Homework 8: Ajax, JSON and Responsive Design

Weather Search

Grading Guidelines

Total Points: 15

<u>Deduction of points in each category will NOT exceed the total points of the category.</u>

- **Basic Search Form (3 point in total)**
  - Street and City Placeholder - 0.25 points
  - Street, City and State must be disabled when choosing "Current location" checkbox and enabled when "Current Location" checkbox is disabled – 0.25 points
  - Disable and enable the "Search" button appropriately - 0.25 points
  - Validation for the search inputs and the error message(s), - 0.5 points total
  - "Clear" button resets the search form to the initial state and clears results area - 0.5 points
  - Obtain user location - 0.25 points
  - City Autocomplete - 1 points
- **Weather Details (7 points in total)**
  - **Current tab (2 point in total)**
    - Show every data in the specified format - 0.25 points deduction for each missing data with a maximum of 1 point.
    - Show State Seal Symbol from Google Custom Search - 0.75 points
    - Tooltip on hovering the icons – 0.25 points.

  - **Hourly tab (2 point in total)**
    - Display all 6 bar charts correctly, deduct 0.25 for each missing graph – up to 1.25 points
    - Styling of bar chart on hovering should follow the video – 0.25 points
    - Units for each bar chart should be specified - 0.25 points
    - Data label above the chart should be not clickable – 0.25 points

  - **Weekly tab (2.5 points in total)**
    - Range bar chart should be displayed for the whole week with axes labels- 1 point
    - Hovering displays Date and range of temperature – 0.25 points
    - On clicking, modal should be displayed - 0.25 points
    - In modal, every data should be displayed in the format as given in the video – 0.25 points
    - Every value except temperature should be rounded up to 2 decimal places and the temperature should be rounded off to the nearest integer – 0.25 points
    - The icon in the modal should correspond to the summary for that day – 0.5 points

  - **Buttons (0.5 point in total)**
    - Favorites and Twitter buttons - 0.25 points
    - Navigation bar of tabs should be displayed in the correct format – 0.25 points

- **Favorites (1.5 point in total)**
  - Add city to favorite list - 0.5 points
  - Delete city from favorite list - 0.25 points
  - Delete city from search result if in favorite list - 0.25 points
  - Favorites should work in the mobile view – 0.5 points
- **Progress bars, No records messages (0.5 points in total)**
  - Progress bars – 0.25 points
  - No records messages – 0.25 points
- **Theme (1 point in total)**
  - 0.25 points will be deducted wherever given theme is not applied with a maximum of 0.5 points deduction.
  - This includes styling on the form (colors, shadows), graphs, modal and overall aesthetics of the site should be close to the video.
- **Responsive (2 point in total)**
  - In mobile browsers, all of the pages should be the same as screenshots provided in description document - 1.5 points
  - In mobile browsers, all search, favorites, and Twitter functions must work - 0.5 points
- **Use of Bootstrap**
  - The app should be implemented using Bootstrap. Implementations without Bootstrap will result in a penalty of 2 points.
- **Use of GAE/AWS/Azure**
  - Node.js script must be deployed on GAE/AWS/Azure. 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://xxx.appspot.com/[path]?[list_of_the_parameters_and_sample_values]
      Or
    - http://xxx.elasticbeanstalk.com/[path]?[list_of_the_parameters_and_sample_values]
      Or
    - http://xxx.azurewebsites.net/[path]?[list_of_the_parameters_and_sample_values]
  - This link would guide graders to a page where it displays the JSON data returned by your Node.js script running on the Google App Engine/Amazon AWS/Azure. Failing to provide a valid link will result in **a penalty of 4 points**.
- **Additional Requirements**
  - The entire assignment is to be implemented using Angular 2+, Node.js and Bootstrap. Use of AngularJs will result in **a penalty of 5 points.**
  - The use of jQuery will result in **a penalty of 2 points.**
  - Most API requests must be made on **server side**. Only ip-api can be called on client side. Any violation will result in a 4-point penalty.
  - The window should not reload for any kind of data request. All transactions are asynchronous. Any violation will result in a 2-point penalty.

- The program must work in Chrome and Firefox on desktop, and Safari and Chrome on mobile devices.
- Please note, you need to submit your files (HTML, JS, CSS, TS), both backend and frontend, directly to the root folder of your homework 8 GitHub repository. That is, do not submit any subfolders on GitHub Classroom. If you submit some subfolders, you will receive a 3-points penalty.