The author has devised the experiment by using Count vectorizer representation of the text review. The experiment assumes that the meta data is irrelevant to model prediction. Next, the author runs several simulation to figure out the best number of features for feature selection. After coming up with ideal feature number 400, the author runs the training set to several chosen classification which includes KNN, multinomial naïve bayes, logistic regression, support vector machine , and a stacking system. The author runs cross validation to measure accuracy with unspecified folds. Next, the author simulate an experiment of tuning the hyper parameters for logistic and support vector machine which receives an ideal parameter of C = 0.7. Then, the author did some error analysis by looking at the confusion matrix of logistic and stack system classifiers. Essentially discussing how the models does not perform well in predicting neutral ratings. The author then concludes the experiment by stating that the difficulty in predicting a neutral polarity results in similar performances on all classifiers.

The author has done well in designing the experiment. Experiment on finding optimal parameters is often conducted, one with the ideal best feature number, another with tuning of hyper parameters of logistic and support vector machine. The author also shows good error analysis in the results when he analyzes the confusion matrix of the classifiers. Overall, the author shows a good attempt on the project.

Suggestions on improving the experiment includes using the doc2vec and other vectorizer representation compared to count vectorizer. The report shown was also lacking in critical analysis such as the number of cross validation folds, reasoning behind the accuracy received by models, and the reasoning behind tuning the hyper parameters. And also, an experiment could be devised about removing meta features from the dataset.