

C

Portfolio

○ capital: float

○ n\_assets: int

○ optimisation\_factor: str

○ weights: list[float]

○ stocks: list[Stock]

○ bearish\_stocks: list[Stock]

○ stock\_returns: pd.DataFrame

○ expected\_return: float | None

○ risk: float | None

○ sharpe\_ratio: float | None

○ value: float | None

● Portfolio()

● \_\_repr\_\_(): str

● add\_stock(stock: Stock | str): void

● remove\_stock(stock: Stock): void

● optimise(): void

● compute\_characteristics(): void

● from\_dict(dictionary: dict): Portfolio

● to\_dict(): dict

● update(): void

● plot(): void

● compute\_optimisation\_factor(x: np.ndarray, stock\_returns: pd.DataFrame, factor: str, rfr: float): float

● evaluate(): void

● update\_evolution(): void

● plot\_evolution(): void

● predict(): void

● suggest\_action(): None

● act\_on\_suggestion(): void

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Market

○ period: str = target\_period

○ stock\_symbols: list[str] = target\_symbols

○ risk\_free\_rate: float = risk\_free\_rate

○ minimum\_share\_price: float = minimum\_share\_price

○ data: pd.DataFrame | None = None

● Market()

● remove\_stock\_symbols(symbols: str | list[str] = None): void

● load\_data(): void

● extract\_top\_n\_stocks(n\_stocks: int): list[str]

● extract\_top\_n\_predicted\_stocks(n\_stocks: int): list[str]

● train\_models(): void

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Stock

○ ticker: str

○ data: pd.DataFrame

○ price: float

○ expected\_return: float

○ risk: float

○ sharpe\_ratio: float

○ weight: float | None

○ capital: float | None

○ shares: int | None

● Stock(ticker: str)

● \_\_repr\_\_(): str

● evaluate(): void

● set\_weight(weight: float): void

● get\_company\_name(): str | None

● from\_dict(ticker: str, dictionary: dict): Stock

● to\_dict(): dict

● get\_train\_data(ticker: str): np.ndarray

● get\_prediction\_data(): np.ndarray

● load\_model\_and\_scaler(): tuple[Sequential, MinMaxScaler]

● predict(): float | None

● bearish(): bool

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Contains

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