department should also input some ideas of their own. This way students who did not like any ideas of their own or their peers could have a second option.

