

DMIT2008 Assignment 1

Task: Stock Ticker App ES6

Due: Midnight on Friday September 27th, 2019

Weight: 15%

Overview

You must create an ES6 web application that will allow for looking up the current stock price when given a stock ticker symbol. This assessment will test a your ability to apply intermediate JavaScript skills learnt in the previous course as well as new ES6 language features covered during the first three weeks of DMIT2008; essentially, this assignment serves as a primer for the remainder of the course. You will also need to apply basic node.js usage for the compiling of ES6 to ES5 for legacy browser compatibility.

Use the <u>Alpha Vantage</u>¹ REST API for this assignment. You will need to sign up and generate an API key. Utilize the Alpha Vantage <u>API documentation</u>² to determine how best to retrieve the information you will need.

Expectations

Your application must demonstrate the following:

- You must provide a means for the user to enter a stock ticker and to then display the stock ticker symbol, current close price, current date (GMT), and any additional information you think would be useful/important.
- Ensure that all your source edits are done in a separate file from the one linked in the final html submission file (i.e. you should have one development file and one compiled production file)
- Use ES6 only, no other libraries are to be used in your solution (e.g. no jQuery)
- Properly documented code using an acceptable commenting convention (e.g. <u>JSDoc</u>)
- Code must adhere to a widely accepted code convention for code style
- Babel.js (via node.js and npm) is to be used to compile ES6 to ES5

¹ https://www.alphayantage.co/

² https://www.alphavantage.co/documentation/

- While your ES6 code does not require an IIFE (i.e. it should be removed), your compiled ES5 code should be encapsulated in an IIFE (i.e. nothing should be leaked to the global object)
- You are solely responsible for all parts of this assignment (all HTML and JavaScript code)
- Any other requirements as laid out by your instructor in class

The emphasis in this assignment is on functionality, which essentially means that the aesthetics are of lesser (if any) concern. Get your application to work correctly and demonstrate **best practices** and solid understanding of JavaScript in the process.

Delivery

Zip your project folder and submit it to Moodle by the deadline.

- Do not include the node_modules/ directory in your zip package.

Seek help if you need it; late submissions will not be graded.

Grading Key

Tasks	Grade	Marks	Total
ES6JS			
Functions are declared using const and implemented as arrow functions, block scoping is applied to all existing variables		5	
Template literals are used where appropriate (e.g. variable interpolation)		3	17
Fetch/promise API used for asynchronous calls		3	[18]
Destructuring used when possible for display variables (may require more than one assignment)		3	
All required response data are properly displayed		3	
Catch and display any errors [bonus]		[1]	
Node.js and Babel			
Required npm packages are installed for babel compilation as dev dependencies		1	
Required package.json entry[ies] are made for babel settings (use preset-env for babel preset)		1	3
A build script is added to package json for running babel, which will compile main.es6.js to main.js		1	[4]
Use babel to automatically wrap your compiled code in an IIFE [<i>bonus</i>]		[1]	
Code Readability and Efficiency			
 Inefficient or unmaintainable techniques Poor code format or lack of documentation ES6 not exclusively used (e.g. ES5 or jQuery used when there is an ES6 equivalent) Does no utilize only your code (i.e. includes code from online sources such as StackOverflow) node_modules present Poor project directory structure 		-5	-5

TOTAL	20
MARKS	20

Marking Rubric

Marks	5 Marks Criteria [minus]
5 [0]	Task was completed with the highest of proficiency, adhering to best practices, and followed subject matter guidelines. The task was completed to a professional standard.
4 [-1]	Task was completed well, with some minor mistakes. Well above average work, shows good understanding of the task, and a high degree of competence.
3 [-2]	Task was completed satisfactorily. Some features are missing or incorrectly implemented. Shows a moderate level of understanding in the task with room for improvement.
2 [-3]	Task completion is below average, the task was poorly completed. Shows understanding of the task and the requirements to implement, but implementation was poorly executed.
1 [-4]	Some of the task was completed. Shows a lack of understanding in the subject matter and very poor execution.
0 [-5]	Not completed.

Marks	3 Marks Criteria [minus]
3 [0]	Task was completed well, adhering to best practices, and followed subject matter guidelines.
2 [-1]	Task was completed satisfactorily. Some features are missing or incorrectly implemented. Shows a moderate level of understanding in the task with room for improvement.
1 [-2]	Some of the task was completed. Shows a lack of understanding in the subject matter and very poor execution.
0 [-3]	Shows a little to no degree of competence in completing the task; not completed.

Marks	1 Marks Criteria
1	Task completed satisfactorily
0	Task was not completed