WEB322 Assignment 2

Submission Deadline:

Friday, May 26th, 2017 @ 11:59 PM

Assessment Weight:

5% of your final course Grade

Objective:

Create and publish a web app that uses multiple routes which serve static files (HTML & CSS). This will serve as the "scaffolding" for future assignments.

Specification:

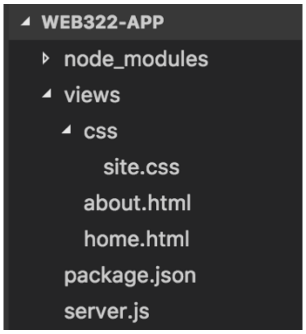
This assignment will involve creating multiple routes that serve specific HTML pages, styled using CSS.

Step 1: Development Environment

- Create a folder called **web322-app**. This will serve as our main application that we will be updating and modifying throughout this course.
- Inside this folder, initialize a local **Git repository (**using **git init** from the integrated terminal**)**
- Add the file **server.js**
- Create a **package.json** file using **npm init**. Ensure that your "entry point" is **server.js** (this should be the default), and "author" is your full name, ie: "John Smith"
- Obtain the **Express.js** module using **npm install express --save**
- **Commit** your changes your **local git repository** (using the source control icon displaying a (**99+**) icon) with the message "initial commit"

Step 2: Adding Files / Folders

- Add the folder **views** - this will be the location of the static pages (.html) and CSS (.css) files that we will be using in our application
- Inside the **views** folder, add the files **home.html** and **about.html**
- Inside the **views** folder - add the folder **css**
- Inside the **views/css** folder - add the file **site.css** (this will serve as the main .css file for our app)
- Your folder structure should now look like the image to the right:



```
▲ WEB322-APP
  ▷ node_modules
  ▲ views
    ▲ css
        site.css
      about.html
      home.html
    package.json
    server.js
```

Step 3: Quick Modification of Files

- Before starting on your **server.js** file, add some content to **home.html**, **about.html** and **site.css,** ie:
- **home.html:**

```
<!doctype html>
<html>
  <head>
    <title>Home</title>
    <link rel="stylesheet" href="css/site.css" type="text/css" />
  </head>
  <body>
    <h3>Home</h3>
  </body>
</html>
```

- **about.html**

```
<!doctype html>
<html>
  <head>
    <title>About</title>
    <link rel="stylesheet" href="css/site.css" type="text/css" />
  </head>
  <body>
    <h3>About</h3>
  </body>
</html>
```

- **style.css**

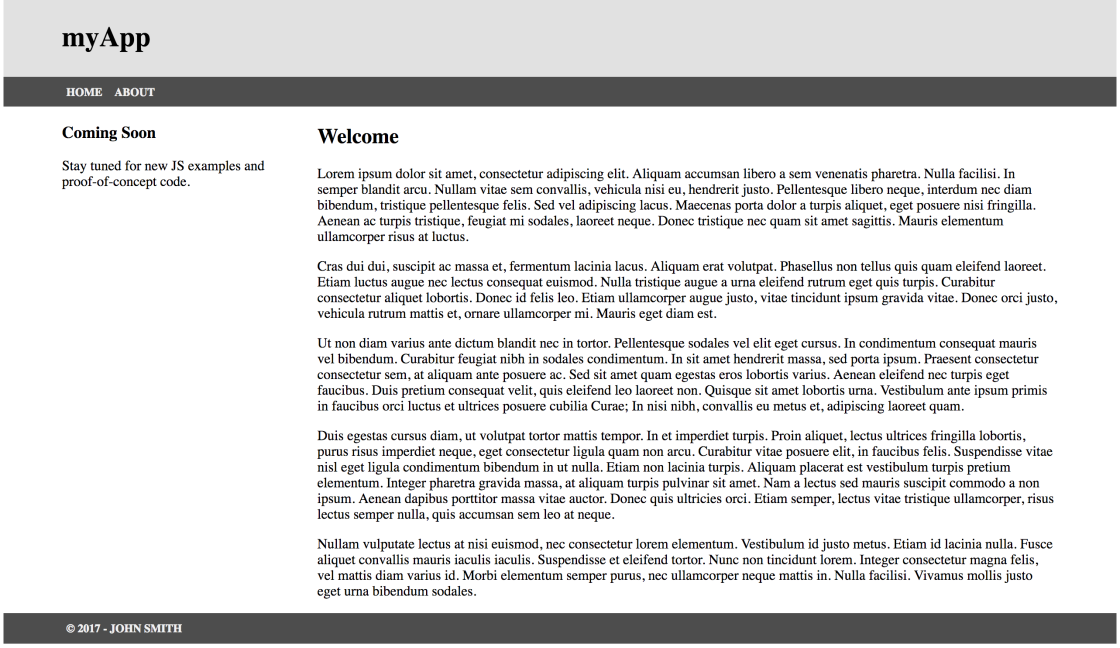
```
h3{
  color: red;
}
```

Step 4: Update server.js & testing app

- Now that all the files are in place, update your **server.js** file according to the following specifications (**HINT**: Refer to the sample code from **week 2** for reference):
  - The server must make use of the "**express**" module
  - The server must listen on **process.env.port || 8080**
  - The server must output: "Express http server listening on ***port***" - to the console, where ***port*** is the port the server is currently listening on (ie: 8080)
  - The route "**/**" must return the **home.html** file
  - The route "**/about**" must return the **about.html** file from the **views** folder
  - **NOTE**: for your server to correctly return the "css/site.css" file, the "**static**" middleware must be used: in your **server.js** file, add the line: **app.use(express.static('views'));** - we will discuss this in greater detail in Week 4
  - From the integrated terminal, enter the command **node server.js** and verify the following:
    - The integrated terminal shows "Express http server listening on 8080"
    - The url: **http://localhost:8080** shows the text "Home" in red
    - The url: **http://localhost:8080/about** shows the text "About" in red

Step 5: Updating Views

- Now that we have verified that the server is functioning properly, we need to update our views to show something a little more like a real website:
  - **home.html**
    - Update your **home.html** file to use the HTML & CSS from the **2-column layout** from **WEB222** (located here: https://scs.senecac.on.ca/~patrick.crawford/shared/winter-2017/web222/lecture9/pt2/layout-2-column-grid.html).
    - **HINT:** right-click on the page and choose "**View Page Source"**
    - **NOTE**: Any CSS present on the HTML page (between <style> tags) must be placed into your own **views/css/style.css** file.
    - Change the <title> element to read "Home"
    - Change the links in the <nav> element from "**Seneca College**", "**ICT**" and "**Google**" to "**Home**" (url: "/") and "**About**" (url: "/about")
    - Change the top heading to read "myApp" instead of "HTML5 Structural Elements"
    - Update the left column <h3> element to read "Coming Soon" and add a short message to the user.
    - Update the right column <h2> element to read "Welcome"
    - Update the <footer> element to read **© 2017 - Student Name** (where "Student Name" is your name)
    - When completed, the page should look like:



myApp

Coming Soon

Stay tuned for new JS examples and proof-of-concept code.

Welcome

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aliquam accumsan libero a sem venenatis pharetra. Nulla facilisi. In semper blandit arcu. Nullam vitae sem convallis, vehicula nisi eu, hendrerit justo. Pellentesque libero neque, interdum nec diam bibendum, tristique pellentesque felis. Sed vel adipiscing lacus. Maecenas porta dolor a turpis aliquet, eget posuere nisi fringilla. Aenean ac turpis tristique, feugiat mi sodales, laoreet neque. Donec tristique nec quam sit amet sagittis. Mauris elementum ullamcorper risus at luctus.

Cras dui dui, suscipit ac massa et, fermentum lacinia lacus. Aliquam erat volutpat. Phasellus non tellus quis quam eleifend laoreet. Etiam luctus augue nec lectus consequat euismod. Nulla tristique augue a urna eleifend rutrum eget quis turpis. Curabitur consectetur aliquet lobortis. Donec id felis leo. Etiam ullamcorper augue justo, vitae tincidunt ipsum gravida vitae. Donec orci justo, vehicula rutrum mattis et, ornare ullamcorper mi. Mauris eget diam est.

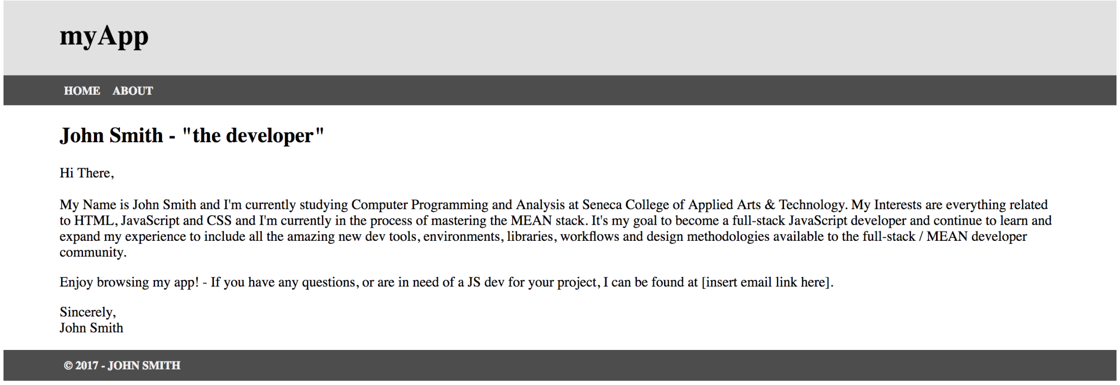
Ut non diam varius ante dictum blandit nec in tortor. Pellentesque sodales vel elit eget cursus. In condimentum consequat mauris vel bibendum. Curabitur feugiat nibh in sodales condimentum. In sit amet hendrerit massa, sed porta ipsum. Praesent consectetur consectetur sem, at aliquam ante posuere ac. Sed sit amet quam egestas eros lobortis varius. Aenean eleifend nec turpis eget faucibus. Duis pretium consequat velit, quis eleifend leo laoreet non. Quisque sit amet lobortis urna. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; In nisi nibh, convallis eu metus et, adipiscing laoreet quam.

Duis egestas cursus diam, ut volutpat tortor mattis tempor. In et imperdiet turpis. Proin aliquet, lectus ultrices fringilla lobortis, purus risus imperdiet neque, eget consectetur ligula quam non arcu. Curabitur vitae posuere elit, in faucibus felis. Suspendisse vitae nisl eget ligula condimentum bibendum in ut nulla. Etiam non lacinia turpis. Aliquam placerat est vestibulum turpis pretium elementum. Integer pharetra gravida massa, at aliquam turpis pulvinar sit amet. Nam a lectus sed mauris suscipit commodo a non ipsum. Aenean dapibus porttitor massa vitae auctor. Donec quis ultricies orci. Etiam semper, lectus vitae tristique ullamcorper, risus lectus semper nulla, quis accumsan sem leo at neque.

Nullam vulputate lectus at nisi euismod, nec consectetur lorem elementum. Vestibulum id justo metus. Etiam id lacinia nulla. Fusce aliquet convallis mauris iaculis iaculis. Suspendisse et eleifend tortor. Nunc non tincidunt lorem. Integer consectetur magna felis, vel mattis diam varius id. Morbi elementum semper purus, nec ullamcorper neque mattis in. Nulla facilisi. Vivamus mollis justo eget urna bibendum sodales.

© 2017 - JOHN SMITH

- **about.html**
  - Update your **about.html** file to use the HTML & CSS from the **1-column layout** from **WEB222** (located here: https://scs.senecac.on.ca/~patrick.crawford/shared/winter-2017/web222/lecture9/pt2/layout-1-column-grid.html).
  - **HINT:** right-click on the page and choose "**View Page Source"**
  - **NOTE**: Any CSS present on the HTML page (between <style> tags) must be placed into your own **views/css/style.css** file (this should be the same as "home.html").
  - Change the <title> element to read "About"
  - Change the links in the <nav> element from "**Seneca College**", "**ICT**" and "**Google**" to "**Home**" (url: "/") and "**About**" (url: "/about")
  - Change the top heading to read "myApp" instead of "HTML5 Structural Elements"
  - Change the <h2> element in the main column (<article> element) to read "***FirstName LastName*** - the developer" where FirstName and LastName are your first Name & Last Name
  - Update the <footer> element to read **© 2017 - Student Name** (where "Student Name" is your name)
  - Write a short blurb about yourself, ie what year you're in, what you would like to do when you have graduated, etc.
  - When completed, the page should look like:



myApp

John Smith - "the developer"

Hi There,

My Name is John Smith and I'm currently studying Computer Programming and Analysis at Seneca College of Applied Arts & Technology. My Interests are everything related to HTML, JavaScript and CSS and I'm currently in the process of mastering the MEAN stack. It's my goal to become a full-stack JavaScript developer and continue to learn and expand my experience to include all the amazing new dev tools, environments, libraries, workflows and design methodologies available to the full-stack / MEAN developer community.

Enjoy browsing my app! - If you have any questions, or are in need of a JS dev for your project, I can be found at [insert email link here].

Sincerely,
John Smith

© 2017 - JOHN SMITH

- **style.css**
  - Feel free to update **style.css** to provide additional style to the pages in your app. Black, White and Gray is boring, so why not add some cool colors and fonts (maybe something from Google Fonts)?

Step 6: Pusing to Heroku

- Once you are satisfied with your application, deploy it to Heroku:
  - Ensure that you have checked in your latest code using **git** (from within Visual Studio Code)
  - Open the integrated terminal in Visual Studio Code
  - Log in to your Heroku account using the command **heroku login**
  - Create a new app on Heroku using the command **heroku create**
  - Push your code to Heroku using the command **git push heroku master**

- **IMPORTANT NOTE:** Since we are using an "**unverified" free** account on Heroku, we are limited to only **5 apps**, so if you have been experimenting on Heroku and have created 5 apps already, you must delete one (or verify your account with a credit card). Once you have received a grade for Assignment 1, it is safe to delete this app (login to the Heroku website, click on your app and then click the **Delete app…** button under "**Settings**").

Assignment Submission:

- Add the following declaration at the top of your **server.js** file:

```
/***********************************************************************************
*  WEB322 – Assignment 02
*  I declare that this assignment is my own work in accordance with Seneca  Academic Policy.  No part
*  of this assignment has been copied manually or electronically from any other source
*  (including 3rd party web sites) or distributed to other students.
*
*  Name: ________________________ Student ID: _______________ Date: _________________
*
*  Online (Heroku) Link: _____________________________________________________________
*
**********************************************************************************/
```

- Compress (.zip) your web322-app folder and submit the .zip file to My.Seneca under **Assignments** -> **Assignment** 2

Important Note:

- **NO LATE SUBMISSIONS** for assignments. Late assignment submissions will not be accepted and will receive a **grade of zero (0)**.

- After the end (11:59PM) of the due date, the assignment submission link on My.Seneca will no longer be available.