# Homework 8: Weather Forecast Web App using Bootstrap, JQuery, AJAX and JSON Mashup

Total points: 10 points

## Basic Search Form (1.25 point in total)

- The initial webpage with all form fields as described, Clear Button, Search button and the Forecast.io logo with a link to Forecast.io homepage (0.75 point)
- jQuery validation for the search input (0.5 point) (i.e. appropriate message in red appears when invalid)

## Result Display (8.75 points in total)

- Tab 1 (Current Weather details, Cloud Map and Facebook button)
  (4.25 points)
  - ➤ Current temperature, the icon, summary and high-low temperature should be displayed as shown in the homework description. (1 point)
  - The other weather details should be displayed in the table in correct format with the appropriate units. (0.5 point)
  - ➤ The cloud map should be displayed properly. (1 point)
    - The clouds and precipitation layer should be visible (0.5 point)
    - The city specified in the search form should be set in the map (0.5 point)
  - ➤ Facebook button (1.5 points)
    - Authorize the user to Facebook if the user is not already logged in (0.5 point)
    - Post the Weather information to a user's News Feed (1 point)
      - Display the correct message as **title**, with the city and state. Together with this you need to give the **description** which should include the summary and current temperature (0.25 point)
      - Weather icon image (0.25 point)
      - Working Link to Forecast.io homepage (0.25 point)
      - Successful/ Failed Message after posting (0.25 point)
  - The tab should be responsive to mobile device as shown in the homework description (0.25 point)
- Tab 2 (24 hour forecast) (2 points)
  - ➤ Table to display the 24-hour weather summary (0.5 point)
  - ➤ Drop down table which is shown when the view details icon is clicked (1.25 points)
  - The table with the drop down should be responsive to mobile device as shown in the homework description (0.25 point)
- Tab 3 (7-day forecast) (2.5 points)
  - ➤ All the seven columns should display the weather details as shown in the homework description (1 point)

- The day and the date should be displayed properly (0.5 point)
- The weather icon should be displayed (0.25 point)
- The max and min temperature should be displayed (0.25 point)
- ➤ Modal properly displayed for each of the seven days (1 point)
  - Modal title should display the city and date, the weather icon and the day should be displayed as shown in homework description (0.5 point)
  - The weather details in the modal window should be displayed in proper format and units (0.5 point)
- The columns showing the weather details and the modal window should be responsive in the same way as shown in the homework description (0.5 point)

### Use of AWS

• PHP script must be deployed on AWS. Implementing the assignment by using the Apache+PHP on cs-server.usc.edu instead of the AWS Elastic Beanstalk, will result in a penalty of **2 points**. To allow the graders to perform this test, an additional link should be added to the list of Homeworks, with a format similar to the following:

http://default-environment-randomstring.elasticbeanstalk.com/?[listing the parameters and sample values is mandatory]

This link would guide graders to a page where it displays the JSON data wrapped in your PHP file running on the Amazon AWS.

### Additional Requirements:

- The program must work in Firefox.
- All the results should be displayed in the same window as the search form.