A) Why did you select this problem to solve?

Answer: Customer churn rate is a universal issue that many companies deal with. They experience a lot of loss due to the poor retention of customers. Therefore, I decided to examine the causes and factors that play a role in this universal issue. If I decide to create a company in the future, I have knowledge of customer retention and factors that play a role in churn rates, therefore I will be able to avoid such issues.

B) How did you contribute to this project?

Answer: I contributed to this project by selecting a linear model, which was logistic regression. I utilized the model to find out what causes customer churn. In response, company X will be able to see what features cause their customers to cancel their subscriptions and will find ways to tweak or change the features. These features can include monthly charges. I then visualized the features with its likelihood of customer retention or churn, i also visualized the confusion matrix and how well the model performed.

- C) What did you find difficult about this project? What did you find easy? What did you learn? Answer: What i found most difficult about this project, same as assignments, is selecting the correct environment to run the project on. Thankfully, by assignment 5 i had found the best environment to run it on and download all the requirements without any issues. I chose jupyter notebook and luckily had no issues with any imports. I found it easy applying knowledge learned in class and assignments to visualize real world problems. I was using things that i have already implemented before so it was straightforward. I learned that when using the customer churn dataset, logistic regression and gradient boosted performed similarly due to the 0,1 nature of the data set, more specifically, churn or not.
- D) Reflect on your experience during the demo session. Describe what it was like to both present your project and check out the projects of your classmates.

Answer: i appreciated the demo session since i was able to explain my model and also get feedback from the TA as to what i can improve to get ready for the video presentation. It was a fairly easy demo and you got reviewed before the big presentation. It was nice checking out other classmates projects and seeing the variety of models and problems they decided to pursue.

E) How can you apply what you learned in this course to your desired career? Answer: as a software engineer, the knowledge i gained from this project and the course as a whole can be applied to many different things. As an example, if i work for a company in the future that has a high churn rate i can build a model to figure out what causes such a high rate. This will save the company a lot of money. In general, i can build and train many models to make predictions which is very necessary in todays world to be a successful company.