

/v3/api-docs Explore

Java Spring Boot REST API Microservice V1.0 OAS3

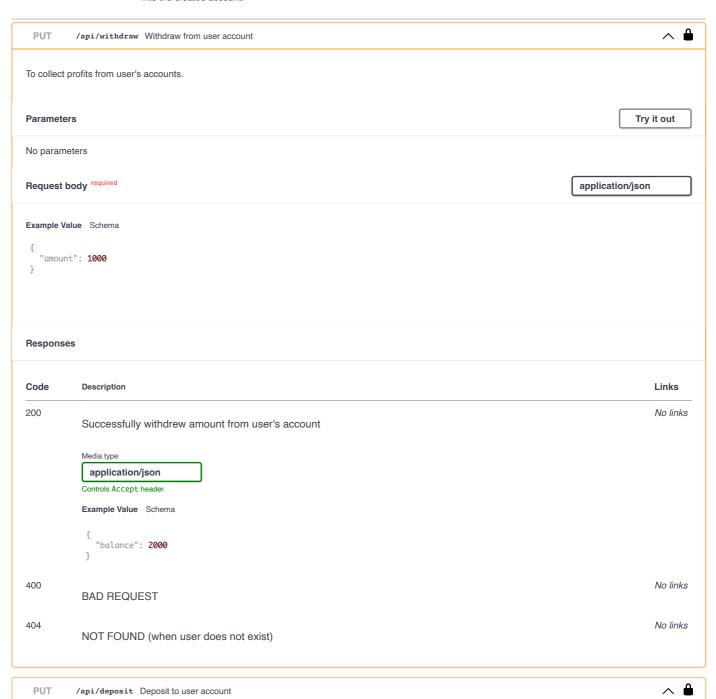
/v3/api-docs

Java Spring Boot REST API for Stock Market Brokers

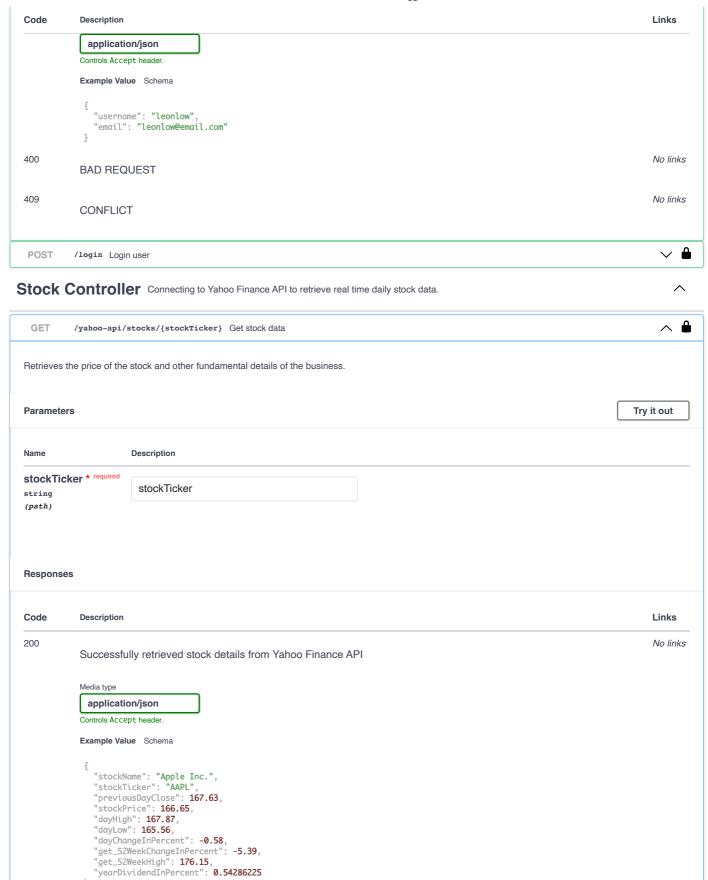
Low Jie Wei - Website Send email to Low Jie Wei



User Controller To sign up for an account and log in with the provided login credentials. Provides endpoint for withdrawing and depositing cash into the created account.



```
To load up funds to user's accounts to purchase stocks.
                                                                                                                                              Try it out
Parameters
No parameters
Request body required
                                                                                                                                 application/json
Example Value Schema
   "amount": 1000
Responses
Code
             Description
                                                                                                                                                   Links
200
                                                                                                                                                   No links
             Successfully deposited amount into user's account
              application/json
             Controls Accept header.
             Example Value Schema
                "balance": 2000
                                                                                                                                                   No links
404
             NOT FOUND (when user does not exist)
                                                                                                                                                     ^ •
POST
           /register Register user
Adds the user to the database. Must have unique email and password.
Parameters
                                                                                                                                              Try it out
No parameters
Request body required
                                                                                                                                 application/json
Example Value Schema
   "username": "leonlow",
"email": "leonlow@email.com",
"password": "Password0!"
Responses
Code
             Description
                                                                                                                                                  Links
                                                                                                                                                   No links
201
             Sign Up was successful!
             Media type
```

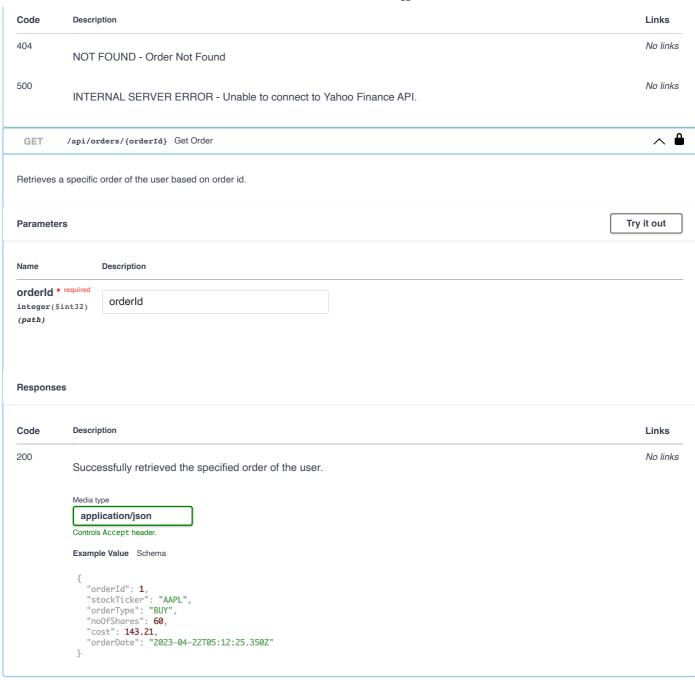


Order Controller To submit an order to purchase or sell a stock.

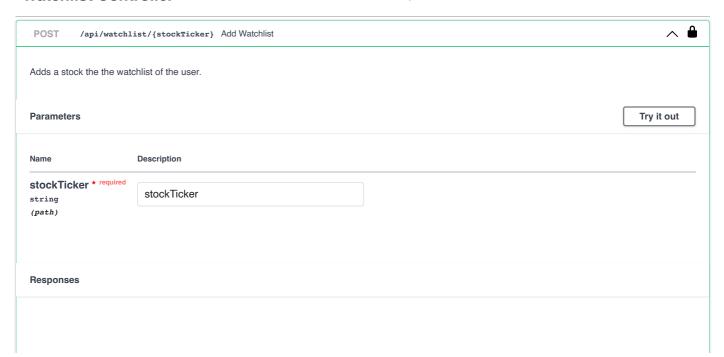
GET /api/orders Get All Orders

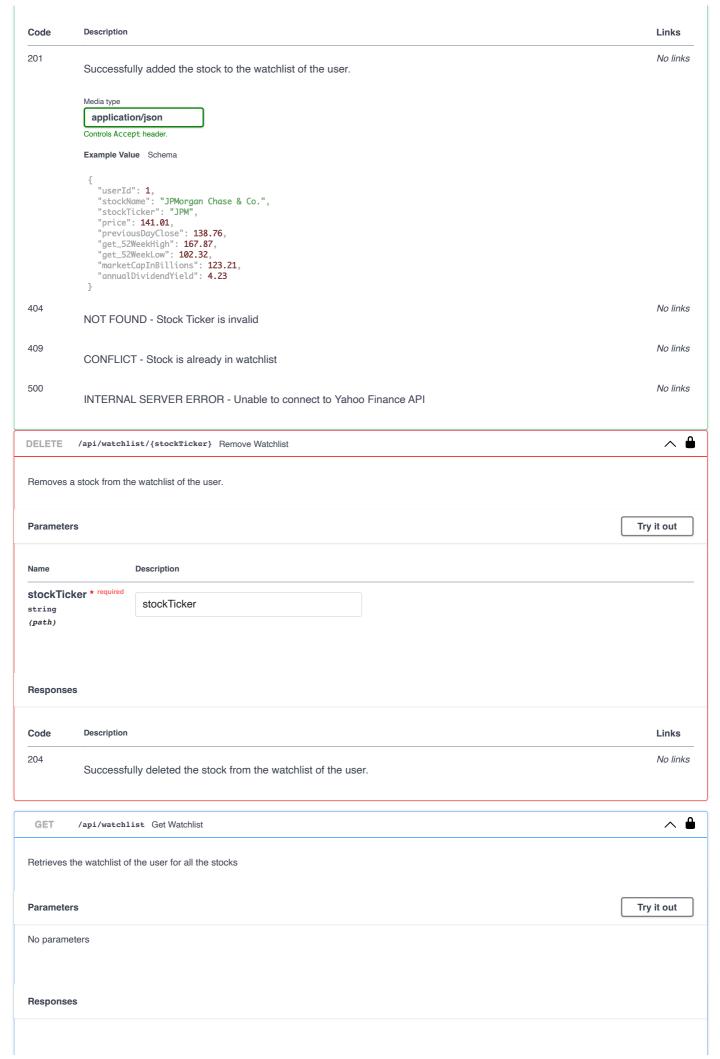
Retrieves all the orders of the user.

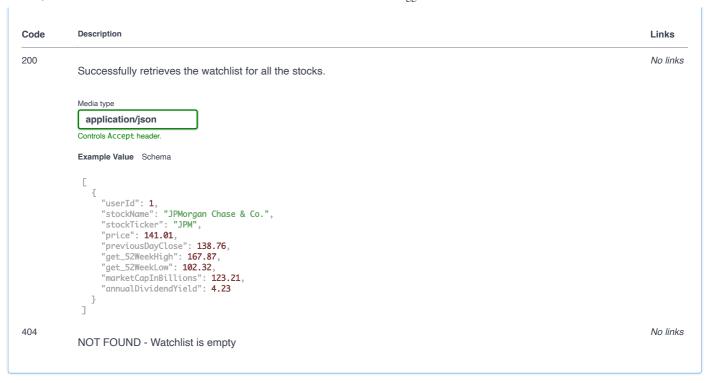
```
Parameters
                                                                                                                                                                   Try it out
No parameters
Responses
Code
               Description
                                                                                                                                                                         Links
200
                                                                                                                                                                         No links
               Successfully retrieved all the orders of the user.
               Media type
                application/json
               Controls Accept header.
               Example Value Schema
                    "orderId": 1,
"stockTicker": "AAPL",
"orderType": "BUY",
"noOfSers": 60,
                     "cost": 143.21,
"orderDate": "2023-04-22T05:12:25.348Z"
                                                                                                                                                                           ^ •
 POST
             /api/orders Submit Order
Submits a order to BUY or SELL a stock.
                                                                                                                                                                   Try it out
Parameters
No parameters
Request body required
                                                                                                                                                    application/json
Example Value Schema
   "stockTicker": "AAPL",
"orderType": "BUY",
"noOfShares": 60,
"cost": 149.86
Responses
                                                                                                                                                                         Links
Code
               Description
201
                                                                                                                                                                         No links
               Successfully created an order when the stock is bought or sold.
               Media type
                application/json
               Controls Accept header.
               Example Value Schema
                  "stockTicker": "AAPL",
"orderType": "BUY",
"noOfShares": 60,
                   "cost": 149.86
                                                                                                                                                                        No links
400
               BAD REQUEST
```



Watchlist Controller Allow user to save stocks into their watchlist to monitor prices or other details related to the stock.







Portfolio Controller To retrieve the portfolio of the user to view stocks that have been purchased.

```
GET
             /api/portfolio Get Portfolio
Retrieves the entire portfolio of stocks of the user.
Parameters
                                                                                                                                                                  Try it out
No parameters
Responses
Code
              Description
                                                                                                                                                                       Links
200
                                                                                                                                                                        No links
              Successfully retrieved the portfolio of the user.
               Media type
                application/json
              Example Value Schema
                    "stockName": "Apple Inc.",
"stockTicker": "AAPL",
"noOfShares": 60,
"cost": 134.54,
"price": 154.65,
                     "pnlinPercentage": 0,
                     "pnlinDollars": 0
404
                                                                                                                                                                        No links
              NOT FOUND - portfolio does not exist
```

/api/portfolio/{portfolioId} Get Portfolio Stock

GET

Retrieves the details of a particular stock in the portfolio of the user. Try it out **Parameters** Name Description portfoliold * required portfoliold integer(\$int32) (path) Responses Description Links Code No links 200 Successfully retrieved the details of the stock of the user. Media type application/json Controls Accept header. Example Value Schema "stockName": "Apple Inc.",
"stockTicker": "AAPL",
"noOfShares": 60,
"cost": 134.54,
"price": 154.65,
"pnlinPercentage": 0,
"pnlinDollars": 0 404 No links NOT FOUND - stock does not exist in user's portfolio.

```
UserAmountDTO

description:

amount

number($double)

writeonly; true
example: 1000

Amount specified by the user to deposit or withdraw to/from the account

balance*

number($double)
readonly: true
example: 2000

Shows the balance in the user's account.

}
```

```
UserRegisterDTO
   description:
                         Data Transfer Object for register user with username, email and password fields.
   username*
                         example: leonlow
                         Username for the newly registered user for an account.
                         string($email)
example: leonlow@email.com
   email*
                         Email for the newly registered user for an account.
                         string
writeOnly: true
   password
                         example: Password0!
                         Password for the newly registered user for an account.
}
UserLoginDTO
   description:
                         Data Transfer Object for user login with email and password fields.
                         string($email)
example: leonlow@email.com
   email*
                         The user's email address used for authentication
                         string
   password*
                         example: Password0!
                         The user's password used for authentication
UserAccessTokenDTO
   description:

Data Transfer Object for a user access token, which is returned upon successful authentication.
   accessToken* string
                example:
eyJhbGciOiJIUzI1NiJ9.eyJpYXQiOjE2ODIwNDQzNDMsImV4cCI6MTY4MjA1MTUOMywidXNlcklkIjoxLCJlbWFpbCI6Imxlb25sb3dAZW1haWwuY29tIn0.0LCfu
                L2cfo76_XccZYOF5uwWxPhJA
                Access Token of the authenticated user upon login.
}
WatchlistDTO
   description:
                         Data Transfer Object for the watchlist of the user, which returns the list of stocks added into the watchlist by the user.
   userId*
                         integer(Sint64)
                         example: 1
                         Unique Identifier of the user that is a foreign key to the 'accounts' table.
   stockName*
                         example: JPMorgan Chase & Co.
                         Name of the stocks inside the watchlist of the user.
   stockTicker*
                         example: JPM
                         Stock ticker of the stocks inside the watchlist of the user.
   price*
                         number($double)
                         example: 141.01
                         Price of the stock inside the watchlist
                         number($double)
   previousDavClose*
                         example: 138.70
                         Previous day close of the stock inside the watchlist
                         number($double)
   get 52WeekHigh*
                         52 Week High of the stock inside the watchlist
   get_52WeekLow*
                         example: 102.32
                         52 Week Low of the stock inside the watchlist
   marketCapInBillions* number($double)
                         example: 123.21
                         Market Capitalisation of the business in billions
   annualDividendYield* number($double)
                         example: 4.23
                         Annual dividend yield payout by the business in percentage
```

```
OrderSubmitDTO
   description:
                        Data Transfer Object for submitting the necessary fields needed to create an order by the user.
                        string
example: AAPL
   stockTicker*
                        Stock ticker of the stock the user wants to buy/sell.
                        string
example: BUY
   orderType*
                        Order type refers to the action which can only be 'BUY' or 'SELL'
                        Enum:
                            Array [ 2 ]
   noOfShares*
                        integer($int32)
                        example: 60
                        No of shares the user wants to BUY/SELL in the order.
   cost*
                        number($double)
                        Price of the stock the user is willing to BUY/SELL in the order.
}
StockDataDTO
   description:
                             Data Transfer Object used to communicate with Yahoo Finance API to retrieve relevant stock data.
                             string
   stockName*
                              example: Apple Inc.
                             Stock name retrieved from Yahoo Finance API
   stockTicker*
                             string
                              example: AAPL
                             Stock ticker used in path parameter to retrieve relevant stock data from Yahoo Finance API
   previousDayClose*
                              example: 167.63
                              Previous day close of the stock retrieved from Yahoo Finance API
   stockPrice*
                              number
                              example: 166.65
                              Stock Price of the stock retrieved from Yahoo Finance API
   davHigh*
                              number
                              example: 167.87
                              Day High of the stock retrieved from Yahoo Finance API
   dayLow*
                              example: 165.56
                              Day Low of the stock retrieved from Yahoo Finance API
   dayChangeInPercent*
                              example: -0.58
                             Day Change In Percent of the stock retrieved from Yahoo Finance API
   get_52WeekChangeInPercent*number
                              example: -5.39
                              52 Week Change In Percent of the stock retrieved from Yahoo Finance API
   get 52WeekHigh*
                              number
                              example: 176.15
                              52 Week High of the stock retrieved from Yahoo Finance API
   yearDividendInPercent*
                              number
                              example: 0.54286225
                             Annual Dividend of the stock in percentage retrieved from Yahoo Finance APi
}
```

```
PortfolioDTO
   description:
                        Data Transfer Object of the portfolio which contains all the stocks the user has purchased.
                        string example: Apple Inc.
   stockName*
                        Name of the stocks inside the portfolio of the user.
   stockTicker*
                        Stock ticker of the stocks inside the portfolio of the user.
   noOfShares*
                        integer($int32)
                        Number of shares of the stocks inside the portfolio of the user.
   cost*
                        number($double)
                        Cost of the stock purchased by the user.
   price*
                        number($double)
                        example: 154.65
                        Current price of the stock in the market
                        string($date-time)
   addedDate
                        writeOnly: true
                        Added date of the stock in the portfolio.
                        string($date-time)
   updatedDate
                         writeOnly: true
                        Updated date of the stock in the portfolio.
   pnlinPercentage
                        number($double)
   pnlinDollars
                        number($double)
OrderDTO
   description:
                        Data Transfer Object of the orders associated with the user, returns the history of all the orders.
   orderId*
                        integer($int64)
                        Unique identifier of the user which is a foreign key to the 'accounts' table.
   stockTicker*
                        Stock ticker of the stock associated with the order.
                        string
example: BUY
   orderType*
                        Order type of the stock associated with the order.
   noOfShares*
                        integer($int32)
                        Number of shares transacted in the order for the stock.
                        number($double)
   cost*
                         example: 143.21
                        Price purchased/sold for each order.
   orderDate*
                        Order date for each order.
}
```