## Full Stack IV - Express Generator

- Express Generator + Router

## Developer Note:

Create a new project structure and run install express-generator

## Exercise #1 – Express Generator

1. Create a folder named Lab 7
2. Open a command prompt create a directory for **exercise-1**
3. Open Visual Studio Code and open the folder **exercise-1**
4. Run the following to install the express application generator

```
npm install express-generator -g
```

5. The following creates an Express app named ***myapp***. The app will be created in a folder named ***myapp*** in the current working directory and the view engine will be set to Pug

```
express --view=pug myapp
```

The result will be the following file skeleton application structure being created in ***myapp***.

```
create : myapp\
create : myapp\public\
create : myapp\public\javascripts\
create : myapp\public\images\
create : myapp\public\stylesheets\
create : myapp\public\stylesheets\style.css
create : myapp\routes\
create : myapp\routes\index.js
create : myapp\routes\users.js
create : myapp\views\
create : myapp\views\error.pug
create : myapp\views\index.pug
create : myapp\views\layout.pug
create : myapp\app.js
create : myapp\package.json
create : myapp\bin\
create : myapp\bin\www
```

6. Change directory to the ***myapp*** and then install the application dependencies

```
change directory:
  > cd myapp

install dependencies:
  > npm install
```

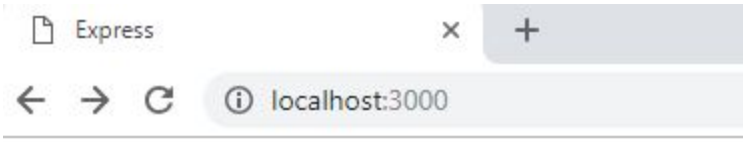
7. Navigate to the ***package.json*** file and review the following scripts section. A CLI ***start script command*** has been generated so that node will execute a file from the bin/www folder. https://docs.npmjs.com/cli/run-script

```
"scripts": {
  "start": "node ./bin/www"
},
```

8. Run the npm start CLI command to start the web server on port 3000

```
npm start
```

9. Navigate the browser to the following URL and view the response from node.




# Express

Welcome to Express

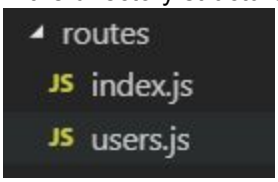
## Exercise #2 – Routes + Body Parser

1. In the same ***exercise-1*** directory, stop the running node application and install the following body-parser middleware.

   https://www.npmjs.com/package/body-parser

```
npm install body-parser --save
```

2. In the directory structure navigate to the router folder.

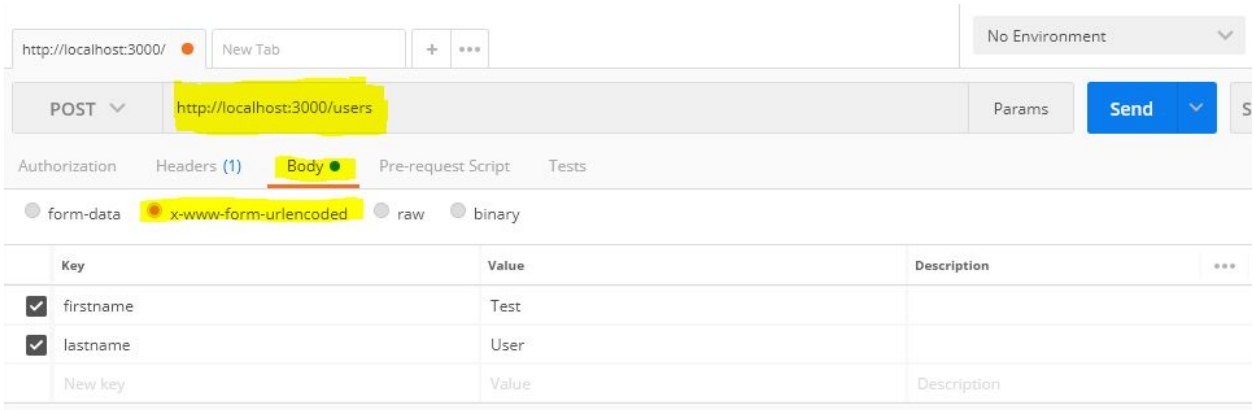



3. In the ***user.js file*** add the following code to include the ***body-parser*** middleware and set up the router to use the body-parser. Modify the code to reflect the following:

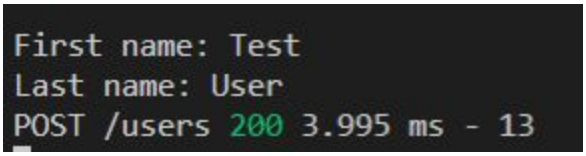
```
var express = require('express');
var bodyParser = require('body-parser')

var router = express.Router();

router.use(bodyParser.urlencoded({ extended: true }));
```

4. Remember to stop the running application and then rebuild the application with ***node app.js*** and then run the application with ***npm start***

5. Using POST API Testing Tool build some post parameters and the following POST URL




6. Write a route in the ***user.js*** that handles the POST submission and uses ***body-parser*** middleware to pull the request parameters from the form and display them in the console log.




The response sent to client ie. POSTMAN from the user route should be the following ‘POST received!’ message: