

Stock Portfolio Management Program

This Python program allows users to manage a stock portfolio by adding, removing, and viewing stocks into

Features

1. Add Stocks

- Add a specific number of shares of a stock to your portfolio with an optional price.
- Automatically updates the shares if the stock already exists in the portfolio.

2. Remove Stocks

- Remove a specific number of shares of a stock from your portfolio.
- Automatically removes the stock if all its shares are sold.
- Prevents removal if the number of shares to remove exceeds the available shares.

3. View Portfolio

- Displays all the stocks in your portfolio in a tabular format.
- Shows details like ticker symbol, number of shares, price per share, and the total value.
- Calculates and displays the total portfolio value.

4. Interactive Menu

- A simple menu-driven interface allows users to:
 - Add stock.
 - Remove stock.

- View portfolio.
- Exit the program.

How to Use

1. Clone or download the repository containing the StockPortfolio.py file.

2. Run the program:

```
python StockPortfolio.py
```

3. Follow the on-screen menu to manage your portfolio:

- Select options (1-4) for different actions.
- Input stock tickers, shares, and prices as prompted.

Example Usage

Adding a Stock:

Options:

1. Add Stock
2. Remove Stock
3. View Portfolio
4. Exit

Select an option (1-4): 1

Enter stock ticker (e.g., AAPL): AAPL

Enter number of shares: 10

Enter stock price: 150

Added 10 shares of AAPL to your portfolio.

Viewing Portfolio:

Options:

- 1. Add Stock
- 2. Remove Stock
- 3. View Portfolio
- 4. Exit

Select an option (1-4): 3

Portfolio Summary:

| Ticker | Shares | Price | Value |
|--------|--------|----------|-----------|
| ----- | | | |
| AAPL | 10 | \$150.00 | \$1500.00 |
| ----- | | | |

Total Portfolio Value: \$1500.00

Removing a Stock:

Options:

- 1. Add Stock
- 2. Remove Stock
- 3. View Portfolio
- 4. Exit

Select an option (1-4): 2

Enter stock ticker (e.g., AAPL): AAPL

Enter number of shares to remove: 5

Removed 5 shares of AAPL.

Requirements

- Python 3.x

Code Structure

- StockPortfolio Class: Contains methods to manage the portfolio:
 - add_stock: Adds shares of a stock to the portfolio.
 - remove_stock: Removes shares of a stock from the portfolio.
 - display_portfolio: Displays a summary of the portfolio.
 - run: Handles the interactive menu loop.
- Interactive Menu: Allows the user to interact with the program using options.

Future Enhancements

- Add support for fetching real-time stock prices.

- Include a feature to calculate profits and losses.
- Enable exporting portfolio data to a file (e.g., CSV).
- Add error logging for better debugging.

License

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Author

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Feel free to connect for feedback or suggestions!