CSE 564 – DATA VISUALIZATION

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Mini Project #2(B)

Dataset: The same Dataset used for Lab 1 and 2A implementation is used for this assignment.

Noteworthy Implementations:

- MDS plots for both data points and variables have been plotted.
- The 1-|Corelation| has been used to derive the points to be plotted. (Task 4)
- Using the previous K-Means Clustering plot, you can select the bar to select the K-means cluster value, and thus, clustering happens in the data MDS Plot as well as the Parallel Coordinates Plot.
- The user can drag the axis to have a meaningful axis ordering. (Task 5)
- The Parallel Coordinates Plot can be plotted using the user-defined variable selection by the user and the axes of the plots are arranged in that way. One can also select all the variables altogether using the single button and plot PCP. (Task 6)
- The polylines in the PCP are colored according to the K-means clustering for the data points.
- On hover, one can see the flow of data lines for the respective cluster group.

The implementation integrates user interaction features, allowing users to order the axes in a meaningful way and the number of clusters (k) for k-means clustering through interactive elements. This capability enables users to explore various aspects of the dataset, observing how adjustments affect visualizations and clustering outcomes. This approach enhances the user experience and facilitates a deeper understanding of the data structures.