



Backtester

Backtester generic flow as follows:

```

1) self.get_data()
2) self.agents_allocate()
3) results = self.evaluate_agents(self.benchmarks)
  } def run
  } def non-evaluate
  
```

Agent

- Based on the model that is passed as an argument in the agent, the appropriate weights-allocate method is called.
- date_data_needed → function to have the min(data_from) that the model requires (e.g. for 3 months back we would need 3 months back outside of our backtesting period).

Weights allocation model

- Has essentially 2 main methods ~~main~~, the same as the agent
- weights_allocate inputs: $(\underbrace{\text{date_from, date_to}}_{\text{dt.date}}, \underbrace{\text{tickers, data}}_{\text{list Pd.DF}})$
- weights_allocate outputs:

It outputs the dataframe with the updated weights for each time that we have updated them.

Evaluation Classes

- Base class, that outlays some structure, on how the evaluation specific classes are created.
- The benchmarks are selected for a type ("pnl", "sharpe" etc.) and a frequency ("weekly", "periodic", "monthly").

Backtester output

- results {} \rightarrow nested dict that contains the benchmark results for each agent.
- The results are displayed into console, and saved to excel for the given simulation.