**The Challenge**

The challenge was set to create a one-page web app using Angular JS. Angular JS is a new library to me and I haven’t used it before but with this one-page web app I have used different aspects of Angular JS to demonstrate my learning and understanding.

**Angular JS**

* Controller
* Directive
* Routing
* Animating
* Sanitize

**Angular inbuilt HTML directives**

* Ng-repeat
* Ng-if
* Ng-click
* Ng-view
* Ng-animation

**How was the App Built?**

I have created a localhost using vhostman (<https://github.com/jamiemill/osx-vhost-manager/blob/master/vhostman.rb>) to the source directory, you can use any localhost configuration to achieve the same once you can access the index.html within source.

Note: View app in Chrome, inspect and choose a mobile.

CSS folder contains all my less files.

JS folder all my js files.

Data folder contains the provided Json files.

HTML folder containers all my custom HTML for my directives and view.

**NPM and Webpack**

I have used npm to install all packages used to complete this app. Modules used can be seen in package.json. Webpage has been used to compile all JS and CSS into bundle-index.js and style.css.

In the terminal from source directory:

* To install packages run: npm install
* Run watch task: npm start
* Unminified: npm run build
* Minified: npm run prod

**JS and interactions**

1. Have used a controller to control all data within the application. Using a HTTP get to get the data from both Json files and applied it to scope variables.
2. Utilised custom directives to display the different views:
   1. Header Logo
   2. Burger Menu Trigger
   3. Menu
   4. News Feed Items
   5. Filter Navigation
   6. Back Navigation
3. User can filter/ sort their news feed by clicking on one of the filters as seen below. These filters are in a scroll pane, user can scroll to see additional filters. The news feed changes accordantly with some animation.



1. User can click on one of the news articles they wish to read. Using routing I animate the view fading out the news feed and fading in the news article. Assumption: on click I save the clicked news item ID and this ID will be used to get the full news articles from DB. For this app I am just displaying the single article provided.
2. When the user is viewing the full news article the navigation changes from Filter to Back. This changes through scope.on(locationChange) and checks the current url and changing both navigations ng-if values if it should be shown or not. Again when the user clicks on Back the view changes fading in and out.

**App Styling:**

The app has been styled using Less and BEM (keen to learn other technologies SCSS etc). I have tried to give each custom directive its own style module, so it can be used again or manipulated using BEM. They include:

* Menu.less
* Burger.less
* Logo.less
* Filter.less
* News.less
* Page.less
* Header.less

There is also some default styling within core this mainly contains variables, typography and grid layout.

**Assumptions**

* From developing the one-page app I soon discovered a full app navigation needed to be created. I have created one to demonstrate what it would look like and how you would interact with it. FYI click on one of the links they go nowhere.
* When a user clicks on an article from the news feed this should get the full associated news article.

**Suggestions**

* For this challenge going forward I would suggest more single articles going forward so we could show app pulling the associated single articles from the data.

**Enhancements**

From looking at your current app on my phone. When navigating to the news I’ve noticed the user is displayed with a white screen images can be a bit staggered when loading. I’m guessing this is happening because the news items are being loaded from the server and it may contain large scaled images.

From experience on slow 3G/ 4G and WIFI connections downloading data can take a lot longer, mostly around images. This is something we are facing within the Interface team at Heyday and we have had a few discussions around it. One approach is compressing images or another is progressive image loading.

We have come across a solution Medium uses when loading their images. An article describing how it works. <https://jmperezperez.com/medium-image-progressive-loading-placeholder/> . First loading a very small distorted image in an image tag, then when the main entire main image has loaded then it is placed as a background image. The transition between the distorted and main image is done with CSS.

We haven’t used it on a project yet but I am keep to incorporate it into one of my personal projects.