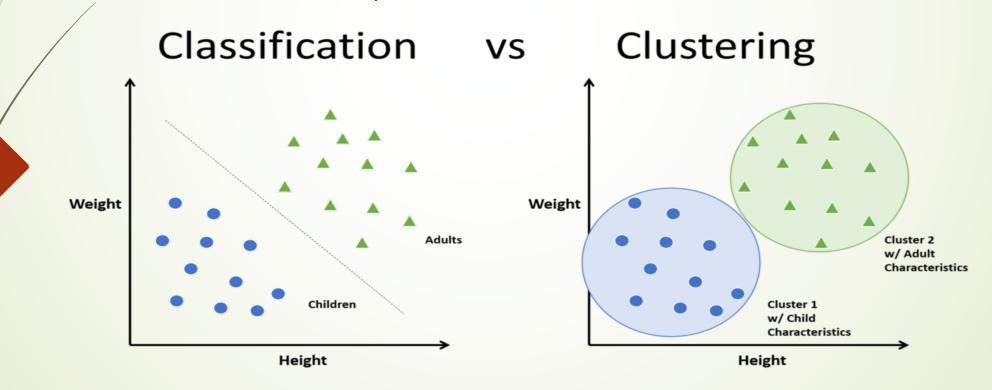
Classification & clustering methods

Both methods are used in data mining for analysing the data sets and divide them in different way



Classification & clustering methods

Classification

The techniques used here is a supervised learning to help find the relation between features and the assigned labels.

It use Some Algorithms such as:

Logistic Regression

Neural Networks

Support Vector Machines

Clustering

The techniques used here is unsupervised learning to help organise the data point into homogeneous group that have the similarities. Because the data is not prelabelled, there is no training process. clusters are created using similarity functions that measure the distance between points.

It use Some Algorithms such as:

K-means

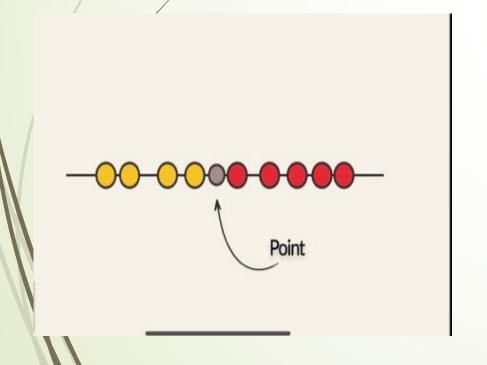
K-medoids

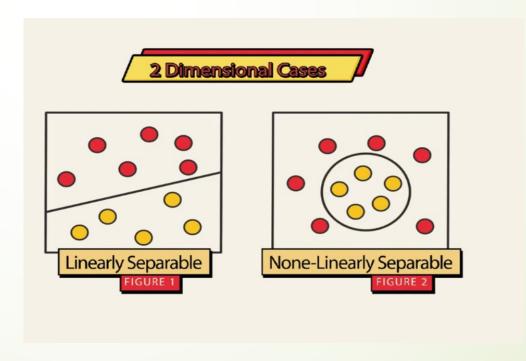
Density Based

Support vector machines

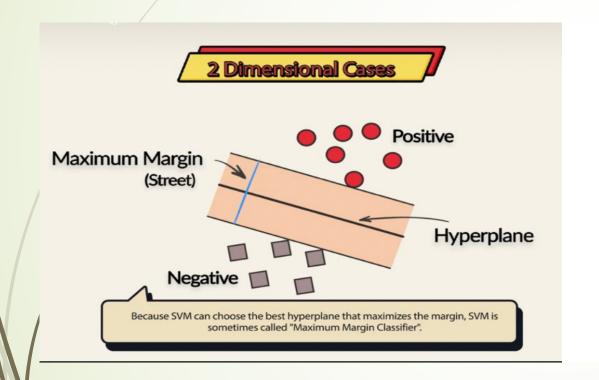
It's a supervised machine learning algorithm.

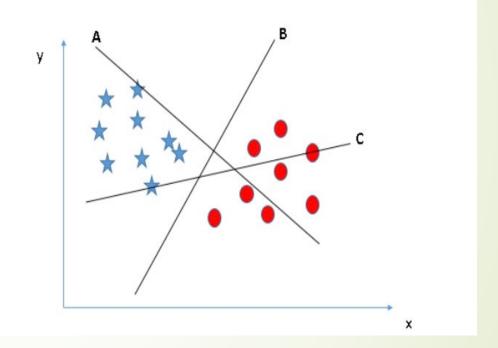
It is input labeled data and output optimal hyperplane





SVM also help to find optimal hyperplane that segregates the two classes better





References

- https://kevin-c-lee26.medium.com/machine-learning-101-classification-vsclustering-e11b12c71243
- <u>https://www.analyticsvidhya.com/blog/2017/09/understaing-support-vector-machine-example-code/</u>