

**Lab 9**  
**CSC 2053 - Platform Based Computing**  
**Grading: 30 points**  
**Due Date: Nov 17th, 2017**

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**Description:**

In this lab we will continue to build upon our web installation from the previous lab. You should have a basic nodejs and express installation setup already on your pi. You will begin to add content to using express routing, bootstrap navigation, and CSS.

**Part 1** - Choose what kind of website you will be making. It could be your personal website, a product or company website, blog, or social media knock-off. Be creative! Connect to your Raspberry Pi using SSH. You can use the command,

```
ssh -l pi youripaddress
```

Recall you can start the webserver using the following command,

```
npm start
```

You can check and see if it is working by navigating on your laptop browser to the web address

```
http://youripaddress:3000
```

You should be able to see your express website. At any point if you want to stop your express webserver, go to your pi terminal and type Ctrl-C.

**Part 2** - Add font awesome to your website. Use the font awesome CDN (do a search for the URL). Include it as you did the bootstrap CSS.

**Part 3** - Add a navigation bar to your layout.jade.

See <https://getbootstrap.com/docs/4.0/components/navbar/> for the reference. Here is the basic template that I used in class.

```
<nav class="navbar navbar-expand-lg navbar-light bg-light">
  <a class="navbar-brand" href="#">Navbar</a>
  <button class="navbar-toggler" type="button" data-toggle="collapse"
    data-target="#navbarNav" aria-controls="navbarNav" aria-expanded="false"
    aria-label="Toggle navigation">
    <span class="navbar-toggler-icon"></span>
  </button>
  <div class="collapse navbar-collapse" id="navbarNav">
    <ul class="navbar-nav">
      <li class="nav-item active">
        <a class="nav-link" href="#">Home </a>
      </li>
      <li class="nav-item">
        <a class="nav-link" href="#">Features</a>
      </li>
    </ul>
  </div>
</nav>
```

```
<li class="nav-item">
  <a class="nav-link" href="#">Pricing</a>
</li>
<li class="nav-item">
  <a class="nav-link disabled" href="#">Disabled</a>
</li>
</ul>
</div>
</nav>
```

Your navigation bar must include a **Brand** (icon optional) and **at least 3 menu items**.

**Part 4** - Add routing to the index.js. Ensure that you are able to navigate to different pages using the navigation bar i.e. your href's actually take to you different pages. Make sure that you modify the content of each page either through jade variables, or by creating new views.

**Part 5** - Download and add a high resolution image as a background element to your page. I suggest searching on the Pexel's website. You may add the background to the body CSS element for now, but eventually we will be creating sections in your website with different background elements.

**Part 6** - Add social media icons to your website using font-awesome. Have them align to the right. You can use a regular p tag with a "text-right" class to achieve this.

**Deliverables:** Upload 3 screenshots of your website (include the web URL in the screenshot) of the 3 different pages of your website