

The goal of this project is to build a database of stock information (prices and general company information). Through a web page users can inspect the contents of the database and investigate stock prices. During access stock prices brought up-to-date interactively, each time a user investigates a stock item.

Usage

Install

First clone this repo. To install all needed javascript packages run `npm -i`

Note that you also need a MongoDB with a database containing a collection with name "stocks".

The collect script

Run the collect script as follows. `python3 collect.py <path-to-your-database>` It queries over 10k of stock symbols from the yahoo_fin package. And starts querying their respective informations from the yahoo API. If the script stops (or you want to stop it), note the last processed index. Then before restarting, set the `START_INDEX` variable (second line of main-block) the index to start at.

The server

Run the server from commandline with: `PORT=<port-to-host-the-webpage>`

`MONGODB_URI=<path-to-your-database> node start server` Eg. if you run:

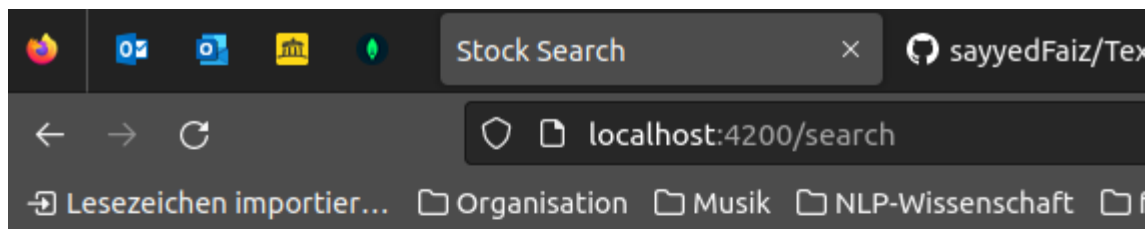
```
PORT=4200 MONGODB_URI="mongodb://localhost:27017/ExampleV2" node server
```

The webpage can be accessed via your browser by visiting:

`http://localhost:4200/` , for the stock details page `http://localhost:4200/search` , for the search page In this example the MongoDB is a local database instance.

Search page

If the server runs, open the webpage `http://localhost:4200/search` . Then you will see the following page:



Find available Stocks

☐ Search for exact phrase

☒ Search for keywords

Search in fields...

☒ Symbol/Ticker

☒ Name

☒ Country

☒ Description

In the textfield you can enter query words (the search is NOT case-sensitive). You can also specify if you want to perform an exact-phrase or a keyword search. The keyword search connects each word (separated by whitespace) with a logical OR, so a field must contain one of the specified words somewhere in its contents to match the query. The exact-phrase search searches each specified field for the appearance of the exact specified query (including the whitespaces but ignoring case).

Nevertheless a text-search is performed, so the query can appear anywhere in a field's content (beginning, mid, end) to match the query. You can also specify which fields to consider while searching. Press 'search' to see the matching database entries.

Search Result page

If the server runs, open the webpage `http://localhost:4200/results?query=<your-query>&<fields-to-be-searched>` Eg. for searching "Medical Technology" in the Description field visit: `http://localhost:4200/results?query=Medical+Technology&byDescription=on` You will see a page like this:

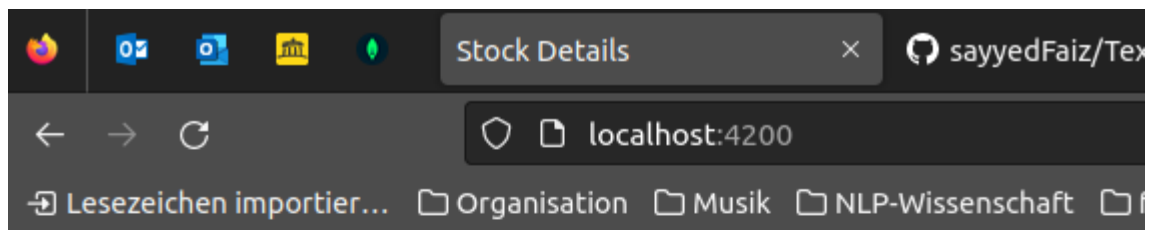
Go back to search Go to stock live stock price

Symbol	Name	Country	Description
AAON	AAON, Inc.	United States	AAON, Inc., together with its subsidiaries, engages in engineering, manufacturing, marketing, and selling air conditioning and heating equipment in the United States and Canada. The company operates through three segments: AAON Oklahoma, AAON Coil Products, and BASX. It offers rooftop units, data center cooling solutions, cleanroom systems, chillers, packaged outdoor mechanical rooms, air handling units, makeup air units, energy recovery units, condensing units, geothermal/water-source heat pumps, coils, and controls. The company markets and sells its products to retail, manufacturing, educational, lodging, supermarket, data centers, medical and pharmaceutical, and other commercial industries. It sells its products through a network of independent manufacturer representative organizations and internal sales force, as well as online. The company was incorporated in 1987 and is based in Tulsa, Oklahoma.
ABC	AmerisourceBergen Corporation	United States	AmerisourceBergen Corporation sources and distributes pharmaceutical products. Its U.S. Healthcare Solutions segment distributes brand-name and generic pharmaceuticals, over-the-counter healthcare products, home healthcare supplies and equipment, and related services to acute care hospitals and health systems, independent and chain retail pharmacies, mail order pharmacies, medical clinics, long-term care and alternate site pharmacies, and other customers. The company also provides pharmacy management, staffing, and other consulting services; supply management software to retail and institutional healthcare providers; packaging solutions to various institutional and retail healthcare providers; clinical trial support, product post-approval, and commercialization support services; data analytics, outcomes research, and additional services for biotechnology and pharmaceutical manufacturers; and pharmaceuticals, vaccines, parasiticides, diagnostics, micro feed ingredients, and other products to customers in the companion animal and production animal markets, as well as demand-creating sales force services to manufacturer. In addition, this segment distributes plasma and other blood products, injectable pharmaceuticals, vaccines, and other specialty products; and provides other services primarily to physicians who specialize in various disease states, primarily oncology, as well as to other healthcare providers, including hospitals and dialysis clinics. The company's International Healthcare Solutions segment offers international pharmaceutical wholesale and related service, and global commercialization services; and distributes pharmaceuticals, other healthcare products, and related services to pharmacies, doctors, health centers and hospitals primarily in Europe. This segments also provides specialty transportation and logistics services for the biopharmaceutical industry. The company was incorporated in 2001 and is headquartered in Conshohocken, Pennsylvania.
ABCM	Abcam plc	United Kingdom	Abcam plc, a life science company, focuses on identifying, developing, and distributing reagents and tools for scientific research, diagnostics, and drug discovery. The company's principal products include primary and secondary antibodies; conjugated antibodies and conjugation kits; singleplex immunoassays; proteins and peptides that include cytokines; edited cell lines and lysates; and various other products, including cellular activity kits, biochemicals, and cell signaling pathway tools. It serves scientists and researchers in academic institutions and research institutes, as well as in pharmaceutical, biotechnology, and diagnostics companies. The company has operations in the Americas, Europe, the Middle East, Africa, China, Japan, and rest of the Asia Pacific. It sells its products online. The company was incorporated in 1998 and is headquartered in Cambridge, the United Kingdom.
ABT	Abbott Laboratories	United States	Abbott Laboratories, together with its subsidiaries, discovers, develops, manufactures, and sells health care products worldwide. It operates in four segments: Established Pharmaceutical Products, Diagnostic Products, Nutritional Products, and Medical Devices. The Established Pharmaceutical Products segment provides generic pharmaceuticals for the treatment of pancreatic exocrine insufficiency, irritable bowel syndrome or biliary spasm, intrahepatic cholestasis or depressive symptoms, gynecological disorder, hormone replacement therapy, dyslipidemia, hypertension, hypothyroidism, Ménière's disease and vestibular vertigo, pain, fever, inflammation, and migraine, as well as provides anti-infective clarithromycin, influenza vaccine, and products to regulate physiological rhythm of the colon. The Diagnostic Products segment offers laboratory systems in the areas of immunoassay, clinical chemistry, hematology, and transfusion; molecular diagnostics systems that automate the extraction, purification, and preparation of DNA and RNA from patient samples, as well as detect and measure infectious agents; point of care systems; cartridges for testing blood; rapid diagnostics lateral flow testing products; molecular point-of-care testing for HIV, SARS-CoV-2, influenza A and B, RSV, and strep A; cardiometabolic test systems; drug and alcohol test and remote patient monitoring and consumer self-test systems; and informative and automation solutions for use in laboratories. The Nutritional Products

Here all results matching your query are shown in a HTML table. Please note: Sofar there is a bug, same items can appear multiple times. TBD: Fix.

Stock Details search page

If the server runs, open the webpage `http://localhost:4200/` Then you will see the following page:



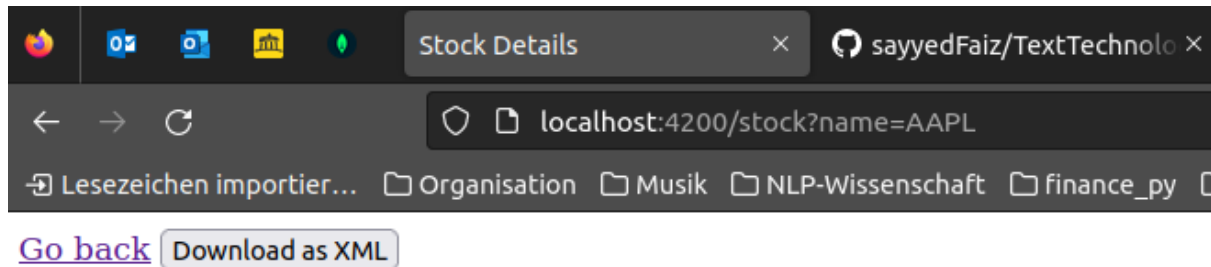
Stock Details

Search

The the textfield you can specify the Symbol/Ticker or Name of a company. Press 'search' to see the database entry and up-to-date price.

Stock Details result page

If the server runs, open the webpage `http://localhost:4200/stock?name=<SYMBOL-or-NAME>` You will be presented with a page like this:



Stock Details

Symbol: AAPL

Name: Apple Inc.

Prices

Date of Information	Price (USD)	Day High (USD)	Day Low (USD)
2023-06-26 15:59:59	186.9132	188.05	186.34
2023-06-26 16:03:24	186.7706	188.05	186.34

Officers

Name	Role/Title
Mr. Timothy D. Cook	CEO & Director
Mr. Luca Maestri	CFO & Sr. VP
Mr. Jeffrey E. Williams	Chief Operating Officer
Ms. Katherine L. Adams	Sr. VP, Gen. Counsel & Sec.
Ms. Deirdre O'Brien	Sr. VP of Retail
Mr. Chris Kondo	Sr. Director of Corp. Accounting
Mr. James Wilson	Chief Technology Officer
Ms. Mary Demby	Chief Information Officer
Ms. Nancy Paxton	Sr. Director of Investor Relations & Treasury
Mr. Greg Joswiak	Sr. VP of Worldwide Marketing

The price list will contain all prices queried so far. Each time this page is loaded, the underlying javascript queries an up-to-date price from the yahoo-API and appends it to this list, so the list will grow each time the page is reloaded. If you want to quickly store the stock information, press the 'Download as XML' button. An automatic download will start, providing you with an XML file containing all displayed and extra informations. (TBD: Maybe offer a schema to validate downloaded files??) Note that if a piece of information is not available a "--Unkown--" text is shown, except for the officers where the whole section will be missing if they are not known.

Files and directories

Path	Description
./views/	Contains the html-pages and embedded-javascript templates for rendering out four pages.
./views/index.ejs	Renders the "Stock-Details" search page. Lets user enter the query.
./views/stock.ejs	Renders the "Stock-Details" results.
./views /index_search.ejs	Renderes the "Search-Function" page. Lets the user enter queries.
./views /stock_results.ejs	Renders the results of the "Search-Funtion page".
./models/	Contains the database models for the Stock object. Mongoose (js-package) requires such a schema definition in order to create js objects from the database responses.
./models/stock_ext.js	Contains the schema for a Stock object.
./models/stock.js	For now, deprecated. Please ignore.
./Controlers/	Contains the code that handels the database/api queries. Background for the "views/index.ejs" and the "views/index_search.ejs" pages.
./Controlers /stockController.js	Handels the user interactions from the index.ejs page. Here the up-to-date stock prices is queried from the yahoo-financial api as well as the stock entry from our MongoDB is done here. Also the MongoDB gets updated here.

Path	Desecription
./Controlers /stockController_ext.js	Handels the user interactions from the index_search.ejs page. Here only queries to our MongoDB are done. Users can specify query words, decide on a searchType and on the fields to serch in. The MongoDB entries are queried for all specified fields and rendered ojn the stock_results.ejs page.
./collect.py	The script that fills the MongoDB with instances.
./server.js	Entry point for the server, this code compiles the webpage from its parts.

Examples and Statistics

Statistics

Currently our MongoDB contains entries for 3617 stocks.

Field	% of examples where info is available	Average-Length
Symbol	100	-
Name	100	-
Country	69	-
Sector	69	-
Industry	69	-
Description	99	-
Officers	67	7.2
Prices	100	1.02

Examples

Find pcitures and example XMLs in the ./readme/ folder.

Search-1 (Unkown attributes)

Find available Stocks

--Unknown--

🔍 Search for exact phrase

🔍 Search for keywords

Search in fields...

☐ Symbol/Ticker

☐ Name

☐ Country

☒ Description

Search

[Go back to search](#) [Go to stock live stock price](#)

Symbol	Name	Country	Description
AIO	Virtus Artificial Intelligence & Technology Opportunities Fund	United States	--Unknown--
AMNA	ETRACS Alerian Midstream Energy Index ETN	--Unknown--	--Unknown--
AMND	ETRACS Alerian Midstream Energy High Dividend Index ETN	--Unknown--	--Unknown--
AMTR	ETRACS Alerian Midstream Energy Total Return Index ETN	--Unknown--	--Unknown--
APLY	Tidal Trust II - YieldMax AAPL Option Income Strategy ETF	--Unknown--	--Unknown--
ASGI	Abrdn Global Infrastructure Income Fund	United States	--Unknown--
BAR	GraniteShares Gold Trust	--Unknown--	--Unknown--
BCAT	BlackRock Capital Allocation Term Trust	United States	--Unknown--
BERZ	MicroSectors Solactive FANG & Innovation -3X Inverse Leveraged ETNs	--Unknown--	--Unknown--
BMEZ	BlackRock Health Sciences Term Trust	United States	--Unknown--
BULZ	MicroSectors Solactive FANG Innovation 3X Leveraged ETNs	--Unknown--	--Unknown--
CPZ	Calamos Long/Short Equity & Dynamic Income Term Trust	United States	--Unknown--
DCF	BNY Mellon Alcentra Global Credit Income 2024 Target Term Fund, Inc.	United States	--Unknown--
DLY	DoubleLine Yield Opportunities Fund	United States	--Unknown--
ECAT	BlackRock ESG Capital Allocation Term Trust	United States	--Unknown--
EIC	Eagle Point Income Company Inc.	United States	--Unknown--
EICA	Eagle Point Income Company Inc.	United States	--Unknown--
ESUS	ETRACS 2x Leveraged MSCI US ESG Focus TR Index ETN	--Unknown--	--Unknown--
FEDL	ETRACS 2x Leveraged IFED Invest with the Fed TR Index ETN	--Unknown--	--Unknown--
FINS	Angel Oak Financial Strategies Income Term Trust	United States	--Unknown--
FTHY	First Trust High Yield Opportunities 2027 Term Fund	United States	--Unknown--
FXE	Invesco CurrencyShares Euro Currency Trust	--Unknown--	--Unknown--

Search-2 (exact vs keyword)

Exact Search:



Find available Stocks

medical complications

☒ Search for exact phrase

☐ Search for keywords

Search in fields...

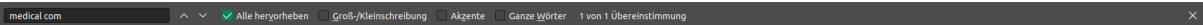
☐ Symbol/Ticker

☐ Name

☐ Country

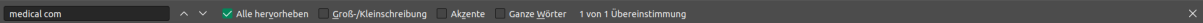
☒ Description

Search



[Go back to search](#) [Go to stock live stock price](#)

Symbol	Name	Country	Description
BMRA	Biomerica, Inc.	United States	Biomerica, Inc., a biomedical technology company, develops, patents, manufactures, and markets diagnostic and therapeutic products for the detection and/or treatment of medical conditions and diseases worldwide. The company's diagnostic test kits are used to analyze blood, urine, nasal or fecal specimens from patients in the diagnosis of various diseases, food intolerances, and other medical complications; or to measure bacteria, hormones, antibodies, antigens, or other substances which may exist in the human body, stools, or blood in extremely small concentrations. It primarily sells its products for gastrointestinal diseases, food intolerances, and various esoteric tests at the physicians' offices and over-the-counter drugstores, and hospital/clinical laboratories. The company is also developing InFoods, that uses a simple blood sample to identify patient-specific foods which may alleviate irritable bowel syndrome symptoms; Helicobacter pylori test that indicates if a patient is infected with the H. Pylori bacteria. In addition, it develops products to indicate if a person has been infected by COVID-19. Biomerica, Inc. was incorporated in 1971 and is headquartered in Irvine, California.



Keyword Sarch:



Find available Stocks

medical complications

☐ Search for exact phrase

☒ Search for keywords

Search in fields...

☐ Symbol/Ticker

☐ Name

☐ Country

☒ Description

Search

medical.com			
localhost:4200/results?query=medical+complications&searchType=keywords&byDescription=on			
AORT	Artivion, Inc.	United States	aneurysmal iliac side branches, and E-tegra, an abdominal aortic aneurysms stent graft system. In addition, the company offers synthetic vascular grafts for use in open aortic and peripheral vascular surgical procedures; PerClot, an absorbable powdered hemostat for use in surgical procedures; cardiac laser therapy products for angina treatment; CryoVein femoral vein and CryoArtery femoral artery vascular preservation services; On-X prosthetic aortic and mitral heart valves and the On-X ascending aortic prosthesis; CarbonAid CO2 diffusion catheters and Chord-X ePTFE sutures for mitral chordal replacement; and ascyrus medical dissection stents, as well as pyrolytic carbon coating services to medical device manufacturers. It serves physicians, hospitals, and other healthcare facilities, as well as cardiac, vascular, thoracic, and general surgeons. The company was formerly known as CryoLife, Inc. and changed its name to Artivion, Inc. in January 2022. Artivion, Inc. was founded in 1984 and is headquartered in Kennesaw, Georgia.
APD	Air Products and Chemicals, Inc.	United States	Air Products and Chemicals, Inc. provides atmospheric gases, process and specialty gases, equipment, and related services in the Americas, Asia, Europe, the Middle East, India, and internationally. The company produces atmospheric gases, including oxygen, nitrogen, and argon; process gases, such as hydrogen, helium, carbon dioxide, carbon monoxide, and syngas; specialty gases; and equipment for the production or processing of gases comprising air separation units and non-cryogenic generators for customers in various industries, including refining, chemical, manufacturing, electronics, magnetic resonance imaging, energy production, medical, food, and metals. It also designs and manufactures equipment for air separation, hydrocarbon recovery and purification, natural gas liquefaction, and liquid helium and liquid hydrogen transport and storage. The company was founded in 1940 and is headquartered in Allentown, Pennsylvania.
APLM	Apollomics, Inc.	United States	Apollomics, Inc., a biotechnology company, engages in the discovery and development of oncology therapies to address unmet medical needs in California, Hangzhou, Shanghai, China, and Australia. It develops APL-101 (Vebreltinib), a potent, selective c-Met inhibitor for the treatment of non-small cell lung cancer and other advanced tumors; APL-102 is an oral active, small molecule multiple tyrosine kinase inhibitor for liver cancer, breast cancer, and esophageal cancer; and APL-122, a tumor inhibitor candidate to treat cancers within the brain. The company was formerly known as CBT Pharmaceuticals, Inc. and changed its name to Apollomics, Inc. in January 2019. Apollomics, Inc. was incorporated in 2015 and is based in Foster City, California.
APLT	Applied Therapeutics, Inc.	United States	Applied Therapeutics, Inc., a clinical-stage biopharmaceutical company, develops novel products to target central nervous system rare disease and diabetic complications in the United States. Its lead product candidate is AT-007 that has completed phase III for the treatment of galactosemia in healthy volunteers and adults, as well as is in pediatric clinical study for the treatment of galactosemia in kids; for treating sorbitol dehydrogenase deficiency; and for the treatment of phosphomannomutase enzyme-CDG. The company also develops AT-001 that is in phase III clinical trials to treat diabetic cardiomyopathy, as well as for the treatment of diabetic peripheral neuropathy; and AT-003, which is in preclinical studies for the treatment diabetic retinopathy. Applied Therapeutics, Inc. was incorporated in 2016 and is headquartered in New York, New York.
APM	Aptorum Group Limited	United Kingdom	Aptorum Group Limited, a biopharmaceutical company, engages in the discovery, development, and commercialization of therapeutic products for the treatment of infectious diseases and cancer. The company operates in the Therapeutics and Non-Therapeutics segments. Its pipeline products include SACT-1 for neuroblastoma and other cancer types; SACT-COV19 for the treatment of coronavirus disease; ALS-4 to treat bacterial infections caused by staphylococcus aureus, including MRSA; and ALS-1 to treat viral infections caused by influenza virus A. The company is also developing ALS-2/3 for the treatment of gram+ve bacterial infections; RPIDD, a pathogen molecular diagnostic; NativusWell DOI (NLS-2), a dietary supplement; NLS-1 for the treatment of endometriosis; DLS-1+2 to treat NSCLC with mutation; DLS-3, an autoimmune small molecule; and CLS-1 for the treatment of obesity. Its pipeline products enable the discovery of new therapeutics assets, such as systematic screening of existing approved drug molecules, and microbiome-based research platforms for treatment of metabolic diseases. The company also focuses on therapeutic and diagnostic projects in neurology, gastroenterology, metabolic disorders, women's health, and other disease areas. In addition, it operates a medical clinic. The company was formerly known as APTUS Holdings Limited and changed its name to Aptorum Group Limited in October 2017. Aptorum Group Limited was incorporated in 2010 and is headquartered in London, the United Kingdom. Aptorum Group Limited is a subsidiary of Jurchen Investment Corporation.
APOLLOHOSPNS	Apollo Hospitals Enterprise Limited	India	Apollo Hospitals Enterprise Limited, together with its subsidiaries, provides healthcare services in India and internationally. The company's healthcare facilities comprise primary, secondary, and tertiary care facilities. Its tertiary care hospitals provide advanced healthcare services; and specialties in cardiac sciences, oncology, neurosciences, orthopedics, emergency, robotic surgery, and transplants. The company also provides other services, such as project consultancy, health insurance, medical colleges, medvarsity for e-learning, and research services. In addition, it operates pharmacies, primary care clinics, birthing centers, specialized birthing centers, single specialty clinics, primary health centers and diagnostic chains, dental clinics, and daycare and home healthcare centers. The company's footprint includes 9,911 beds, 4,529 pharmacies, and 1,734 national retail healthcare centers, as well as Apollo 24/7, an end-to-end omni-channel healthcare platform and www.apollopharmacy, an online pharmacy. Apollo Hospitals Enterprise Limited was incorporated in 1979 and is based in

Details (Apple)

Stock Details

Search

[Go back](#)

Download as XML

Stock Details

Symbol: AAPL

Name: Apple Inc.

Prices

Date of Information Price (USD) Day High (USD) Day Low (USD)

2023-06-26 15:59:59	186.9132	188.05	186.34
2023-06-26 16:03:24	186.7706	188.05	186.34
2023-06-29 12:23:15	189.25	189.9	187.6

Officers

Name	Role/Title
Mr. Timothy D. Cook	CEO & Director
Mr. Luca Maestri	CFO & Sr. VP
Mr. Jeffrey E. Williams	Chief Operating Officer
Ms. Katherine L. Adams	Sr. VP, Gen. Counsel & Sec.
Ms. Deirdre O'Brien	Sr. VP of Retail
Mr. Chris Kondo	Sr. Director of Corp. Accounting
Mr. James Wilson	Chief Technology Officer
Ms. Mary Demby	Chief Information Officer
Ms. Nancy Paxton	Sr. Director of Investor Relations & Treasury
Mr. Greg Joswiak	Sr. VP of Worldwide Marketing

Mit dieser XML-Datei sind anscheinend keine Style-Informationen verknüpft. Nachfolgend wird die Baum-Ansicht des Dokuments angezeigt.

```
--<stock>
  <name>Apple Inc.</name>
  <symbol>AAPL</symbol>
  <country>United States</country>
  +<description></description>
  <sector>Technology</sector>
  <industry>Consumer Electronics</industry>
  -<officers>
    -<officer>
      <name>Mr. Timothy D. Cook</name>
      <title>CEO & Director</title>
    </officer>
    +<officers></officers>
    +<officer></officer>
    +<officer></officer>
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      <dayHigh>189.9</dayHigh>
      <dayLow>187.6</dayLow>
    </price>
  </prices>
</stock>
```