

## Lab 4

### Introduction

This lab will have you do a very basic Node JS Express Web Application.

### Objective

Use the Node JS web framework express to build a simple web application. This web application will only need to be the Read component of a CRUD application.

### Requirements

- All HTML tags and page structure should be **HTML5** compliant
- Use the express-generator node package (and express command) as demonstrated to generate your project. Your project should be named "youruserid\_lab4".
- Create a new route file that holds the routes for your application.
- Data for your application is up to you but each object should have at least 4 properties plus id. For example, if you choose a car maybe you have id, color, doors, price, tires. Just hard code your data in your routes file like we did in the beginning of the class demo. You should have at least 4 entries in your dummy data.
- Do not use the contacts data example I demoed in class. Choose a different data object to model.
- You need to define two REST routes at a minimum. If you chose cars they would probably be:
  - /cars to show list of all car objects
  - /cars/1 to show the details of one specific id of a car
- Create the proper Jade templates to display both the list of all objects and the specific object display in a nicely styled and formatted way with css. I expect css to be applied.
- You may use bootstrap css if you like. Either link to the cdn or download the css files to the public stylesheets folder and link there.
- Make sure you add a link to your route for your object list to the main index homepage route so when we run the add and visit localhost:3000 we see the default index page with a button that takes us to your list route page.

### Graduate Additional Requirements

If you are involved in **any section of 562** you need to complete the additional requirements listed here.

Also produce two additional routes in a separate route file for an api that returns JSON data. So you need one route that returns all the objects as a JSON array and one route that returns the individual JSON object that aligns with the id passed in the url.

Your api routes should be the same as your main data routes above just prefixed with api/

So if you were using cars:

/api/cars

/api/cars/1

### README File

Not Required for this Lab

### Due Date / Late Policy

This assignment is due **Wednesday April 13, 2016 11:59 PM Chicago Time**. See syllabus for full late policy. **No Extensions**.

### Submission Guidelines

You must upload your submission, to the blackboard assignment by the due date. The submission must be in the following format and structure. If you do not submit your assignment exactly as specified, you will receive an immediate 5% deduction.

#### *Submission Format Specification:*

**Zip your project folder and submit it to the blackboard assignment. Remember the project folder that the express generator created, and the project name in the package.json file, should be youruserid\_lab4.**