

## DATA DICTIONARY FOR “Bankruptcy Prediction Using Machine Learning” BY GROUP E

This dataset focuses on bankruptcy prediction encompasses data related to American public companies listed on the New York Stock Exchange and NASDAQ. The dataset comprises comprehensive accounting records from 8,262 distinct companies, meticulously recorded over a substantial timeframe spanning from 1999 to 2018.

A company in the American market is deemed bankrupt under two circumstances. Firstly, if the firm's management files for Chapter 11 of the Bankruptcy Code, indicating an intention to "reorganize" its business, In this case, the company's management continues to oversee day-to-day operations, but significant business decisions necessitate approval from a bankruptcy court. Secondly, if the firm's management files for Chapter 7 of the Bankruptcy Code, indicating a complete cessation of operations and the company going out of business entirely, In this dataset, the fiscal year before the filing of bankruptcy under either Chapter 11 or Chapter 7 is labeled as "Bankruptcy" (1) for the subsequent year. Conversely, if the company does not experience these bankruptcy events, it is considered to be operating normally.

LINK-<https://www.kaggle.com/datasets/utkarshx27/american-companies-bankruptcy-prediction-dataset>

Variable Name	Description	Data Type
status_label	A label indicating the status or category.	Object
year	The calendar year to which the financial data corresponds.	Integer
X1	Current assets: All assets expected to be sold or used within the next year for standard operations.	Float

X2	<b>Cost of goods sold:</b> The total expenses directly related to the sale of products.	Float
X3	<b>Depreciation and amortization:</b> Loss of value of tangible and intangible assets over time.	Float
X4	<b>EBITDA (Earnings before interest, taxes, depreciation, and amortization):</b> Overall financial performance measure.	Float
X5	<b>Inventory:</b> Accounting of a company's items and raw materials used for production or sales.	Float
X6	<b>Net Income:</b> Overall profitability after deducting all expenses from total revenue.	Float
X7	<b>Total Receivables:</b> Money owed to the company for goods or services delivered but not yet paid for.	Float
X8	<b>Market value (Market capitalization for publicly traded companies):</b> Price of the company in the market.	Float
X9	<b>Net sales:</b> Gross sales minus returns, allowances, and discounts.	Float
X10	<b>Total assets:</b> Sum of all valuable items owned by the business.	Float
X11	<b>Total Long-term debt:</b> Company liabilities due beyond one year from the balance sheet date.	Float
X12	<b>EBIT (Earnings before interest and taxes):</b> Company earnings before deducting interest and taxes.	Float
X13	<b>Gross Profit:</b> Profit after subtracting manufacturing and selling costs.	Float

<b>X14</b>	<b>Total Current Liabilities: Sum of immediate liabilities like accounts payable, accrued liabilities.</b>	<b>Float</b>
<b>X15</b>	<b>Retained Earnings: Profits remaining after paying all costs, taxes, and dividends to shareholders.</b>	<b>Float</b>
<b>X16</b>	<b>Total Revenue: Income generated from all sales before subtracting expenses.</b>	<b>Float</b>
<b>X17</b>	<b>Total Liabilities: Sum of all debts and obligations owed by the company.</b>	<b>Float</b>
<b>X18</b>	<b>Total Operating Expenses: Expenses incurred through normal business operations.</b>	<b>Float</b>