FINQ Senior Data Scientist - Home Exercise

This document outlines the home exercise for candidates applying for the Senior Data Scientist position at FINQ.

Exercise Overview

Predict what are the **best 10 stocks** from S&P 500 to invest in today, using historical data from Yahoo Finance.

We estimate the work on this exercise as 3 days

Deliverables

Please submit your work as a **report** (in GoogleSlide or GoogleDoc) and a **git repository** with any code you used to complete the exercise.
- Git repository:
  - Include a full modeling cycle from API to extract data to model evaluation.
  - Ensure your code is well-documented and easy to understand.
  - You may use Vibe coding (AI) in this assignment. Yet you need to provide a good quality code, clear report and explain it.
- Report to include:
  - What is your model target
  - Features EDA
  - Evaluation
  - Relevant references
  - What you would like to do next if you had much more time and resources.

Follow-Up

In the 30 min face to face interview following this exercise, we'll ask you to:

- Walk through EDA, modeling and evaluation decisions
- Discuss tradeoffs (e.g., model choice, performance vs interpretability)
- What you would have done if you had more time