

Smallcase

Backend task Documentation

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Smallcase Portfolio Tracking API.

Portfolio Tracking API.

A portfolio tracking API which allows adding/deleting/updating trades and can do basic return calculations etc. For simplicity, we assume there is only one user who can have single portfolio.

Basic functionality includes –

1. Get all trades from portfolio
2. Add trade to portfolio
3. Buy Shares
4. Sell Shares
5. Remove trade from portfolio Get all holdings.
6. Get cumulative returns of portfolio.

Heroku Base URL: <https://harshit-portfolio-tracking.herokuapp.com/>

Trade URL: <https://harshit-portfolio-tracking.herokuapp.com/trade>

Portfolio URL: <https://harshit-portfolio-tracking.herokuapp.com/portfolio>

Postman Collection: <https://www.getpostman.com/collections/3bdf4af0c492373202d7>

Documentation: <https://documenter.getpostman.com/view/7585955/TVCmTR1f>

Getting started:

- 1) git clone <https://github.com/harshitsinghai77/portfolio-tracking-node-API.git>
- 2) Navigate to folder
- 3) Run npm install
- 4) node app.js

Working Demo

The following screenshots will help with the payload and the expected result

The screenshot displays a REST client interface. At the top, a GET request is configured to `https://harshit-portfolio-tracking.herokuapp.com/trade`. Below the request bar, tabs for Params, Authorization, Headers (7), Body, Pre-request Script, Tests, and Settings are visible. The 'Body' tab is selected, showing the response in JSON format. The response status is 200 OK, with a time of 12.81 s and a size of 633 B. The JSON response is as follows:

```
{
  "success": true,
  "message": "All Portfolio trades",
  "data": [
    {
      "avgBuyPrice": 1833.45,
      "shares": 5,
      "_id": "5f5a30d39f45020017354d16",
      "tickerSymbol": "TCS",
      "__v": 0
    },
    {
      "avgBuyPrice": 319.25,
      "shares": 5,
      "_id": "5f5a499667a3f500174c958f",
      "tickerSymbol": "TCS",
      "__v": 0
    }
  ]
}
```

POST

https://harshit-portfolio-tracking.herokuapp.com/trade

Params

Authorization

Headers (9)

Body

Pre-request Script

Tests

Settings

none

form-data

x-www-form-urlencoded

raw

binary

GraphQL

JSON

```

1  {
2    "tickersymbol": "ACCENTURE",
3    "avgBuyPrice": 125,
4    "shares": 10
5  }

```

Body

Cookies

Headers (9)

Test Results

Status: 201 Created

Time:

Pretty

Raw

Preview

Visualize

JSON

```

1  {
2    "success": true,
3    "message": "Trade created and added to portfolio",
4    "data": {
5      "avgBuyPrice": 125,
6      "shares": 10,
7      "_id": "5f5a6fb8bd420d00177954c0",

```

Buy Shares

Examples 1

BUILD

PATCH

https://harshit-portfolio-tracking.herokuapp.com/trade/5f5a6fb8bd420d00177954c0/buys

Send

Params

Authorization

Headers (9)

Body

Pre-request Script

Tests

Settings

none

form-data

x-www-form-urlencoded

raw

binary

GraphQL

JSON

```

1  {
2    "buyPrice": 100,
3    "shares": 15
4  }

```

Body

Cookies

Headers (9)

Test Results

Status: 200 OK

Time: 863 ms

Size: 440 B

Save

Pretty

Raw

Preview

Visualize

JSON

```

1  {
2    "success": true,
3    "message": "Added 15 shares succesfully",
4    "data": {
5      "avgBuyPrice": 110,
6      "shares": 25,
7      "_id": "5f5a6fb8bd420d00177954c0",
8      "tickersymbol": "ACCENTURE",

```

► Sell Shares

Examples

PATCH

https://harshit-portfolio-tracking.herokuapp.com/trade/5f5a6fb8bd420d00177954c0/sells

Params

Authorization

Headers (9)

Body ●

Pre-request Script

Tests

Settings

● none

● form-data

● x-www-form-urlencoded

● raw

● binary

● GraphQL

JSON ▼

```
1 {  
2   "shares": 10  
3 }
```

Body

Cookies

Headers (9)

Test Results



Status: 200 OK

Time: 977 ms

Pretty

Raw

Preview

Visualize

JSON ▼



```
1 {  
2   "success": true,  
3   "message": "Total 10 shares sold succesfully",  
4   "data": {  
5     "avgBuyPrice": 110,  
6     "shares": 15,  
7     "_id": "5f5a6fb8bd420d00177954c0",  
8     "tickerSymbol": "ACCENTURE".
```

► Remove trade from portfolio

Examples 1 ▼

BUILD

DELETE ▼

https://harshit-portfolio-tracking.herokuapp.com/trade/5f5a6fb8bd420d00177954c0

Send ▼

Params

Authorization

Headers (7)

Body

Pre-request Script

Tests

Settings

Query Params

KEY	VALUE	DESCRIPTION	...
Key	Value	Description	

Body Cookies Headers (9) Test Results



Status: 200 OK

Time: 1929 ms

Size: 438 B

Save I

Pretty

Raw

Preview

Visualize

JSON ▼



```
1 {
2   "success": true,
3   "message": "Trade deleted succesfully",
4   "data": {
5     "avgBuyPrice": 110,
6     "shares": 15,
7     "_id": "5f5a6fb8bd420d00177954c0",
8     "tickerSymbol": "ACCENTURE".
```

► Get all holdings

GET

▼

https://harshit-portfolio-tracking.herokuapp.com/portfolio/holdings

Params

Authorization

Headers (7)

Body

Pre-request Script

Tests

Settings

Query Params

	KEY	VALUE	DESCRIPT
--	-----	-------	----------

Body

Cookies

Headers (9)

Test Results

Status: 200 OK

Tim


Pretty

Raw

Preview

Visualize

JSON ▼



```
1  {
2    "success": true,
3    "message": "Aggregate view of all securities in the portfolio",
4    "data": [
5      {
6        "_id": null,
7        "total_share_quantity": 17,
8        "total_average_buy_price": 2591.27
9      }
10   ]
11 }
```

► Get cumulative returns of portfolio.

Examples 1 ▾ BUILD

GET https://harshit-portfolio-tracking.herokuapp.com/portfolio/cumulative_returns

Send ▾

Params Authorization Headers (7) Body Pre-request Script Tests Settings

KEY	VALUE	DESCRIPTION	...
Key	Value	Description	

Body Cookies Headers (9) Test Results

Status: 200 OK Time: 586 ms Size: 351 B Save

Pretty Raw Preview Visualize

JSON ▾



```
1 {  
2   "success": true,  
3   "message": "cumulative returns: -12133.49",  
4   "data": -12133.49  
5 }
```

Important Notes:

1. Payload information can be found in the documentation here at
Documentation: <https://documenter.getpostman.com/view/7585955/TVCmTR1f>
2. Postman collection can be found at
<https://www.getpostman.com/collections/3bdf4af0c492373202d7>

Docstrings and comments

Docstrings and comments are included in the code as required.

Error handling

The below errors are handled in the flask app

-
- 1) Content type should be application/json
 - 2) Post body cannot be empty.

Response format

All responses consists of the following format

- 1) success: boolean
- 2) message: string
- 3) data: Object

Thanks

Thank you for giving me this opportunity. I would love if you could provide a feedback.
Looking forward to hearing from you soon

Find me at

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