## CS5100 Final Project

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Final project will be applying Agglomerative Hierarchical Clustering algorithm to a selected dataset and using various heuristic functions to determine the actions of agent.

## Agglomerative Hierarchical Clustering

- Clustering from every single data.
- Performs good on messy dataset in unsupervised learning
- Agent is the program
- Actions are the combinations made to cluster the data
- Different heuristic functions to determine the actions

## Distance Metrics - Affinity

We will compare the following distance metrics to determine which one is most optimal for our given dataset:

- Euclidean Distance
- Manhattan Distance
- Cosine Distance
- At least 2 Heuristic Functions based on the chosen dataset