### Project Summary: Tech Stock Performance Prediction

#### Objective

Our project focuses on predicting the future stock prices of Intel, Nvidia, and AMD using machine learning. We aim to provide investors with insights to make informed decisions by analyzing historical stock data.

#### Data and Approach

We will collect over 1,000 records of historical stock prices for each company using API requests. Our analysis will primarily use supervised machine learning models like decision trees and random forests, implemented through Scikit-learn, to predict future stock prices. We'll also explore time series forecasting methods suitable for financial data.

#### Technologies Used

- \*\*Python\*\* for overall programming.

- \*\*Pandas\*\* for data manipulation.

- \*\*Matplotlib\*\* and \*\*Pandas Plotting\*\* for visualizing data and model outcomes.

- \*\*Scikit-learn\*\* for building and evaluating machine learning models.

- Data will be fetched via \*\*API Requests\*\*.

#### Evaluation

Model performance will be evaluated using metrics such as MAE, RMSE, and R-squared, alongside visual comparisons of predicted versus actual prices.

#### Goal

To develop a reliable model that forecasts the stock performance of Intel, Nvidia, and AMD, helping demystify investment decisions in the volatile tech stock market.