**Project Write-up**

**Sections:**

**Background** – **Abuzaar** - Talk about asset classes chosen and we want to test established trading strategies and ML and ANN models across these asset classes – may just about the asset classes a little, commodities, stocks, forex, and crypto.

**Technical Indicators and Strategies** -**Abuzaar** – look at project proposal then just describe briefly the describe the technical indicators and strategies.

**Steps** - **Saibal**

Got the data from yahoo finance, we used pandas-ta library to get the technical indicators, we then built using these indicators and then calculated trade statistics for these strategies.

Before running through ML and ANN models we transformed the indicators into a rolling 21day z-score and also, we normalized the indicators.

After that we ran the models through a Random Forest and ANN model and compared the test results with the trading strategies.

**Results - Aizhen**

Training Period –Table1 results for ANN and RF accuracy, recall and precision scores.

Test Period – Table2: with overall results showing the best trading strategy vs RF classifier (using best indicator) vs ANN (using best indicator).

**Conclusion - Aizhen**

Consideration: with ML and RF these strategies are not as customizable, difficult implement risk strategies (stop loss strategies). Where its good and can be used in conjunctions with other models is that it provides probability which can be useful enhance or use with other more tradition strategies.

**Postmortem – Saibal**

We can talk about the neural network issues we were having. Also, the topic of look-ahead bias. Thinking about it now, we also had issues with the data, forex in particular had OHLC values all the same for extended periods so we had to ditch some of the technical indicators we were using cause they were producing unrealistic results.