

Project Definition

Our team is called Allocor.

Our project is to develop an asset allocation web application that enables users to select a set of stock tickers and explore different weighting strategies for constructing/optimizing their portfolio. Users will be able to toggle between common allocation methods (such as equal-weighted, market-cap-weighted, P/E-ratio-weighted, and inverse-volatility-weighted portfolios). The app will fetch historical market data to run backtests and display performance metrics including cumulative returns, CAGR, volatility, Sharpe ratio, and drawdowns. Users will be able to interact with visualizations (equity curves, pie charts, comparison dashboards) to gain insight into how weighting choices affect the long-term performance of their portfolio.

Our technology stack will include:

- Frontend: React, Chart.js
- Backend: Python (Django), Pandas, NumPy, SciPy
- Data: Yahoo Finance API (yfinance)

Our team members are:

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The Scrum Master in the first Sprint will be:

Matthew Eiley, 261177542, matthew.eiley@mail.mcgill.ca

The Proxy Product Owner in the first Sprint will be:

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