

# PROJECT

## PYTHON IS COOL,KIDS

### TEAM MEMBERS:-

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### PROJECT TITLE:- "Market Segmentation using machine learning in Python"

#### ABSTRACT:-

Unsupervised learning allows us to approach problems with little or no idea what our results should look like. We can derive structure from data where we don't necessarily know the effect of the variables. We can derive this structure by clustering the data based on relationships among the variables in the data. The market segmentation is also an example of clustering in unsupervised learning. This clustering is done by using K – Means algorithm in Python. The results will help to find out the present and future trend of the customers to make strong decisions. we will be working on market segregation based on buying behaviour using k-clustering algorithm in python. The data set is taken from UCI machine learning repository

To make our clustering reach its maximum performance we have to determine which hyperparameter fits to the data. To determine which hyperparameter is the best for our model and data ,we can use the method to decide.

In concluding we will determine the cluster of customer on the basis of characteristics that exist using python.

Our plan of action (**POA**) is :-

- Data analysing and visualisation
- Recency Frequency monetary Table
- Statistics Modelling for data fitting
- Clustering of Data using ML( k means clustering)

**Python Libraries :- NumPy, Pandas, Matplotlib, Seaborn**

**Project Use:-** Since we are from Mtech this project will help us in our coming placements and will help to target different sectors.