

## Competition Summary

Hello Hackathon'ers!

Welcome to our data science hackathon! We are pleased to bring you an exciting and challenging data-driven competition that will test your analytical prowess. We hope you are as excited as we are to get started!

But before we go any further, let's go over a few housekeeping items first. See details below:

- Submissions are to be emailed to [desasubmissions@gmail.com](mailto:desasubmissions@gmail.com)
- Please email a zipped folder containing all competition materials
  - The final submission should include model code, any rough work used, datasets (preferably .csv or .xlsx), a 1-page summary of the model project, and model validation scores.
- Submissions are to be emailed **no later than** October 17<sup>th</sup>, 2024 @ 12pm EST
- Extra points awarded to those who leverage the [Dinnect](#) community group at any point to initiate dialogue, other than sharing solutions. Anyone who shares solutions or any tips regarding the solution will be automatically disqualified.
- The competition is **virtual**, and you can complete it on your own schedule
- You can use any language you like (i.e. Python, R...) to complete the competition
- Submissions will be judged based on the creativity of the project, choice of model, and of course, model validation

### Competition: Stock Finance

Given the close proximity of the [2024 USA presidential elections](#), stock markets are ripe with volatility! Traders are placing their bets on which companies they wish to keep in their portfolios that will have the highest ROI. With that said, traders are banding together on social media to share their ideas on which stocks are “going to the moon”. Your job, in this competition, is to assess the overall sentiment of the portfolio of stocks below by leveraging any datasets you deem necessary. Disclaimer: this is not financial advice to trade these securities.

Stocks : [\$ONCO, \$CNEY, \$TNXP, \$APLD, \$KTTA]

Your goal is to leverage publicly available data/APIs to build a time-series dataset (most recent date as of September 26<sup>th</sup>, 2024) with factors that can be used to accurately predict stock price movements, encompassing sentiment-based data. We expect that you will leverage social media data/APIs as part of your submission.

Given that this is a prediction-based task, we would expect some form of Machine Learning to be incorporated into your submission. To simplify the target variable, we ask that you use a binary classifier (1/0) that denotes whether there was a price increase (1) or not (0) from the previous trading day. As for model validation, you are free to use any metric you deem important to assess the accuracy of your Machine Learning model(s).

Once completed with your submission, you must complete a short feedback form. This will be counted as part of your submission. The link to the form can be found here:

<https://forms.gle/Q12tzA4jzQ6kegM2A>.

Good luck and we look forward to reviewing your submissions!