CHAPTER 6 CONCLUSION

SGD and SVM able to predict the intentions of consumers when visiting online stores. This is can be shown when the train and test data compared with actual data. The train data and test data is approaching the actual data which can be concluded the model of prediction is able to get used for predicting the future value.

RandomizedSearchCV hyperparameter tuning works better if the algorithm parameters and their dataset have a large capacity. It is computationally more efficient in RandomizedSearchCV, but it may not find the optimal hyperparameter because it doesn't try all of them. Resampling using ADASYN can correct the balancing data so that the accuracy value can be readjusted with more precision. The linear kernel can be tried directly by way of dimension reduction beforehand because the value of feature X is very large, so the data must be scaled first. In the end, using RandomizedSearchCV's hyperparameter tuning, both algorithms show better values. But the SGD algorithm shows better results compared to the SVM algorithm. Both algorithms show the best results on a test size of 60% and a training size of 40%, with accuracy scores reaching 0.88 for SVM and 0.89 for SGD. There are also more SGD parameters than SVM so that the calculation process can be deeper and more accurate with various existing parameters.

For further research, the researcher can utilized other hyperparameter tuning method for better accuracy and performance. Several parameters and also values that support the accuracy of the prediction results can also be processed using a more complex tuning process. Bigger dataset is also one of the better research for predicting the value.