Tasks list

- Exploratory data analysis and visualization
    - Illustrate the data
    - PCA with feature scaling
    - Include comments on what can be learned from the visualizations
- Classification
    - M1: Decision Trees
        - Methodology
            - How we applied the method to the data
            - Details needed to reproduce the results
            - How hyperparameters were selected
        - Reference Decision Tree – Any Python Library
        - Homebrew Decision Tree - No Keras, TensorFlow or Pytorch. Preprocessing can be done with any packages.
        - Interpretation/Visualizations
    - M2: Feed-Forward Neural Networks
        - Methodology
            - How we applied the method to the data
            - Details needed to reproduce the results
            - How hyperparameters were selected
        - Reference FFNN – Any Python Library
        - Homebrew FFNN- No Keras, TensorFlow or Pytorch. Preprocessing can be done with any packages.
        - Interpretation/Visualizations
    - M3: One or more classification methods, free choice.
        - Methodology
            - How we applied the method to the data
            - Details needed to reproduce the results
            - How hyperparameters were selected
        - Reuse reference implementations from old reports? – Any library, no restrictions
        - Possibly use an ensemble method using reference implementations of models. – Any library, no restrictions
- Interpretation
    - Discuss performance of each method
    - Compare methods and interpret results
    - Why do some methods perform better than others?