

Homework #3: Upgrade UI to Dynamic Using Service API

Due: THURSDAY 2017 March 23 @ 11:55pm

This homework assignment will have you implement an UI for HW2 with a dynamic approach that uses asynchronous JavaScript requests to send the user-inputted data to the ReST API you built, receive the structured results, and then publish them into the page without refreshing the whole page again.

The Webpage should take an input date and then plot the Forecasts TMIN, TMAX for atl Next Five Days.

BONUS 25 Points: Also, Plot weather forecast for at least 5 DAYS from a Third Party Weather Forecasting Service such as Yahoo Weather, NCDC, Weather Underground, Weather, Open Weather Map,

This dynamic-conversion exercise will have you learn the following concepts:

- Event-driven programming
- Separation of data & presentation
- Asynchronous JavaScript (AJAX, DHTML, etc.)

You'll want to read up on the following:

- http://www.w3schools.com/xml/ajax_intro.asp
- <https://www.sitepoint.com/use-jquery-ajax-function/>
- http://sixrevisions.com/ajax/ajax_techniques/

The following libraries might be helpful for you, and you are encouraged to incorporate any of them to help speed up implementation:

- <https://jquery.com/>
- <http://prototypejs.org/>
- <https://angularjs.org/>
- There are numerous others too... feel free to experiment!

The UI should provide (at a minimum) the same functionality that HW1 provided when it was created in a FORM-POST style, except that it shouldn't require a full-page refresh to update the data.

As with the HW2 assignments, provide **submission.json**