

MARKET DATA WITH YAHOO FINANCE

Yahoo Finance provides a service to retrieve market data about Stocks, Indexes, Options, Futures, ETFs and Currency exchanges using HTTP with a GET request. The yahoo HTTP server responds to the requested GET string with a chunked comma separated variable (csv) line or lines depending on the number of stocks requested. The Market data is approximately 15mins -20mins behind the live Market.

The URI for requesting the Market Data starts as follows:-

`http://download.finance.yahoo.com/d/quotes.csv?`

Next the the identities of the instruments you want the data for separated by coma's:-

`s=<id1>,<id2>,....`

Following by the data requested in a properties string:-

`&f=<format1><format2>....`

The URI needs to be finished with a static part:-

`&e=.csv`

The following table outlines all properties string:-

Description	Tag
After Hours Change (Realtime)	c8
Annualized Gain	g3
Ask	a0
Ask (Realtime)	b2
Ask Size	a5
Average Daily Volume	a2
Bid	b0
Bid (Realtime)	b3
Bid Size	b6
Book Value Per Share	b4

Change	c1
Change Change In Percent	c0
Change From Fiftyday Moving Average	m7
Change From Two Hundredday Moving Average	m5
Change From Year High	k4
Change From Year Low	j5
Change In Percent	p2
Change In Percent (Realtime)	k2
Change (Realtime)	c6
Commission	c3
Currency	c4
Days High	h0
Days Low	g0
Days Range	m0
Days Range (Realtime)	m2
Days Value Change	w1
Days Value Change (Realtime)	w4
Dividend Pay Date	r1
Trailing Annual Dividend Yield	d0
Trailing Annual Dividend Yield In Percent	y0
Diluted E P S	e0

E B I T D A	j4
E P S Estimate Current Year	e7
E P S Estimate Next Quarter	e9
E P S Estimate Next Year	e8
Ex Dividend Date	q0
Fiftyday Moving Average	m3
Shares Float	f6
High Limit	l2
Holdings Gain	g4
Holdings Gain Percent	g1
Holdings Gain Percent (Realtime)	g5
Holdings Gain (Realtime)	g6
Holdings Value	v1
Holdings Value (Realtime)	v7
Last Trade Date	d1
Last Trade Price Only	l1
Last Trade (Realtime) With Time	k1
Last Trade Size	k3
Last Trade Time	t1
Last Trade With Time	l0
Low Limit	l3

Market Capitalization	j1
Market Cap (Realtime)	j3
More Info	i0
Name	n0
Notes	n4
Oneyr Target Price	t8
Open	o0
Order Book (Realtime)	i5
P E G Ratio	r5
P E Ratio	r0
P E Ratio (Realtime)	r2
Percent Change From Fiftyday Moving Average	m8
Percent Change From Two Hundredday Moving Average	m6
Change In Percent From Year High	k5
Percent Change From Year Low	j6
Previous Close	p0
Price Book	p6
Price E P S Estimate Current Year	r6
Price E P S Estimate Next Year	r7
Price Paid	p1
Price Sales	p5

Revenue	s6
Shares Owned	s1
Shares Outstanding	j2
Short Ratio	s7
Stock Exchange	x0
Symbol	s0
Ticker Trend	t7
Trade Date	d2
Trade Links	t6
Trade Links Additional	f0
Two Hundredday Moving Average	m4
Volume	v0
Year High	k0
Year Low	j0
Year Range	w0

Example URI to download bid price/size and ask price/size for IBM and AAPL equities:-

`http://finance.yahoo.com/d/quotes.csv?s=IBM,AAPL&f=a0a5b0b6&e=.csv`

This will return 2 lines of csv which can be parsed, first line will be for IBM and the second line for AAPL.

IMPLEMENTATION HINTS

A Java class can be implemented to download the data and parse the output.

1. Use `StringBuilder` to build the URI string
2. Use `java.net.HttpURLConnection` and `java.net.URL` to make a connection to Yahoo and download the data

3. On the HttpURLConnection set setRequestMethod to "GET"
4. Check that the response code from Yahoo is 200 which indicates OK
5. Use BufferedReader and InputStreamReader