Clustering Analysis

Task: Implementing Clustering Algorithms

Explanation: In this module, you will practice unsupervised learning techniques for clustering data points based on similarities. You will practice different clustering algorithms and how to choose the appropriate method. You will work with the dataset of your choice, and produce the report of your analysis.

Associated Course (if you haven't taken it or mastered the skills):

- Clustering Analysis

Instructions:

1. Partitioning Clustering: Implement partitioning clustering algorithms like k-Means to divide data points into distinct clusters.
2. Hierarchical Clustering: Build a hierarchical clustering model to create a tree-like structure of data clusters.
3. Density-Based Clustering: Use density-based clustering algorithms such as DBSCAN to identify clusters based on data density.
4. Grid-Based Clustering: Understand grid-based clustering methods for handling large datasets.