

## Creative Project Assignment 5

### Objectives:

- Building web server with Express.js
- Handling requests and responses
- Better and easier routing
- Serving external files and assets
- Using templates and layouts

### Task:

Use your CPA4 assignment and convert it to an Express.js based server application to respond the requests according to the requesting URL.

### Requirements:

- Your Express.js project name should be Brandeis\_SAA\_Express
- The project should be initialized with a short description of your project, your FirstName<space>LastName as author, and index.js as the main application file.
- Your project directory structure should follow the Model-View-Controller (MVC) architecture and all the external files and assets should be placed in the public folder.
- Your server should listen to incoming requests either on port 8080 or any port number assigned to the environment variable PORT during a shell session.
- Your server should be able to respond to different requests differently. For example, if a user visit your application by typing `http://localhost:8080/contact.html`, the response should be a contact HTML page and should be different from response to `http://localhost:8080/index.html` which is the home page.
- Your server should be able to respond differently to clicks on different navigation options. For example, clicking on Events should take the user to Events page and clicking on Jobs should take users to the Jobs page.
- Your application should use ejs templates and express-ejs-layouts for the views

### Front-end:

- Use your CPA3 as the front-end interface.
- Create a common header, navigation bar, and footer using **layout.ejs**. Use your CPA4 index.html's header, navigation bar and footer.
- Create all the views for options available in your layout navigation bar (e.g. index.ejs). All the views should use the layout.ejs which makes you able to use the same header, navigation bar, and footer for all of your views and only change the content of the main section.
- The content of your views should be distinct and same as your CPA4 but try to use templaing engine "ejs" to send them dynamically from within homeController.js file where applicable.
- Link all the views throuhg navigation bar's <a> tag in layout.ejs to be able to navigate to different views if clicked.

## Back-end:

- Create an instance of express application in **index.js** as the core application file.
- Write all the routes in index.js file and handle them in a separate controller module called **homeController.js** which resides in the **controllers** folder.
- Handle the NOT\_FOUND and INTERNAL\_SERVER\_ERROR errors inside **errorController.js** module. You can add extra views to the views folder if you want to render an error view instead of an error message.
- Serve all your static assets (e.g. style.css file) using express's static method

## Assignment will be graded based on:

- Internal Correctness: The assignment should meet all the requirements.

## Assignment submission guideline:

1. Your project name is Brandeis\_SAA\_Express
2. Submit it via Latte in a zip folder named yourFirstname\_yourLastname\_CPA5.zip

## Submission deadline:

Please make sure to submit your assignment before 10/28/2023 11:59 PM