

Homework 8: Responsive Web Design

AlphaVantage Stock Search

(AJAX/JSON/Bootstrap/jQuery/AngularJS/Cloud Exercise)

Total Points: 10 + 2

- **Basic Search Form (1.5 point in total)**

- The initial webpage with a text-input field along with a Get Quote button and a Clear button as specified in the description - **0.5 point**
- When Clear button clicked, the text-input and the results section are cleared – **0.5 point**
- When search button is clicked and no keywords are entered, a message has to be displayed as specified in the description. – **0.5 point**

- **Stock Details (6 points in total)**

- **Current Stock tab – 2 points**
 - Shows correct data in correct format – **0.25 point**
 - When back button clicked, can navigate back to Favorite tab – **0.25 point**
 - When favorite button clicked, can add/remove the stock from the favorites list – **0.25 point**
 - If the stock is in the favorites list, yellow star button should be displayed – **0.5 point**
 - When the data is being fetched, progress bar is displayed – **0.25 point**
 - Display price/volume/indicators with correct name and date in correct format – **0.5 point**
- **Historical Charts tab – 2 points**
 - Display chart with correct stock name, label and title/subtitle – **0.5 point**
 - Display chart with correct value and format – **0.5 point**
 - Display chart with correct zoom level – **0.5 point**
 - Display chart with correct ticker and interval – **0.5 point**
- **News Feeds tab – 1.5 point**
 - Display five most recent pieces of news in total – **0.5 point**
 - Display news title/author/date in correct format – **0.5 point**
 - Titles hyperlink to correct news page – **0.5 point**
- **Facebook post – 0.5 point**
 - Upon clicking the Facebook button, a pop up appears to post that into client's machine – **0.25 point**
 - Post correct price/volume/indicators chart on current tab – **0.25 point**

- **Favorites (1.5 point in total)**

- The favorites table implements Sort By Corresponding Order – **0.25 point**
- The favorites table has the automatic/manual refresh mechanism – **0.25 point**

- The favorites table correctly display fields of “Symbol”, “Stock Price”, Change, Volume – **0.25 point**
- When delete button clicked, the stock should be removed from the table and favorites list local storage – **0.25 point**
- When delete button clicked, the removed stock should not be displayed with yellow star button in other pages – **0.25 point**
- When stock symbol clicked, should go to the detail page of the corresponding stock – **0.25 point**
- **Responsive (1 point in total)**
 - In mobile browsers, all of the pages should be the same as screenshots provided in description document – **0.5 point**
 - In mobile browsers, the search form should display each component in a vertical way as specified in the description – **0.25 point**
 - In mobile browsers, the stock details table and chart image should be aligned vertically as specified in the description – **0.25 point**
- **Use of Angular**
 - The whole app should be implemented utilizing Angular framework. Implementation without using Angular framework will result in a penalty of 1 point.
- **Use of Bootstrap**
 - The app should be implemented using Bootstrap. Implementations without Bootstrap will result in a penalty of 2 points.
- **Use of Sliding Mechanism**
 - The favorite table and Stock details table should be switched in sliding fashion using Angular. Fails to implement sliding mechanism or without Angular will result in a penalty of 2 points.
- **Use of GAE/AWS**
 - PHP/Node.js script must be deployed on GAE/AWS. Implementing the assignment without GAE/AWS will result in a penalty of 4 points. To allow the graders to perform this test, an additional link should be added to the list of homework, with a format similar to the following:
 - [http://example.appspot.com/?\[listing_the_parameters_and_sample_values\]](http://example.appspot.com/?[listing_the_parameters_and_sample_values])
 - Or
 - [http://example.elasticbeanstalk.com/?\[listing_the_parameters_and_sample_values\]](http://example.elasticbeanstalk.com/?[listing_the_parameters_and_sample_values])
 - This link would guide graders to a page where it displays the JSON data wrapped in your PHP/Node.js file running on the Google App Engine/Amazon AWS.
- **Additional Requirements**
 - The program must work in Firefox and Chrome for desktop, Safari and Chrome for mobile
 - All the Alpha Vantage APIs should be requested from PHP or Node.js. Directly calling from JavaScript will result in a 5 points penalty.

- The window should not reload for any kind of data request. All transactions are asynchronous

- **Extra Credits**

- We will provide 2 extra credits for using Node.js at GAE/AWS
- Testing of use of Node.js will be done using the link provided above under “Use of GAE/AWS”