Clustering Results Report

Clustering Algorithm:

Hierarchical Clustering

Number of Clusters:

2

Clustering Metrics:

- **DB Index:** 0.6428
  The Davies-Bouldin Index (DB Index) measures the average similarity ratio of each cluster to the other clusters. A lower value indicates better clustering with more compact and well-separated clusters. A DB Index value of 0.6428 suggests a relatively good clustering result.
- **Silhouette Score:** 0.4748
  The Silhouette Score evaluates the quality of the clustering by measuring how close each point in one cluster is to the points in the neighboring clusters. A score closer to +1 indicates well-separated clusters. A score of 0.4748 indicates moderately good separation and cohesion in the clusters.

Cluster Distribution:

- **Cluster 0:** 450 customers
- **Cluster 1:** 550 customers

The clustering process divided the customers into two distinct clusters based on their **Total Spending** and **Purchase Frequency**.