

Package ‘RobinHood’

April 22, 2022

Type Package

Title Interface for the RobinHood.com No Commission Investing Platform

Version 1.6.5

Author Joseph Blubaugh

Maintainer Joseph Blubaugh <jestonblu@gmail.com>

Description Execute API calls to the RobinHood <<https://robinhood.com>> investing platform. Functionality includes accessing account data and current holdings, retrieving investment statistics and quotes, placing and canceling orders, getting market trading hours, searching investments by popular tag, and interacting with watch lists.

Imports jsonlite, lubridate, profvis, magrittr, dplyr, httr, uuid

License GPL-3

URL <https://github.com/JestonBlu/RobinHood>

RoxygenNote 7.1.2

NeedsCompilation no

Repository CRAN

Date/Publication 2022-04-22 03:10:02 UTC

R topics documented:

api_accounts	3
api_accounts_crypto	3
api_ach	4
api_contracts	4
api_currency_pairs	5
api_endpoints	5
api_fundamentals	6
api_historical	6
api_historical_crypto	7
api_historical_options	7
api_instruments	8
api_instruments_options	8

api_login	9
api_logout	9
api_marketdata	10
api_markets	10
api_orders	11
api_orders_crypto	12
api_orders_options	13
api_portfolios	14
api_portfolios_crypto	14
api_positions	14
api_positions_crypto	15
api_positions_options	15
api_quote	16
api_quote_crypto	16
api_ratings	17
api_tag	17
api_tickers	17
api_user	18
api_watchlist	18
cancel_ach_transfer	19
cancel_order	19
cancel_order_crypto	20
cancel_order_options	21
check_rh	21
get_accounts	22
get_ach	22
get_contracts	23
get_fundamentals	23
get_historical	24
get_historical_crypto	25
get_historical_options	26
get_market_hours	27
get_order_history	27
get_order_history_crypto	28
get_order_history_options	28
get_order_status	29
get_order_status_crypto	30
get_order_status_options	31
get_portfolios	31
get_positions	32
get_positions_crypto	33
get_positions_options	33
get_quote	34
get_quote_crypto	34
get_ratings	35
get_tag	36
get_tickers	36
get_user	37

<i>api_accounts</i>	3
logout	37
mod_json	38
place_ach_transfer	38
place_order	39
place_order_crypto	40
place_order_options	41
RobinHood	42
watchlist	43
Index	44

<i>api_accounts</i>	<i>RobinHood API: User</i>
---------------------	----------------------------

Description

Backend function called by `get_user()`, returns a list of user account data.

Usage

`api_accounts(RH)`

Arguments

RH object of class RobinHood

<i>api_accounts_crypto</i>	<i>RobinHood API: User Crypto</i>
----------------------------	-----------------------------------

Description

Backend function which calls the Nummus API to return the account id.

Usage

`api_accounts_crypto(RH)`

Arguments

RH object of class RobinHood

 api_ach

RobinHood API: ACH

Description

Backend function for interacting and getting data on linked bank accounts.

Usage

```
api_ach(
  RH,
  action,
  amount = NULL,
  status_url = NULL,
  cancel_url = NULL,
  transfer_url = NULL
)
```

Arguments

RH	object of class RobinHood
action	(string) one of "transfers", "relationships", "schedules", "status", "cancel", "deposit", "withdraw"
amount	(numeric) amount in dollars you want to deposit or withdraw (NULL if not one of those actions)
status_url	(string) URL returned by place_ach_transfer()
cancel_url	(string) URL returned by place_ach_transfer()
transfer_url	(string) url of your linked account, output of get_ach(RH, "relationships")

 api_contracts

RobinHood API: Option Contract Instruments

Description

RobinHood API: Option Contract Instruments

Usage

```
api_contracts(RH, chain_symbol, type)
```

Arguments

RH	object of class RobinHood
chain_symbol	(string) a single ticker symbol
type	(string) one of call or put

api_currency_pairs *RobinHood API: Currency Pairs*

Description

Returns the ID for a particular paired currency

Usage

```
api_currency_pairs(RH)
```

Arguments

RH object of class RobinHood

api_endpoints *RobinHood API: Endpoints*

Description

Backend function called by almost every function. Returns the appropriate starting URL for a given endpoint.

Usage

```
api_endpoints(endpoint, source = "equity")
```

Arguments

endpoint (string) which api endpoint to look up?
source (string) directs api to api.robinhood.com (equity) vs nummus.robinhood.com (crypto)

api_fundamentals *RobinHood API: Fundamentals*

Description

Backend function called by `get_fundamentals()`, `watchlist()`. Returns a data frame of descriptive data for a given ticker symbol.

Usage

```
api_fundamentals(RH, ticker)
```

Arguments

RH object of class RobinHood
ticker (string) vector of ticker symbols

api_historical *RobinHood API: Historicals*

Description

Backend function called by `get_historical()`. Returns a data frame of historical price data.

Usage

```
api_historical(RH, historicals_url, body)
```

Arguments

RH object of class RobinHood
historicals_url (string) api url
body (string) api body

`api_historical_crypto`*RobinHood API: Historicals crypto*

Description

Backend function called by `get_historical_crypto()`. Returns a data frame of historical price data.

Usage

```
api_historical_crypto(RH, url)
```

Arguments

RH	object of class RobinHood
url	(string) full url coming from <code>get_historical_crypto</code>

`api_historical_options`*RobinHood API: Historicals Options*

Description

Backend function called by `get_historical_options()`.

Usage

```
api_historical_options(  
  RH,  
  chain_symbol,  
  type,  
  strike_price,  
  expiration_date,  
  interval = NULL,  
  span = NULL  
)
```

Arguments

RH	object of class RobinHood
chain_symbol	(string) stock symbol
type	(string) one of ("put", "call")
strike_price	(numeric) strike price

expiration_date	(string) expiration date (YYYY-MM-DD)
interval	(string) one of ("5minute", "10minute", "hour", "day", "week")
span	(string) one of ("day", "week", "month")

api_instruments	<i>RobinHood API: Instruments</i>
-----------------	-----------------------------------

Description

Backend function called by get_tag(), get_position(), watchlist(). Returns a list of instrument data.

Usage

```
api_instruments(RH, symbol = NULL, instrument_url = NULL)
```

Arguments

RH	object of class RobinHood
symbol	(string) a single symbol
instrument_url	(string) instrument url

api_instruments_options	<i>RobinHood API: Option Contracts</i>
-------------------------	--

Description

Backend function for retrieving option contracts.

Usage

```
api_instruments_options(
  RH,
  method = "url",
  option_instrument_url = NULL,
  chain_symbol = NULL,
  type = NULL,
  state = NULL,
  strike_price = NULL,
  tradability = NULL,
  expiration_date = NULL
)
```


Arguments

RH	object of class RobinHood
method	(string) one of ("url", "symbol")
option_instrument_url	(string) direct url for an option contract
chain_symbol	(string) stock symbol
type	(string) one of ("put", "call")
state	(string) one of ("active", "inactive")
strike_price	(numeric) strike price
tradability	(string) one of ("tradable", "untradable")
expiration_date	(string) expiration date ("YYYY-MM-DD")

api_login	<i>RobinHood API: Login</i>
-----------	-----------------------------

Description

Backend function called by RobinHood(). Returns a list like object of class RobinHood which stores tokens required by all other functions.

Usage

```
api_login(username, password, mfa_code)
```

Arguments

username	(string) RobinHood username
password	(string) RobinHood password
mfa_code	(string) Provided by your authentication app

api_logout	<i>RobinHood API: Logout</i>
------------	------------------------------

Description

Backend function called by logout(). Sends a logout call and disables your oauth2 token.

Usage

```
api_logout(RH)
```

Arguments

RH	object of class RobinHood
----	---------------------------

api_marketdata	<i>RobinHood API: Market Data</i>
----------------	-----------------------------------

Description

Returns a dataframe of quantitative market information for a particular option instrument

Usage

```
api_marketdata(RH, instrument, type = "instrument_id")
```

Arguments

RH	object of class RobinHood
instrument	(string) a single instrument_id or multiple instrument_urls
type	(string) one of instrument_id or instrument_url

api_markets	<i>RobinHood API: Markets</i>
-------------	-------------------------------

Description

Backend function called by get_market_hours(). Returns a data frame of markets data and trading hours.

Usage

```
api_markets(RH, markets_url, type = "df")
```

Arguments

RH	object of class RobinHood
markets_url	(string) a single market url
type	(string) structure of data returned, 'df' or 'list'

Description

Backend function called by `place_order()`, `get_order_status()`, `cancel_order()`. Issues a buy/sell order or returns the status of an order. When issuing a buy order use the `url` column in the return data to check the status or cancel the order.

Usage

```
api_orders(
    RH,
    action,
    status_url = NULL,
    cancel_url = NULL,
    instrument_id = NULL,
    symbol = NULL,
    type = NULL,
    time_in_force = NULL,
    trigger = NULL,
    price = NULL,
    stop_price = NULL,
    quantity = NULL,
    side = NULL,
    page_size = NULL
)
```

Arguments

<code>RH</code>	object of class <code>RobinHood</code>
<code>action</code>	(string) one of "order", "status", "cancel", or "history"
<code>status_url</code>	(string) if <code>action = "status"</code> , <code>status_url</code> is required (output from <code>place_order()</code>)
<code>cancel_url</code>	(string) if <code>action = "cancel"</code> , <code>cancel_url</code> is required (output from <code>place_order()</code>)
<code>instrument_id</code>	(string) URL of the <code>instrument_id</code>
<code>symbol</code>	(string) Ticket symbol you are attempting to buy or sell
<code>type</code>	(string) "market" or "limit"
<code>time_in_force</code>	(string) Good For Day ("gfd"), Good Till Canceled ("gtc"), Immediate or Cancel ("ioc"), or Opening ("opg")
<code>trigger</code>	(string) "immediate" or "stop"
<code>price</code>	(number) the price you are willing to sell or buy at
<code>stop_price</code>	(number) if <code>trigger = stop</code> , enter stop price, otherwise leave blank
<code>quantity</code>	(int) number of shares you wish to transact
<code>side</code>	(string) "buy" or "sell"
<code>page_size</code>	(int) for <code>get_order_history</code> , refers to the number of historical records to return

api_orders_crypto *RobinHood API: Orders Crypto*

Description

Backend function called by `place_order()`, `get_order_status()`, `cancel_order()`. Issues a buy/sell order or returns the status of an order. When issuing a buy order use the `url` column in the return data to check the status or cancel the order.

Usage

```
api_orders_crypto(
    RH,
    action,
    order_id = NULL,
    cancel_url = NULL,
    currency_pair_id = NULL,
    type = NULL,
    time_in_force = NULL,
    price = NULL,
    quantity = NULL,
    side = NULL
)
```

Arguments

<code>RH</code>	object of class <code>RobinHood</code>
<code>action</code>	(string) one of "order", "status", "cancel", or "history"
<code>order_id</code>	(string) action is "status" or "cancel", only <code>order_id</code> is required
<code>cancel_url</code>	(string) url for posting a cancel order
<code>currency_pair_id</code>	(string) currency pair id
<code>type</code>	(string) "market" or "limit"
<code>time_in_force</code>	(string) Good For Day ("gfd"), Good Till Canceled ("gtc"), Immediate or Cancel ("ioc"), or Opening ("opg")
<code>price</code>	(number) the price you are willing to sell or buy at
<code>quantity</code>	(int) number of shares you wish to transact
<code>side</code>	(string) "buy" or "sell"

api_orders_options *RobinHood API: Option Orders*

Description

RobinHood API: Option Orders

Usage

```
api_orders_options(  
    RH,  
    action,  
    status_url = NULL,  
    cancel_url = NULL,  
    quantity = NULL,  
    direction = NULL,  
    stop_price = NULL,  
    type = NULL,  
    time_in_force = NULL,  
    side = NULL,  
    option_id = NULL  
)
```

Arguments

RH	object of class RobinHood
action	(string) one of "order", "status", "cancel", "history"
status_url	(string) if action = "status", status_url is required (output from place_order_options())
cancel_url	(string) if action = "cancel", cancel_url is required (output from place_order_options())
quantity	(int) number of contracts you want to buy
direction	(string) one of "debit" or "credit"
stop_price	(numeric) stop price on a limit order
type	(string) one of "limit" or "market"
time_in_force	(string) Good Till Canceled ("gtc"), Immediate or Cancel ("ioc"), or Opening ("opg")
side	(string) one of "buy" or "sell"
option_id	(string) id column returned by get_contracts()

api_portfolios *RobinHood API: Portfolio*

Description

Backend function called by `get_portfolio()`. Returns a data frame of account summaries.

Usage

```
api_portfolios(RH, portfolio_url)
```

Arguments

RH object of class RobinHood
portfolio_url portfolio url

api_portfolios_crypto *RobinHood API: Portfolio Crypto*

Description

Backend function called by `get_portfolio(..., source = "crypto")`. Returns a data frame of the current crypto portfolio summary.

Usage

```
api_portfolios_crypto(RH)
```

Arguments

RH object of class RobinHood

api_positions *RobinHood API: Positions*

Description

Backend function called by `get_positions()`. Returns a data frame of instrument position data.

Usage

```
api_positions(RH)
```

Arguments

RH object of class RobinHood

api_positions_crypto *RobinHood API: Cryptocurrency Positions*

Description

Backend function called by get_positions(). Returns a data frame of crypto position data via the Nummus api.

Usage

```
api_positions_crypto(RH)
```

Arguments

RH object of class RobinHood

api_positions_options *RobinHood API: Option Contract Positions*

Description

Backend function called by get_positions_options(). Returns a data frame of owned options contracts.

Usage

```
api_positions_options(RH)
```

Arguments

RH object of class RobinHood

api_quote	<i>RobinHood API: Quote</i>
-----------	-----------------------------

Description

Backend function called by `get_positions()`, `get_quote()`, `place_order()`. Returns a data frame of quote data

Usage

```
api_quote(RH, symbols_url)
```

Arguments

RH	object of class RobinHood
symbols_url	(string) url of query with ticker symbols

api_quote_crypto	<i>RobinHood API: Quotes for cryptocurrency</i>
------------------	---

Description

Returns a dataframe of current quotes

Usage

```
api_quote_crypto(RH, symbols_url)
```

Arguments

RH	object of class RobinHood
symbols_url	(string) url of query with ticker symbols

api_ratings	<i>RobinHood API: Analyst ratings</i>
-------------	---------------------------------------

Description

Backend function called by `get_ratings()` to get analyst rating from RobinHood

Usage

```
api_ratings(RH, symbol)
```

Arguments

RH	object of class RobinHood
symbol	(string)

api_tag	<i>RobinHood API: Tag</i>
---------	---------------------------

Description

Backend function called by `get_tag()`. Returns a list of instrument ids.

Usage

```
api_tag(RH, tag)
```

Arguments

RH	object of class RobinHood
tag	(string) a hyphenated tag such as "100-most-popular"

api_tickers	<i>RobinHood API: Tickers</i>
-------------	-------------------------------

Description

Backend function called by `get_ticker`. Returns a data frame of all instruments listed on RobinHood.

Usage

```
api_tickers(RH)
```

Arguments

RH	object of class RobinHood
----	---------------------------

api_user	<i>RobinHood API: User</i>
----------	----------------------------

Description

Backend function called by get_user() to return user data

Usage

api_user(RH)

Arguments

RH object of class RobinHood

api_watchlist	<i>RobinHood API: watchlist</i>
---------------	---------------------------------

Description

Backend function called by watchlist(). Adds or remove instruments from the default watchlist. The create and delete watchlist features are disabled as it appears that the functionality is not currently available on the platform.

Usage

api_watchlist(RH, watchlist_url, detail = FALSE, delete = FALSE)

Arguments

RH object of class RobinHood
watchlist_url (string) a single watchlist url
detail (logical) if null use header api only, otherwise pass options
delete (logical) send delete call

cancel_ach_transfer *Cancel an ACH transfer from your RobinHood account*

Description

Cancel an ACH transfer from your RobinHood account

Usage

```
cancel_ach_transfer(RH, cancel_url)
```

Arguments

RH object of class RobinHood
cancel_url (string) cancel url returned from initiating a transfer with place_ach_transfer()

cancel_order *Cancel an existing order on RobinHood*

Description

Send a cancel signal for a particular order to RobinHood. You will need to retain the buy/sell order url returned from place_order.

Usage

```
cancel_order(RH, cancel_url)
```

Arguments

RH object of class RobinHood
cancel_url (string) cancel url returned from place_order()

Examples

```
## Not run:
# Login in to your RobinHood account
RH <- RobinHood("username", "password")

# Place an order, should generate an email confirmation
x <- place_order(RH = RH,
                 symbol = "GE",           # Ticker symbol you want to trade
                 type = "market",         # Type of market order
                 time_in_force = "gfd",   # Time period the order is good for (gfd: good for day)
                 trigger = "immediate",   # Trigger or delay order
                 price = 8.96,            # The highest price you are willing to pay
```

```

        quantity = 1,          # Number of shares you want
        side = "buy")         # buy or sell

# Cancel the order, should also generate an email confirmation
cancel_order(RH, x$cancel_url)

## End(Not run)

```

cancel_order_crypto *Cancel an existing crypto order on RobinHood*

Description

Send a cancel signal for a particular order to RobinHood. You will need to retain the buy/sell order url returned from place_order.

Usage

```
cancel_order_crypto(RH, cancel_url)
```

Arguments

RH object of class RobinHood
cancel_url (string) cancel url returned from place_order_crypto()

Examples

```

## Not run:
# Login in to your RobinHood account
RH <- RobinHood("username", "password")

# Place an order, should generate an email confirmation
x <- place_order_crypto(RH = RH,
                        symbol = "ETC",          # Ticker symbol
                        type = "market",        # Type of market order (market, limit)
                        time_in_force = "gtc",  # Time period (gfd: good for day)
                        price = 1,             # The highest price you are willing to pay
                        quantity = 1,         # Number of shares you want
                        side = "buy")         # buy or sell

# Cancel the order, should also generate an email confirmation
cancel_order_crypto(RH, x$cancel_url)

## End(Not run)

```

cancel_order_options *Cancel an existing options order on RobinHood*

Description

Send a cancel signal for a particular order to RobinHood. You will need to retain the buy/sell order url returned from place_order_options().

Usage

```
cancel_order_options(RH, cancel_url)
```

Arguments

RH object of class RobinHood
cancel_url (string) cancel url returned from place_order()

Examples

```
## Not run:
# Login in to your RobinHood account
RH <- RobinHood("username", "password")

# Place an order, should generate an email confirmation
x <- place_order_options(RH = RH,
  option_id = "346e46af-380e-4052-a7c2-15748f0fc0ca",
  direction = "debit", # one of "debit" or "credit"
  side = "buy", # one of "buy" or "sell"
  quantity = 1, # number of contracts
  stop_price = .01, # Time period (gfd: good for day)
  type = "limit", # limit or market (only limit is currently supported)
  time_in_force = "gtc") # "gfd", "gtc", "ioc", "opg"

# Cancel the order, should also generate an email confirmation
cancel_order_options(RH, x$cancel_url)

## End(Not run)
```

check_rh *Checks to see if you have a valid RobihHood object*

Description

Checks to see if you have a valid RobihHood object

Usage

```
check_rh(RH)
```

Arguments

RH object of class RobinHood

get_accounts *Get data related to your RobinHood account*

Description

Get data related to your RobinHood account

Usage

```
get_accounts(RH)
```

Arguments

RH object of class RobinHood

Examples

```
## Not run:
# Login in to your RobinHood account
RH <- RobinHood("username", "password")

get_accounts(RH)

## End(Not run)
```

get_ach *Get ACH data from your RobinHood linked bank accounts*

Description

Get ACH data from your RobinHood linked bank accounts

Usage

```
get_ach(RH, action, status_url = NULL)
```

Arguments

RH object of class RobinHood
action (string) one of "transfers", "relationships", "schedules", "status"
status_url (string) URL returned by place_ach_transfer()

get_contracts	<i>Get a option contracts from RobinHood</i>
---------------	--

Description

Get a option contracts from RobinHood

Usage

```
get_contracts(RH, chain_symbol, type, detail = FALSE)
```

Arguments

RH	object class RobinHood
chain_symbol	(string) a single ticket symbol
type	(string) one of call or put
detail	(logical) if TRUE (default) return additional info on greeks, previous day, high/low fill rate prices

Examples

```
## Not run:  
# Login in to your RobinHood account  
RH <- RobinHood("username", "password")  
  
get_contracts(RH, "IR")  
  
## End(Not run)
```

get_fundamentals	<i>Get fundamental investment statistics for a particular ticker symbol</i>
------------------	---

Description

Get fundamental investment statistics for a particular ticker symbol

Usage

```
get_fundamentals(RH, ticker, include_description = FALSE)
```

Arguments

RH	object of class RobinHood
ticker	(string) vector of ticker symbols
include_description	(logical) include a long description of the company (default: FALSE)

Examples

```
## Not run:  
# Login in to your RobinHood account  
RH <- RobinHood("username", "password")  
  
get_fundamentals(RH, "CAT")  
  
## End(Not run)
```

get_historical	<i>Get historical price history from RobinHood</i>
----------------	--

Description

Returns a data frame of historical price history for a given symbol.

Usage

```
get_historical(RH, symbol, interval, span, tz = Sys.timezone())
```

Arguments

RH	object of class RobinHood
symbol	(string) Stock symbol to query, single symbol only
interval	(string) Interval of time to aggregate to (examples: hour, day, week, month)
span	(string) Period of time you are interested in (examples: day, week, month, year)
tz	(string) timezone returned by OlsonNames() (eg: "America/Chicago")

Examples

```
## Not run:  
# Login in to your RobinHood account  
RH <- RobinHood("username", "password")  
  
get_historical(RH = RH, symbol = "CAT", interval = "day", span = "month")  
  
## End(Not run)
```

`get_historical_crypto`*Get historical crypto price history from RobinHood*

Description

Returns a data frame of historical crypto price history for a given symbol. Note that not all combinations of interval/span and bounds will return results. Spans that go beyond day (week, month, year) will not return results for certain bounds values (trading, extended). The function should return a message if you specify a combination of inputs that returns no results.

Usage

```
get_historical_crypto(RH, symbol, interval, span, bounds, tz = Sys.timezone())
```

Arguments

<code>RH</code>	object of class <code>RobinHood</code>
<code>symbol</code>	(string) ticker symbol of crypto (BTC, ETH, ETC)
<code>interval</code>	(string) Interval of time to aggregate to (examples: hour, day, week, month)
<code>span</code>	(string) Period of time you are interested in (examples: day, week, month, year)
<code>bounds</code>	(string) One of regular (6 hours), trading (9 hours), extended (16 hours), 24_7
<code>tz</code>	(string) timezone returned by <code>OlsonNames()</code> (eg: "America/Chicago")

Examples

```
## Not run:  
# Login in to your RobinHood account  
RH <- RobinHood("username", "password")  
  
get_historical_crypto(RH, symbol = "ETC", interval = "5minute", span = "day", bounds = 'regular')  
get_historical_crypto(RH, symbol = "ETC", interval = "5minute", span = "day", bounds = 'trading')  
get_historical_crypto(RH, symbol = "ETC", interval = "5minute", span = "day", bounds = 'extended')  
get_historical_crypto(RH, symbol = "ETC", interval = "5minute", span = "day", bounds = '24_7')  
  
## End(Not run)
```

`get_historical_options`*Get historical options from RobinHood*

Description

Returns a data frame of historical options for a given symbol, strike price, and expiration date.

Usage

```
get_historical_options(  
  RH,  
  chain_symbol,  
  type,  
  strike_price,  
  expiration_date,  
  interval = NULL,  
  span = NULL  
)
```

Arguments

<code>RH</code>	object of class <code>RobinHood</code>
<code>chain_symbol</code>	(string) stock symbol
<code>type</code>	(string) one of ("put", "call")
<code>strike_price</code>	(numeric) strike price
<code>expiration_date</code>	(string) expiration date (YYYY-MM-DD)
<code>interval</code>	(string) one of ("5minute", "10minute", "hour", "day", "week")
<code>span</code>	(string) one of ("day", "week", "month")

Examples

```
## Not run:  
# Login in to your RobinHood account  
RH <- RobinHood("username", "password")  
  
get_historical_options(RH = RH, chain_symbol = "AAPL", interval = "10minute", type = "call",  
  expiration_date = "2021-03-12", strike_price = 122)  
  
## End(Not run)
```

get_market_hours	<i>Get open market hours</i>
------------------	------------------------------

Description

Get a list of markets available on RobinHood with trading hours for a specific date.

Usage

```
get_market_hours(RH, market_date = NULL, tz = Sys.timezone())
```

Arguments

RH	object of class <code>RobinHood</code>
market_date	(string) date in the form 'yyyy-mm-dd', default today
tz	(string) one of timezone returned by <code>OlsonNames()</code> , defaults to local

Examples

```
## Not run:  
# Login in to your RobinHood account  
RH <- RobinHood("username", "password")  
  
get_market_hours(RH)  
  
## End(Not run)
```

get_order_history	<i>Download all available order history for your RobinHood account</i>
-------------------	--

Description

Download all available order history for your RobinHood account

Usage

```
get_order_history(RH, page_size = 1000)
```

Arguments

RH	object of class <code>RobinHood</code>
page_size	(int) number of historical records to fetch

Examples

```
## Not run:  
# Login in to your RobinHood account  
RH <- RobinHood("username", "password")  
  
get_order_history(RH)  
  
## End(Not run)
```

get_order_history_crypto

Download all available crypto currency order history for your RobinHood account

Description

Download all available crypto currency order history for your RobinHood account

Usage

```
get_order_history_crypto(RH)
```

Arguments

RH object of class RobinHood

Examples

```
## Not run:  
# Login in to your RobinHood account  
RH <- RobinHood("username", "password")  
  
get_order_history_crypto(RH)  
  
## End(Not run)
```

get_order_history_options

Download all available options order history for your RobinHood account

Description

Download all available options order history for your RobinHood account

Usage

```
get_order_history_options(RH)
```

Arguments

RH object of class RobinHood

Examples

```
## Not run:
# Login in to your RobinHood account
RH <- RobinHood("username", "password")

get_order_history(RH)

## End(Not run)
```

get_order_status	<i>Get a current status of an order on RobinHood</i>
------------------	--

Description

Returns a list of order information given a buy/sell order url returned from place_order().

Usage

```
get_order_status(RH, status_url, limit_output = TRUE)
```

Arguments

RH object of class RobinHood
status_url (string) url of order returned from place_order
limit_output (logical) return limited info on the order (default TRUE)

Examples

```
## Not run:
# Login in to your RobinHood account
RH <- RobinHood("username", "password")

# Place an order, should generate an email confirmation
x <- place_order(RH = RH,
                 symbol = "GE",                # Ticker symbol you want to trade
                 type = "market",             # Type of market order
                 time_in_force = "gfd",       # Time period the order is good for (gfd: good for day)
                 trigger = "immediate",       # Trigger or delay order
                 price = 8.96,                 # The highest price you are willing to pay
                 quantity = 1,                 # Number of shares you want
```

```

        side = "buy")          # buy or sell

get_order_status(RH, x$status_url)

## End(Not run)

```

```
get_order_status_crypto
```

Get a current status of an crypto currency order on RobinHood

Description

Returns a list of order information given a buy/sell order url returned from place_order().

Usage

```
get_order_status_crypto(RH, order_id)
```

Arguments

RH	object of class RobinHood
order_id	(string) id field of the object returned by place_order_crypto

Examples

```

## Not run:
# Login in to your RobinHood account
RH <- RobinHood("username", "password")

# Place an order, should generate an email confirmation
x <- place_order_crypto(RH = RH,
  symbol = "GE",          # Ticker symbol you want to trade
  type = "market",       # Type of market order
  time_in_force = "gfd", # Time period (gfd: good for day)
  trigger = "immediate", # Trigger or delay order
  price = 8.96,          # The highest price you are willing to pay
  quantity = 1,         # Number of shares you want
  side = "buy")         # buy or sell

get_order_status_crypto(RH, order_id = x$id)

## End(Not run)

```

```
get_order_status_options
```

Get a current status of an option order on RobinHood

Description

Returns a list of order information given a buy/sell order url returned from place_order_options().

Usage

```
get_order_status_options(RH, status_url)
```

Arguments

RH object of class RobinHood
 status_url (string) url of order returned from place_order

Examples

```
## Not run:
# Login in to your RobinHood account
RH <- RobinHood("username", "password")

# Place an order, should generate an email confirmation
x <- place_order_options(RH = RH,
  option_id = "346e46af-380e-4052-a7c2-15748f0fc0ca",
  direction = "debit", # one of "debit" or "credit"
  side = "buy", # one of "buy" or "sell"
  quantity = 1, # number of contracts
  stop_price = .01, # Time period (gfd: good for day)
  type = "limit", # limit or market (only limit is currently supported)
  time_in_force = "gtc") # "gfd", "gtc", "ioc", "opg"

get_order_status_options(RH, x$status_url)

## End(Not run)
```

```
get_portfolios
```

Get portfolio summaries related to your RobinHood Account

Description

Returns a dataframe of portfolio summaries for a specific period of time. Default is current day.

Usage

```
get_portfolios(RH, interval = NULL, span = NULL)
```

Arguments

RH object of class RobinHood
interval (string) Interval of time to aggregate to (examples: hour, day, week, month)
span (string) Period of time you are interested in (examples: day, week, month, year)

Examples

```
## Not run:  
# Login in to your RobinHood account  
RH <- RobinHood("username", "password")  
  
get_portfolios(RH)  
get_portfolios(RH, interval = "day", span = "3month")  
  
## End(Not run)
```

get_positions *Get the currently held positions for your RobinHood account*

Description

Get the currently held positions for your RobinHood account

Usage

```
get_positions(RH, limit_output = TRUE)
```

Arguments

RH object class RobinHood
limit_output (logical) if true, return a simplified positions table, false returns all position details

Examples

```
## Not run:  
# Login in to your RobinHood account  
RH <- RobinHood("username", "password")  
  
get_positions(RH)  
  
## End(Not run)
```

get_positions_crypto *Get the currently held crypto positions for your RobinHood account*

Description

Get the currently held crypto positions for your RobinHood account

Usage

```
get_positions_crypto(RH)
```

Arguments

RH object class RobinHood

Examples

```
## Not run:  
# Login in to your RobinHood account  
RH <- RobinHood("username", "password")  
  
get_positions_crypto(RH)  
  
## End(Not run)
```

get_positions_options *Get the currently held positions for your RobinHood account*

Description

Get the currently held positions for your RobinHood account

Usage

```
get_positions_options(RH, trim_pending = TRUE)
```

Arguments

RH object class RobinHood
trim_pending (logical) if FALSE, then return pending and intraday columns

Examples

```
## Not run:  
# Login in to your RobinHood account  
RH <- RobinHood("username", "password")  
  
get_positions_options(RH)  
  
## End(Not run)
```

get_quote	<i>Get a quote from RobinHood</i>
-----------	-----------------------------------

Description

Get a quote from RobinHood

Usage

```
get_quote(RH, symbol, limit_output = TRUE)
```

Arguments

RH	object class RobinHood
symbol	(string) of ticker symbols
limit_output	(logical) if TRUE (default) return less quote detail

Examples

```
## Not run:  
# Login in to your RobinHood account  
RH <- RobinHood("username", "password")  
  
get_quote(RH, "IR")  
  
## End(Not run)
```

get_quote_crypto	<i>Get a crypto currency quote from RobinHood</i>
------------------	---

Description

Get a crypto currency quote from RobinHood

Usage

```
get_quote_crypto(RH, symbol)
```

Arguments

RH object class RobinHood
symbol (string) crypto currency symbol such as BTC, ETH, DOGE

Examples

```
## Not run:  
# Login in to your RobinHood account  
RH <- RobinHood("username", "password")  
  
get_quote_crypto(RH, "BTC")  
  
## End(Not run)
```

get_ratings *Get analyst ratings for a given equity symbol from RobinHood*

Description

Get analyst ratings for a given equity symbol from RobinHood

Usage

```
get_ratings(RH, symbol)
```

Arguments

RH object class RobinHood
symbol (string) Ticker symbol

Examples

```
## Not run:  
# Login in to your RobinHood account  
RH <- RobinHood("username", "password")  
  
get_ratings(RH, symbol = "CAT")  
  
## End(Not run)
```

get_tag	<i>Get ticker symbols for popular tags on RobinHood</i>
---------	---

Description

Get a data frame of ticker symbols and names linked to trending tags on the RobinHood website.

Usage

```
get_tag(RH, tag)
```

Arguments

RH	object class RobinHood
tag	(string) a hyphenated tag such as "100-most-popular"

Examples

```
## Not run:  
# Login in to your RobinHood account  
RH <- RobinHood("username", "password")  
  
get_tag(RH, "100-most-popular")  
  
## End(Not run)
```

get_tickers	<i>Download all financial instruments available on RobinHood</i>
-------------	--

Description

Get a dataframe of all listed companies including ticker symbols and tradeability indicators.

Usage

```
get_tickers(RH, add_fundamentals = FALSE)
```

Arguments

RH	object of class RobinHood
add_fundamentals	(logical) if TRUE then return fundamental data (long run time)

Examples

```
## Not run:  
# Login in to your RobinHood account  
RH <- RobinHood("username", "password")  
  
get_tickers(RH)  
  
## End(Not run)
```

get_user

Get personal user data related to your RobinHood account

Description

Get personal user data related to your RobinHood account

Usage

```
get_user(RH)
```

Arguments

RH object class RobinHood

Examples

```
## Not run:  
# Login in to your RobinHood account  
RH <- RobinHood("username", "password")  
  
get_user(RH)  
  
## End(Not run)
```

logout

Logout of RobinHood

Description

Send a logout call through the RobinHood API service and disable your token.

Usage

```
logout(RH)
```

Arguments

RH object of class RobinHood

Examples

```
## Not run:
# Login in to your RobinHood account
RH <- RobinHood("username", "password")

logout(RH)

## End(Not run)
```

mod_json	<i>Converts a data frame to json minus the square brackets on the ends</i>
----------	--

Description

Converts a data frame to json minus the square brackets on the ends

Usage

```
mod_json(x, type)
```

Arguments

x dataframe intended for json conversoin
 type (string) one of "fromJSON" or "toJSON"

place_ach_transfer	<i>Place an ACH transfer to and from your RobinHood account</i>
--------------------	---

Description

Place an ACH transfer to and from your RobinHood account

Usage

```
place_ach_transfer(RH, action, amount, transfer_url)
```

Arguments

RH object of class RobinHood
 action (string) one of "deposit", "withdraw"
 amount (numeric) amount in dollars you want to deposit or withdraw
 transfer_url (string) url of your linked account, output of get_ach(RH, "relationships")

place_order

Place a buy or sell order against your RobinHood account

Description

Place a buy or sell order against your RobinHood account

Usage

```
place_order(
    RH,
    symbol,
    type,
    time_in_force,
    trigger,
    price = NA,
    stop_price = NA,
    quantity,
    side
)
```

Arguments

RH	object of class RobinHood
symbol	(string) Ticket symbol you are attempting to buy or sell
type	(string) "market" or "limit"
time_in_force	(string) Good For Day ("gfd"), Good Till Canceled ("gtc"), Immediate or Cancel ("ioc"), or Opening ("opg")
trigger	(string) "immediate" or "stop"
price	(number) the price you are willing to sell or buy at (max 2 decimals) (Note: $P * Q > 0.01$)
stop_price	(number) if trigger = stop, enter stop price, otherwise leave blank
quantity	(int) number of shares you wish to transact (> 0) (Note: $P * Q > 0.01$)
side	(string) "buy" or "sell"

Examples

```
## Not run:
# ***** ATTENTION *****
# - Price cannot extend beyond 2 decimals
# - Quantity must be a whole number
# - Price * Quantity > $0.01
# - Stop triggers requires stop_price > 0
# ***** ATTENTION *****
```

```

# Login in to your RobinHood account
RH <- RobinHood("username", "password")

# Place an order, should generate an email confirmation
place_order(RH = RH,
            symbol = "GE",          # Ticker symbol you want to trade
            type = "market",        # Type of market order (market, limit)
            time_in_force = "gfd",  # Time period the order is good for (gfd: good for day)
            trigger = "immediate",  # Trigger or delay order
            price = 8.96,           # The highest price you are willing to pay
            quantity = 1,           # Number of shares you want
            side = "buy")           # buy or sell

# Stop loss example
place_order(RH,
            symbol="ABC",
            type = 'market',
            trigger = 'stop',
            stop_price = 100,
            time_in_force = "gtc",  # Good till close
            quantity = 10,
            side = 'sell')

## End(Not run)

```

place_order_crypto *Place a crypto currency buy or sell order against your RobinHood account*

Description

****Note****: Price and Quantity can both extend beyond 2 decimals ****Note****: Price * Quantity > \$0.01

Usage

```
place_order_crypto(RH, symbol, type, time_in_force, price, quantity, side)
```

Arguments

RH	object of class RobinHood
symbol	(string) Ticket symbol you are attempting to buy or sell
type	(string) "market" or "limit"
time_in_force	(string) Good Till Canceled ("gtc"), Immediate or Cancel ("ioc"), or Opening ("opg")
price	(number) the price you are willing to sell or buy at
quantity	(number) number of shares you wish to transact
side	(string) "buy" or "sell"

Examples

```
## Not run:
# Login in to your RobinHood account
RH <- RobinHood("username", "password")

# Place an order, should generate an email confirmation
x <- place_order_crypto(RH = RH,
  symbol = "DOGE",      # Ticker symbol
  type = "market",     # Type of market order (market, limit)
  time_in_force = "gtc", # Time period (gfd: good for day)
  price = .003,        # The highest price you are willing to pay
  quantity = 500,     # Number of shares you want
  side = "buy")       # buy or sell

## End(Not run)
```

place_order_options *Place a options buy or sell order against your RobinHood account*

Description

Place an order on an option contract. Currently only limit orders are supported so you must supply a price

Usage

```
place_order_options(
  RH,
  option_id,
  direction,
  side,
  quantity,
  stop_price = NULL,
  type = "limit",
  time_in_force
)
```

Arguments

RH	object of class RobinHood
option_id	(string) id returned from get_contracts()
direction	(string) one of "debit" or "credit"
side	(string) one of "buy" or "sell"
quantity	(integer) number of contracts to buy
stop_price	(numeric) stop price for a limit order
type	(string) "limit" or "market" (only limit is currently supported)
time_in_force	(string) Good Till Canceled ("gtc"), Immediate or Cancel ("ioc"), or Opening ("opg")

Examples

```
## Not run:
# Login in to your RobinHood account
RH <- RobinHood("username", "password")

# Place an options order, should generate an email confirmation
x <- place_order_options(RH = RH,
  option_id = "346e46af-380e-4052-a7c2-15748f0fc0ca",
  direction = "debit", # one of "debit" or "credit"
  side = "buy", # one of "buy" or "sell"
  quantity = 1, # number of contracts
  stop_price = .01, # Time period (gfd: good for day)
  type = "limit", # limit or market (only limit is currently supported)
  time_in_force = "gtc") # "gfd", "gtc", "ioc", "opg"

## End(Not run)
```

RobinHood

RobinHood Account Authentication

Description

This function returns an object of S3 class RobinHood and establishes a connection to a RobinHood account. It is a required input for every other function in the package.

Usage

```
RobinHood(username, password, mfa_code = NULL)
```

Arguments

username	(string) account email address
password	(string) password
mfa_code	(string) mfa_code provided by your authentication app (required if mfa is enabled)

Examples

```
## Not run:
RH <- RobinHood("username", "password")

## End(Not run)
```

watchlist	<i>Manage your RobinHood watchlist</i>
-----------	--

Description

Add and delete instruments from your RobinHood watchlist.

Usage

```
watchlist(RH, action, watchlist = "", ticker = "")
```

Arguments

RH	object class RobinHood
action	(string) one of: get, add, delete
watchlist	(string) name of watchlist to add, delete, or get instruments, null will return a list of watchlist
ticker	(string) list of tickers to add or delete, null will add or delete watchlist

Examples

```
## Not run:  
# Login in to your RobinHood account  
RH <- RobinHood("username", "password")  
  
# Get a vector of your watchlist names  
watchlist(RH, action = "get")  
  
# Get a vectors of symbols on your watchlist  
watchlist(RH, action = "get", watchlist = "Default")  
  
# Add a symbol to your watchlist  
watchlist(RH, action = "add", watchlist = "Default", ticker = "CAT")  
  
# Delete a symbol from your watchlist  
watchlist(RH, action = "delete", watchlist = "Default", ticker = "CAT")  
  
## End(Not run)
```

Index

api_accounts, 3
api_accounts_crypto, 3
api_ach, 4
api_contracts, 4
api_currency_pairs, 5
api_endpoints, 5
api_fundamentals, 6
api_historical, 6
api_historical_crypto, 7
api_historical_options, 7
api_instruments, 8
api_instruments_options, 8
api_login, 9
api_logout, 9
api_marketdata, 10
api_markets, 10
api_orders, 11
api_orders_crypto, 12
api_orders_options, 13
api_portfolios, 14
api_portfolios_crypto, 14
api_positions, 14
api_positions_crypto, 15
api_positions_options, 15
api_quote, 16
api_quote_crypto, 16
api_ratings, 17
api_tag, 17
api_tickers, 17
api_user, 18
api_watchlist, 18

cancel_ach_transfer, 19
cancel_order, 19
cancel_order_crypto, 20
cancel_order_options, 21
check_rh, 21

get_accounts, 22
get_ach, 22

get_contracts, 23
get_fundamentals, 23
get_historical, 24
get_historical_crypto, 25
get_historical_options, 26
get_market_hours, 27
get_order_history, 27
get_order_history_crypto, 28
get_order_history_options, 28
get_order_status, 29
get_order_status_crypto, 30
get_order_status_options, 31
get_portfolios, 31
get_positions, 32
get_positions_crypto, 33
get_positions_options, 33
get_quote, 34
get_quote_crypto, 34
get_ratings, 35
get_tag, 36
get_tickers, 36
get_user, 37

logout, 37

mod_json, 38

place_ach_transfer, 38
place_order, 39
place_order_crypto, 40
place_order_options, 41

RobinHood, 42

watchlist, 43