Project proposal

- ## Introduction:

- **Predicting Corporate Bankruptcy**
  We are trying to **predict whether a company will go bankrupt.** This is important because it helps investors, banks, and businesses avoid financial losses. If we can predict bankruptcy accurately, companies can take early action to avoid failure, and banks can make better lending decisions,we aim to develop a machine learning model that can classify companies as either bankrupt or not bankrupt based on financial indicators.

- ## Models/algorithms:

1. **XGBoost (Gradient Boosted Trees)**
2. **Random Forest:** This model works well on financial data
3. **LASSO and Ridge Regression**
4. **Neural Networks**
5. **Support Vector Machine (SVM)**

Data:

- Company Bankruptcy Prediction
- **Data Specifics:**
  1. **Size: 6,819** samples(companies) and **96** financial features
  2. **Format:** The data is provided in **CSV** format
  3. **Source:** The data is sourced from the Taiwan Economic Journal and available on Kaggle.
  4. **Time: Financial data** from 1999 to 2009
  5. **Target variable: Binary classification** (Bankrupt=1, Not Bankrupt=0)

References:

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