

Project Check-In 2

By December 8...

- All of the K-mean algorithm implementation complete including benchmarks related to real world datasets and different initialization strategies

 - Implemented **K-Means ++** Strategy
 - Comparing both K-Means vs. Random through multiple trials
 - Applied to real world dataset (Spotify-song dataset from Kaggle)
 - Interpreted clusters in terms of musical mood
 - Created benchmark to look at performance
 - Iterations to converge, within cluster sum of squares, runtime (milliseconds)

- Most visualizations made for my written report and slides

 - K-Means vs Random
 - Spotify Energy vs. Valence

- Draft of my written report with sections

 - Introduction & Background
 - Implementation
 - Real World Applications
 - Benchmarking Results/Analysis
 - Conclusion/Summary
 - Have already written a good portion of it

- Draft of my slides with sections

 - Drafted complete Google Slides with similar sections as report

Should have full slides/report by Tuesday 12/16