UNIVERSITY OF MALTA
L-Università ta' Malta

LAS3009 - Single Page Applications: A Pragmatic Approach

Assignment Brief

Introduction

For your final assignment, you are expected to combine all the techniques we have learnt so far and apply them to create a single page application. The assessment of your assignment will be based on the following criteria:

1. Setup of development environment using NodeJs and Grunt (or similar build system)
2. Functionality of the final application
3. Modularity of code
4. Readability of code

Assignment Outline

You are instructed to develop a Job Management system as a single page application. A basic structure of the application is given below:

- Login Page (only markup required - code will be provided)
- Pages for creating individual users and projects.
    - Each user should be tagged as 'Admin', 'Manager' or 'Staff'.
    - Each project should be tagged with particular users.

    - Only ‘Admin’ users can create ‘Manager’ users and only ‘Manager’ users can create ‘Staff’ users.
    - Only ‘Manager’ users can create projects.
- Listing pages for all users and projects. Delete and edit functionality for individual users and projects should be available.
    - ‘Staff’ users can only view projects they have been tagged to and ‘Manager’ users can only view or edit projects they have created.
    - ‘Staff’ users can only update progress of projects and add notes. They should not be allowed to edit project details.

Milestones

The following milestones are expected to be covered during the course of completing your assignment:

1. Wireframe all layouts and draft user journies through your application
2. Build the above wireframes in html and css only
3. Transfer templates into a Javascript application and code logic around them

Suggested Technologies

It is suggested that Angular (v1) be used as a framework for your assignment as it is currently the local industry standard and most likely to be helpful in your career. Other frameworks or libraries are welcome however advanced notice should be given to lecturers.

Persistence of data

It is suggested that you make use of either of the following options:

1. JSON Server (https://github.com/typicode/json-server)
2. Firebase (https://www.firebase.com - Free Tier)

Note: Custom backend solutions are welcome however are not within the scope of this course and will not be assessed.

Helper Libraries

It is encouraged to use helper libraries such as those listed below to allow more time to be spent on actual application logic.

- UnderscoreJs (http://underscorejs.org/)
- MomentJs (http://momentjs.com/)
- NumeralJS (http://numeraljs.com/)

Suggested Reading

AngularJS

- https://www.airpair.com/angularjs/posts/top-10-mistakes-angularjs-developers-make
- https://github.com/johnpapa/angular-styleguide

Javascript

- http://www.w3schools.com/js/js_best_practices.asp

CSS

- https://css-tricks.com/css-style-guides/

General

- https://github.com/bendc/frontend-guidelines

Assignment Submission

Please create a github repository with a README.md file explaining how to install / setup the application and any caveats that should be considered when assessing the solution.

Submissions will be accepted no later than June 1st 2016.