

Introduction

This assignment is the second of six assignments. It has been designed to give you practical experience creating and working with JavaScript modules and creating EJS views.

Before you begin this assignment, you must finish your previous assignment. All objectives listed for this assignment are to be made “on top” of your previous assignment.

This assignment is worth 9% of your final grade.

Note: Database connectivity is **not** required for this assignment, and you do not need to implement the MVC design pattern.

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This assignment must be worked on individually and you must submit your own work. You are responsible to ensure that your solution, or any part of it, is not duplicated by another student. If you choose to push your source code to a source control repository, such as GIT, ensure that you have made that repository private.

A suspected violation will be filed with the Academic Integrity Committee and may result in a grade of zero on this assignment or a failing grade in this course.

Technical Requirements

- All **back-end** functionality **must** be implemented using only **Node.js**, **express**, and **express-ejs-layouts**. Other frameworks/packages are not allowed for this assignment.
- Your views **must** be created with **EJS**.
- You **can use** a front-end CSS framework such as Tailwind CSS, daisyUI, or Bootstrap to make your website responsive and aesthetically pleasing.
- You are **not allowed** to use any Front-End JavaScript Frameworks. For example, you may not use React, Vue, or Angular.

Objectives

Data Module

In this assignment, you are not reading data from a database. Instead, you will create **one** back-end node.js module file to encapsulate the static (*“fake”*) data for both the “Featured Rentals” section on the home page and the rentals shown on the “Rentals” page. For now, this module is going to represent the model for your MVC application but in the future, it will be deprecated. Place the file in a “models” folder and call it “rentals-db.js”.

Your module, when complete, will:

- Contain a local variable called **rentals** to store an Array of rental objects.
Note: You may only use a single variable to store the rentals. This variable is a local variable and therefore it should not be exported. You will need to include at minimum six rentals: four in one city and two in another.
- Export a function called **getFeaturedRentals()** that will return a single array of rentals where the rental has been flagged as “featured”. This function is used on the home page to display the featured rentals.
- Export a function called **getRentalsByCityAndProvince()**, used by the “rentals” page, that will return a single array of rentals grouped by the city and province. More information about this function is available on the next page.

Each rental object will require at minimum the following JS properties. You must use the property name and data type provided.

- **headline** (String) – *Cozy Lakefront Log Cabin*
- **numSleeps** (Number) – *2*
- **numBedrooms** (Number) – *1*
- **numBathrooms** (Numbers) – *1*
- **pricePerNight** (Number) – *125.99*
- **city** (String) – *Scugog*
- **province** (String) – *Ontario*
- **imageUrl** (String) – *For now, point to an image placed in your assets folder.*
- **featuredRental** (Boolean) – *true*

Notes regarding the **getRentalsByCityAndProvince()** function.

- Do not hardcode or limit the number of cities that will be returned.
- All logic must be written into a single function using vanilla JS. There is no need to have supporting local functions.
- It is possible that cities in different provinces may have the same name. Use the city and province when grouping the rental properties.
- You may use ES6 JavaScript features to help but this is not mandatory.
- The array returned should look similar to this:

```
[ {
  "cityProvince": "Scugog, Ontario",
  "rentals": [
    { headline: "Rental 1", city: "Scugog", province: "Ontario", ... "featuredRental": true },
    { headline: "Rental 2", city: "Scugog", province: "Ontario", ... "featuredRental": false }
  ]
},
{
  "cityProvince": "Toronto, Ontario",
  "rentals": [
    { headline: "Rental 3", city: "Toronto", province: "Ontario", ... "featuredRental": false },
    { headline: "Rental 4", city: "Toronto", province: "Ontario", ... "featuredRental": true },
  ]
}
]
```

EJS Implementation

In the previous assignment, you created a home page containing several components, for example, a header, navbar, hero, content sections, and a footer. You will move some of these components into reusable EJS partial view files.

Create only the following partial views and refrain from adding additional ones.

- **navbar.ejs** – contains the html used to construct the header and navigation bar.
- **footer.ejs** – contains the html used to construct the footer area.
- **rental.ejs** – contains the html used to construct a single rental card.

The remaining components, such as the hero and content sections will not be moved into partial views.

Create a default layout view called **main.ejs**. The layout will contain markup that is shared across all pages of your website. This view will render the partial views for the header and footer. The layout should not include the hero image, content sections, or the rental partial view file.

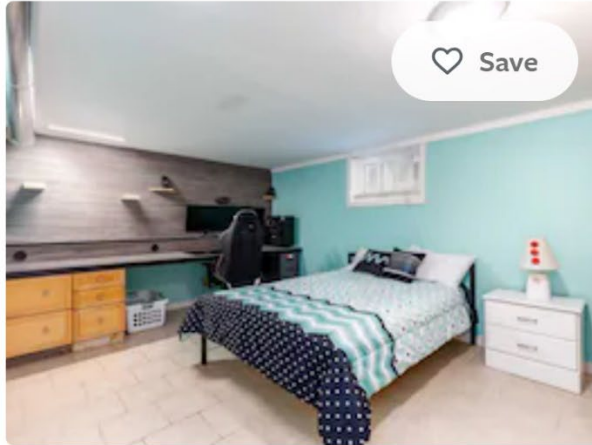
Create the following EJS view files for the routes defined in the previous assignment. *Make sure these pages use the default layout view. Anytime a rental is displayed, ensure you are using the “rental” partial view from above. Do not change the URL for any of the routes, simply use `res.render()` to display the correct view file. Remember that you are not implementing controllers, so place all your views in the “views” folder and partial views in the “partials” folder. Delete the `index.html` file from the previous assignment once you have created the views.*

- **home.ejs** – Home page, contains the hero, content sections, and featured rentals.
- **rentals.ejs** – Rentals page, displays rentals grouped by city and province.
- **sign-up.ejs** – A customer registration page to allow new users to create an account.
- **log-in.ejs** – A login page to allow existing users to access their account.

[Rentals Page](#)

You are required to build a well-designed listing page.

Scugog, Ontario

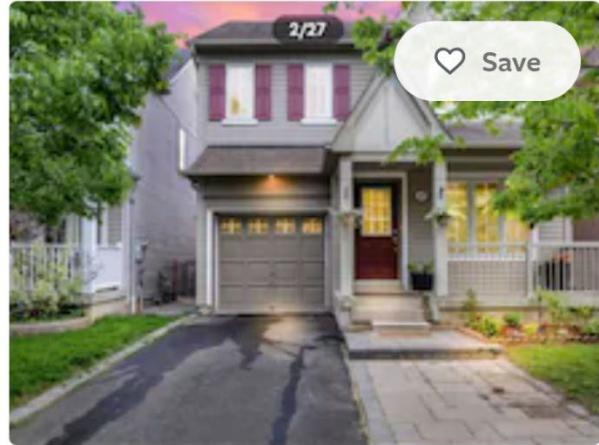


♡ Save

Cozy Basement

Sleeps 3 · 1 BR · 1 BA

C\$80 avg/night

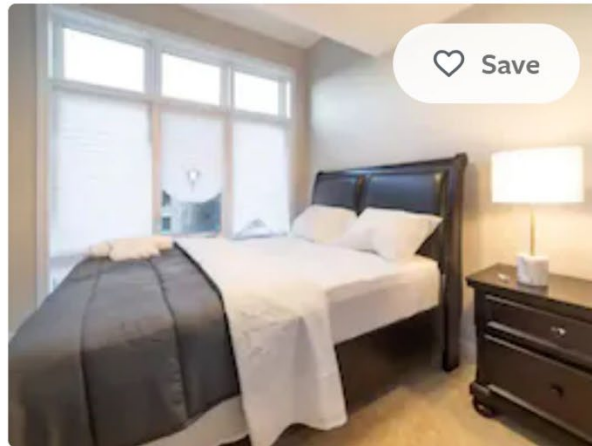


♡ Save

Purple Surprise

Sleeps 8 · 4 BR · 2 BA

C\$185 avg/night

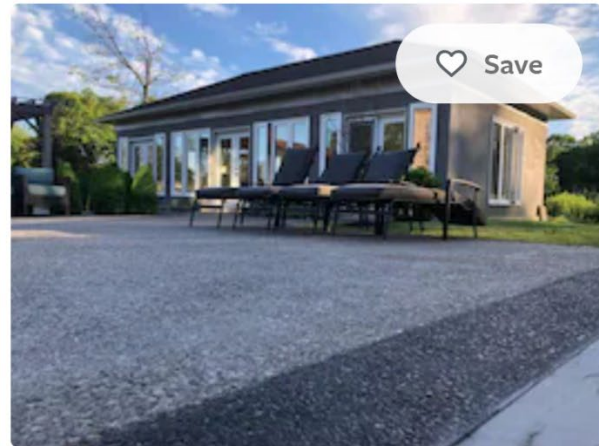


♡ Save

King Size Ensuite

Sleeps 8 · 4 BR · 3 BA

C\$185 avg/night



♡ Save

Modern and Bright Escape

Sleeps 20 · 6 BR · 5 BA

C\$80 avg/night

The rental properties are organized in a grid with two columns. The third rental property will wrap to the next row.

You will notice the rentals in the above screen shot are categorized in a section titled “Scugog, Ontario”. This title is read from the “cityProvince” property. If you have created your data module correctly, the

data you are working with is already grouped for you. Use two `{{each}}` iterators (one embedded in the other) to render the page. To demonstrate this functionality works correctly, you must ensure that the rentals view displays **at least two sections**. At least one section should show four rentals.

Every rental card will display in a similar fashion as the home page (featured rentals). Furthermore, like the “Featured Rentals” section on the home page, the data for this section will not be pulled from a database, however, you are required to define the data in a separate back-end node.js module.

This view must include the header, navigation bar, and footer. Don’t forget, the html for the rental cards are contained in a partial view and included on this page.

Registration Page

You are required to build a well-designed user registration form as shown below. You must ensure that the page maintains consistency. The view must include the header, navigation bar and footer. Do not include the hero or content section(s) on this page.

Do not implement form submission, client-side validation, or server-side validation.

Sign Up

Create your account by entering your email address and choosing a password

First Name

Last Name

Email Address

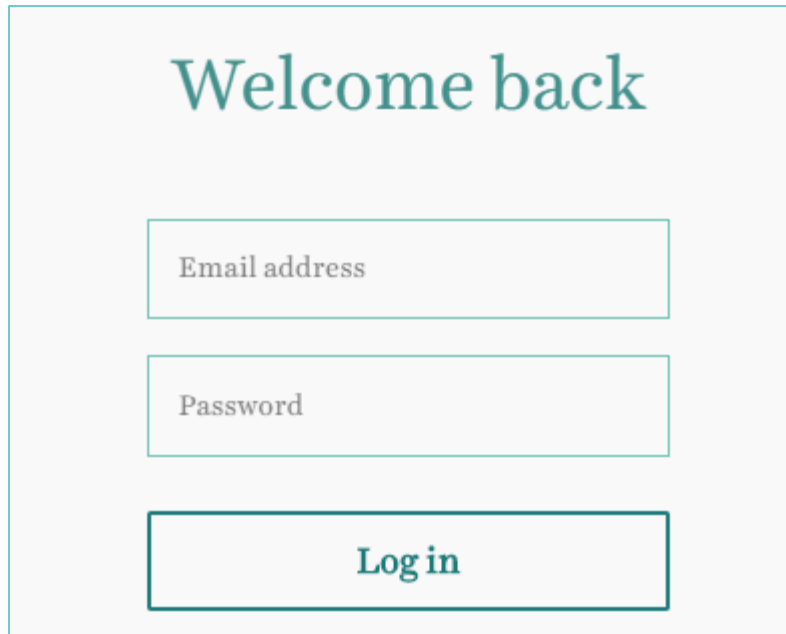
Password

Sign up today

Login Page

You are required to build a well-designed user login form as shown below. You must ensure that the page maintains consistency. The view must include the header, navigation bar and footer. Do not include the hero or content section(s) on this page.

Do not implement form submission, client-side validation, or server-side validation.



Welcome back

Email address

Password

Log in

Responsive Design

Ensure that your entire website renders well on a variety of devices, specifically on desktops, tablets, and smartphones. To accomplish this, you will need to use CSS Media Queries in combination with a modern CSS Layout Module (CSS Grids, or Flexbox, or both). You may optionally use Tailwind CSS, daisyUI, or Bootstrap in this assignment. Also ensure that all pages of your site follow the same branding outlined in your original home page. This means that all pages should use consistent colours, fonts, and styles.

Reminder

All back-end functionality **must** be done using **Node.js**, **express** and **express-ejs-layouts**. Your views **must** be created with **EJS**. You will have three partial views and four view pages. All pages must operate responsively, in other words, must function well on all browser sizes.

Rubric

Criteria	Not Implemented (0)	Partially Implemented (1)	Fully Implemented (2)
<p>Little or no work done. Unacceptable attempt.</p>	<p>Work is minimally acceptable but is incomplete or needs significant modification.</p>	<p>Work is complete and done perfectly.</p>	
<p>Data Module</p> <ul style="list-style-type: none"> Contained in a separate Node.JS module named "models/rentals-db.js". Includes only one private/local variable, no private/local functions, and two public/exported functions. Contains a local variable that stores an array of six rental properties across two "city and provinces". Array only contains rental objects as described in the specifications. Contains the <code>getFeaturedRentals()</code> function coded as specified. Contains the <code>getRentalsByCityAndProvince()</code> function coded as specified. 			

<p>Partial Views</p> <ul style="list-style-type: none">• Header with nav bar as specified. Named navbar.ejs.• Footer as specified. Named footer.ejs.• Rental “card” as specified, includes all required fields. Named rental.ejs.			
<p>Views</p> <ul style="list-style-type: none">• Main layout view as specified. All views use the layout file. Named main.hbs• Registration form as specified. Named sign-up.ejs.• Login form as specified. Named log-in.ejs.			
<p>Home Page</p> <ul style="list-style-type: none">• Converted to a view with the necessary partial views included. As specified. Named home.ejs.• “Featured rentals” data is dynamic and passed into the view.			
<p>Rentals Page</p> <ul style="list-style-type: none">• Rentals broken by city and province. Named rentals.ejs.• Rentals are displayed in a two-column grid.			

<ul style="list-style-type: none"> Rental data is dynamic and passed into the view as specified. 			
Responsive Design <ul style="list-style-type: none"> Overall site looks polished on all devices, specifically on smartphones, tablets, and large screens. 	Poor (1)	Average (3)	Exceeds (6)

Total: 36 Marks

Note: Half marks may be awarded.

Deductions	No Deduction (0)	Partial Deduction (1)	Full Deduction (2)
A front-end CSS or JavaScript framework was used. Only Tailwind CSS, daisyUI, or Bootstrap are allowed.	No	Exactly one	More than one
An unapproved NPM package was installed.	No	Exactly one	More than one
Something other than EJS was used to build view files.	Assignment will not be graded.		
Additional deductions may occur if the requirements outlined in this document are not followed precisely.			

Submitting your work

Make sure you submit your assignment before the due date and time. It will take a few minutes to package up your project so make sure you give yourself a bit of time to submit the assignment.

1. Locate the folder that holds your solution files. **It is recommended that you delete the node_modules folder but do not delete any other files or folders.**
2. Compress the copied folder into a zip file. **You must use ZIP compression, do not use 7z, RAR, or other compression algorithms or your assignment will not be marked.**
3. Login to My.Seneca, open the **Web Programming Tools and Frameworks** course area, then click the **Project** link on the left-side navigator. Follow the link for this assignment.
4. Submit/upload your zip file. The page will accept unlimited submissions so you may re-upload the project if you need to make changes. Make sure you make all your changes before the due date. Only the latest submission will be marked.