## **ABSTRACT**

Traders like sellers of hardware, super market sellers and many others who keep track of their stocks, purchases and sales. They should use the software to help them receive regular updates. They buy things from the vendors they deal with. Vendors deliver the product they are looking for.

Some products generally yield a very high profit, and where they don't yield as some. If there is any profit or loss that the user yields from products purchased from vendors, he won't be able to decide exactly which product to consider. The seller who is most beneficial and who is not can't decide. The purpose of this application is to manage and categorize the stock details. The output focuses primarily on the list of vendors and ranks them with the highest priority. The application user can predict the vendors by inserting some test inputs in the required text boxes. Performance of any vendor will be based on quality, on-time delivery of product and profit from that vendor with the help of purchase history.

The prediction algorithm used is support vector machine (SVM) which will create a model called pickle-dump. The data's from the dataset will be fed into this algorithm and the clusters will be formed within the training model. As the test input is received from the application user the SVM predicts vendors list. Flask is used as the local server to execute the application. Then we used an algorithm called Skfuzzy to performance of some particular vendors. As we type the vendor name, it is going to predict the performance of vendor and present in graphs and charts. There will a page to display the statistical data of the stock.

The usage of this application will help the users to predict an accurate vendor for some particular product. Vendors will be listed based on their performance and not on preference. Thus by predicting the list it is useful for the user to take a quick and beneficial decision over the trade.

Stock management, profit and loss prediction application can be further implemented by using different algorithms where the accuracy of the output can be further increased. The training dataset needs to be accurate for prediction. This application has wide use in many small-scale and large-scale units.