1. What is the problem you are trying to solve?

Our goal is to research and find a stock market trading strategy that outperformes the major indices, specifically focusing on swing trading strategies on growth stocks in the style of Mark Minervini and William O'neill trading strategies.

2. Describe briefly, in high level your presumed solution

We use stock market datasets and a backtesting platform in order to simulate the performance of our strategies over the years.

3. Are there other approaches?

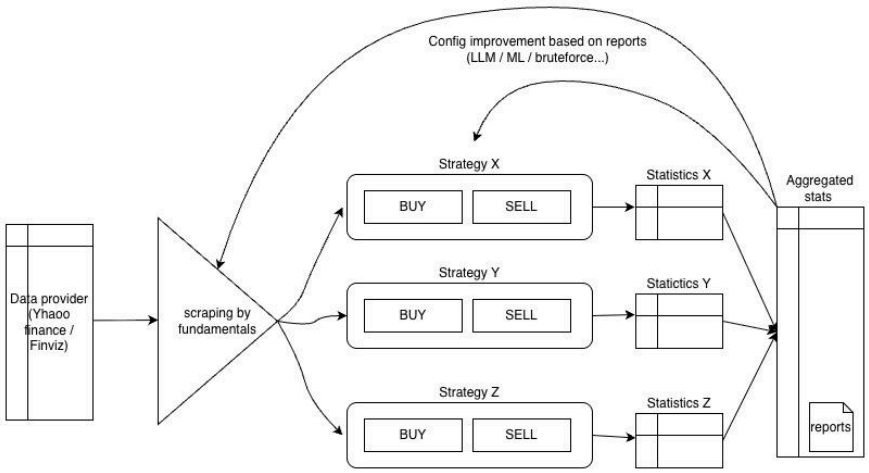
Another way to approach the problem could be to research all the big moves of the stocks and characterize the behaviour of a stock before a big move and from that to derive the trading strategy instead of jumping head first into backtesting.

4. Who are the expected users of the application?

There are no users to our application. It is a research project aimed to improve our stock market performance.

5. What will be the main features and flows of the (different) user(s)?

Since there are no users i'll focus on the flow of different strategies.
Attached is a schematic pipeline of our way of researching various strategies.



6. Are there any external dependencies?

Stock market datasets from kaggle or hugging face.
Backtrader - a python backtesting library.
We might also scrape the SEC API or Yahoo Finance in order to create additional datasets of our own.

In case you are interested to have more items to choose from, here is a list of key items that most likely will appear in such a document (in courtesy of Chat GPT):

Project Overview:

- Concise summary of the project's purpose and scope.
- Clear identification of the problem(s) being addressed.

Objectives:

- Specific goals the project aims to achieve.
- Measurable outcomes or deliverables.

Key Features:

- Highlight the main functionalities or components of the software.
- Unique selling points that differentiate the project.

Target Audience:

- Description of the intended users or beneficiaries of the software.
- Explanation of how the project meets their needs.

Technology Stack:

- List of programming languages, frameworks, and tools used in development.
- Brief explanation of their relevance to the project.

Implementation Approach:

- Overview of the methodology or approach used in developing the project.
- Highlight any innovative or unique strategies applied.

Challenges Faced:

- Identification of major hurdles encountered during development.
- Description of how these challenges were addressed or overcome.

Impact and Benefits:

- Explanation of the positive outcomes or advantages the project offers.
- Potential real-world applications or implications of the project.

Future Scope:

- Outline potential enhancements, expansions, or future iterations.
- Opportunities for further development or research.

Key Takeaways:

- Summarize the main lessons learned or insights gained from the project.
- Highlight the educational or practical value for the audience.

Demonstration or Showcase:

- Offer a glimpse or demo of the software project, if possible.
- Provide visuals or examples to illustrate its functionality.

Team and Contributors:

- Acknowledge the individuals or groups involved in the project.
- Highlight their roles and contributions.