

## CAS CS412 PS2: Simple Node App

You have enough tools now to create a simple back-end server. In this assignment you'll do just that, and post your project to your GitHub repo. We haven't gone over all of the moving parts in class yet, so you'll need to do a little research on your own. If you get stuck, post a note on Piazza.

### Requirements

1. Build a Node/Express application. The app must have:
  - a. An instance of `express.Router` in a separate route file that is mounted on the path `/ps3` (i.e. `app.use('/ps3', ...)`). If you are using `express-generator` or `Webstorm` to set up an empty project, you'll find example routes in the `/routes` folder. Probably the easiest approach is to modify one of those files, just be sure to mount it in a different spot.
  - b. A route using the GET method that returns a fixed string, which can be anything that you like. The response should be a JSON object with one key/value pair, such as `{string: 'Hey now'}`, passed into a Pug template for rendering. Your Pug page design is up to you, I would suggest keeping it really simple. Use the same template for all three problems -- Pug provides conditional statements to hide/show values.
  - c. A route using the POST method that returns a similar response as b. above but gets its parameter from the request body rather than the URL string. (To test this from Postman, select POST as the method, then click the Body tab. Your input parameter should be an `x-www-form-urlencoded` string.) The response should be a JSON object with two key/value pairs, one for the original string and the second for the length. Pass the object into a Pug template for rendering.

- d. A route using the GET method that reads its input parameter as a named value on the URL, for example `http://localhost:3000/names/Bob`, where Bob is the param. Grab the param and pass it in a JSON object to Pug for rendering (you should be able to use the same template as in c.).

2. To submit your assignment, drag-and-drop the following files from your project into Gradescope:

- `app.js`
- your Pug template(s)
- the route file holding your routes (`ps3.js`)