Capstone Project Submission

Instructions:

- i) Please fill in all the required information.
- ii) Avoid grammatical errors.

Team Member's Name, Email and Contribution:

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Contribution – Done Project single Handedly

Please paste the GitHub Repo link.

Github Link:- https://github.com/Chandr25/Almabetterclusteringproject

Please write a short summary of your Capstone project and its components. Describe the problem statement, your approaches and your conclusions. (200-400 words)

We all are aware about importance of customer in any business. So it is very crucial to know the need and interest of customer. Suppose we want to introduce a new product into market then it is crucial to know the market size and demand for that product so that the company can make profit through it. Here the customer segmentation comes into picture.

The dataset with us has lots of record from online market and our task is to analyse the data and find keypoint from it and also make clusters according to features given.

After removing null values. we done exploratory data analysis to know some insights and we finded some points which are as follows.

- 1)Top 5 selling products are WHITE HANGING HEART T-LIGHT HOLDER, REGENCY CAKESTAND 3 TIER, JUMBO BAG RED RETROSPOT, ASSORTED COLOUR BIRD ORNAMENT and PARTY BUNTING.
- 2) Top 5 stock name based on selling
- 1. 85123A 2. 22423 3. 85099B 4. 84879 5. 47566
- 3) Most of the customers are from unitedkingdom, Germany, france, eire, spain
- 4) Most of the customer buy things on thursday, Wednesday and Tuesday.
- 5) most numbers of customers have purches the gifts in the month of November .October and December September
- 6)Less numbers of customers have purches the gifts in the month of April ,january and February.
- 7)In AfterNone Time most of the customers have purches the item.
- 8) Most of the customers have purches the items in Aftrnoon, moderate numbers of customers have purches the items in Morning and least numbers of customers have purches the items in Evening.

After that we created RFM Model and made clusters through various algorithms. The optimum number of clusters from all algorithms is 2 but in some RFM cases and in DBSCAN it shows 3.But as in lot of cases its 2 so we use two clusters to represent our clustering algorithm in this case.