**Week of 19 HW: NYT React Search**

**Objectives**

* In this activity you will be creating a new React-based rendition of the New York Times Article Search application.
* This assignment will require you to create React components, work with helper functions, and utilize the React mounting lifecycle to query and display articles based on user searches.
* You will additionally use Node, Express, and MongoDB to save articles of interest for future display.

**Required Assignment**

* Analyze the attached image of the final product
* Create a MongoDB database called nytreact.
* Using mongoose the create an Article schema and model
* Articles should have each of the following fields:
  + title (Title of the stored article from nytimes.com)
  + date (publish date and time of the article)
  + url (URL of the article on nytimes.com)
  + Creating documents in your articles collection similar to  
     { title: 'Ali Sells Jersey House And Moves to Chicago', date: '1974-07-18T00:00:00Z', url: 'http://query.nytimes.com/gst/abstract.html?res=9A0DE5D8173FEF34BC4052DFB166838F669EDE' }
* Then create a Node/Express/Handlebars/MongoDB/ReactJS application called nytreact that is a recreation of the NYT Articles Search exercise application we built way back in Week 6 in class... <http://nytarticle-search.herokuapp.com/> . Running this application will:
  + Display a Bootstrap layout (or another of your choosing) with similar to the same layout displayed in HW\_Assignment.png . This should be a SPA (Single Page Application) that uses react-router (<https://github.com/reactjs/react-router> ) to navigate, hide, show your React components without changing the route within Express.
  + You'll need several Express routes that your React components will use internally and to load your initial application:
    - / - will load your single HTML page (with ReactJS) in public/index.html
    - /api/saved (get) - route that React components will call to query MongoDB for all saved articles
    - /api/saved (post) - route that React component will use to save an article to the database
    - /api/saved (delete) - route that React component will use to delete a saved article in the database
  + The layout should include 3 React Components for named Main, Search, Saved that display:
    - **Main** - React component that contains the main-container div that holds the main layout and navigation. Main component should also be able to hold sub-components Search and Saved
    - **Search** - React component that queries the NYT API for articles. Display API search results from another possible **Query** component and **Results** component. Gives the user the ability to save an article to their Saved Articles.
    - **Saved** - React component that displays the Saved Articles that were searched and stored in the database

**Bonus: Live Updates to Saved Articles**

* Using React routing and socket.io ( [http://socket.io](http://socket.io/) ) ( <https://www.npmjs.com/package/socket.io> ) create a notification or a component that will display the most recently saved article as it happens. For example if you have multiple browsers open and visiting your site at the same time, if you save an article in browser A, browser A, B and C's display should be updated to show a new article was saved.

Good luck!