Introduction

Vrbo (https://www.vrbo.com/) is a popular online vacation rental site where property owners can list their homes for rent and travelers can book them. You have been contracted as a full-stack programmer to develop your version, a competing product, of the Vrbo website. Of course, your version will not be nearly as feature rich, but it will be a great showpiece for your CV.

<u>You must not name your website Vrbo</u> but must instead come up with your own name and brand. Also, your website <u>cannot</u> look the same as the Vrbo website however you can use the website (or similar property rental websites) to inspire the look and feel for your implementation.

The implementation of the website will be spanned over six assignments. In this assignment, you will focus on building an Express server and the home page for your web application. There is no database connectivity required at this time.

This assignment is worth 5% of your final grade.

Reminder about academic integrity

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These prohibitions remain in effect both during a student's enrollment at the college as well as withdrawal or graduation from Seneca.

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 <u>back-end</u> functionality <u>must</u> be implemented using only **Node.js** and **Express**, other frameworks/packages are not allowed for this assignment.
- You are **not allowed to use** any front-end CSS frameworks or JavaScript frameworks.

Objectives

Express web server set-up

Create an Express web server that listens to incoming HTTP requests <u>on port 8080</u>. The logic for your web server must be placed in a file called "server.js". The file must include the code snippet provided on Blackboard.

Remember to fill in your name, student ID, and the course code (including the section code) in the header. Failure to do so will result in a mark of zero.

Implement Route Handlers

Create <u>route handlers</u> that will direct users to specific pages when they navigate to the following routes. Each route must be located at the URL specified.

- The "home" page "/"
- A "rentals" page showing all listings "/rentals"
- A registration page used to sign up to the service "/sign-up"
- A login page used by the user to log in (after a user has signed up) "log-in"

The "Home" Page

You are required to build a well-designed home page that consists of the following sections:

Navigation Bar/Header:

- The navigation bar <u>must</u> contain a logo for your website. The logo <u>must be an image file</u> and should be implemented using an tag. Make sure that clicking the logo links the user to the home page (/). Don't forget, all tags should include an "alt" attribute.
- The navigation bar <u>must</u> contain links that navigate visitors to the rentals page, a sign-up page, and the login page. Users can navigate to the home page by clicking the logo (but you can add a "home" link as well).



 A Hero: This section <u>must</u> have a prominent image or video element that is placed at the top of your page, below the navigation bar. Ideally, any text will be coded with HTML and not "hardcoded" into the image or video file. This will make it easier to build a responsive website. Here is an example:



One or More Content Section(s): These sections must use a combination of grids, words, headings, and images with the sole purpose of highlighting some selling features of the website, how it will work, and/or the services that it will provide. Here is an example:



Peace of mind

Our Book with Confidence guarantee gives you 24/7 support



More quality time

From booking to staying, the whole process is simple and enjoyable



All the privacy of home

Enjoy full kitchens, laundry, pools, yards and more



More for less

More space, more privacy, more amenities - more value

Featured Rentals: This section must display three (3) rental properties in a row. In this assignment, the data for this section will not be pulled from a database, instead it will be hardcoded in the HTML file. Each property must display an image, headline, number of people the property sleeps, number of bedrooms, number of bathrooms, and a price per night. Here is an example, you don't need "Save" functionality:

Featured Rentals





Sleeps 4 · 2 BR · 1 BA \$125/night Sleeps 2 · 1 BR · 1 BA \$175/night Sleeps 2 · 1 BR · 1 BA \$225/night



Old Town Historic District... Port Weller West, St. Cath... Sutton, Georgina, Ontario,...

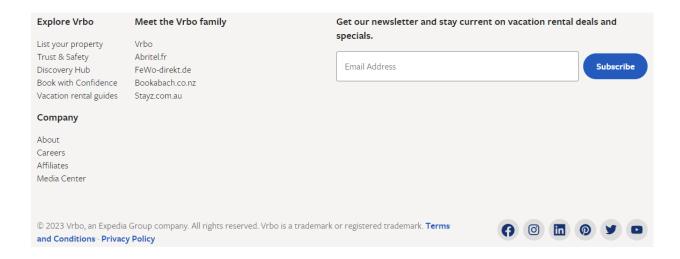
Footer: This section must include menu items, social media links, and any other information you deem necessary. It must also contain the entire copyright statement exactly as shown here:

By submitting this assignment I declare that this assignment is my own work in accordance with the Seneca Academic Policy. No part of this assignment has been copied manually or electronically from any other source (including web sites) or distributed to other students.

© StudentFirstName StudentLastName, StudentEmail@myseneca.ca, WEB322 Winter 2023

Be sure to include your first and last name. For example, your professor would show the following copyright statement:

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Rentals, Registration, and Login Pages

You do not need to implement these pages for this assignment, but you must create and configure the appropriate routes. Simply, <u>return a string with the page name</u> using res.send(). Going forward, your site should never contain "dead" links or routes.

Reminder

All back-end functionality <u>must</u> be implemented using **Node.js** and **Express** and your pages <u>must</u> be created by using only vanilla HTML, CSS and JavaScript.

Rubric

Criteria	Not Implemented (0) Little or no work done. Unacceptable attempt.	Partially Implemented (1) Work is minimally acceptable but is incomplete or needs significant modification.	Fully Implemented (2) Work is complete and done perfectly.
 Navigation bar contains a custom logo image that is clickable and navigates the user to the home page. Navigation bar contains links to the rentals, registration, and login pages. Hero section meets minimum requirements. Text is not "hard-coded". One or more content sections that meet the minimum requirements and properly use grids. Featured rentals section that meets the minimum requirements and properly uses grids. Footer contains menu links, social media links, the academic policy disclaimer, and the copyright message. 			

Project initialization and Express web server configuration. "npm init" was correctly run. All fields, including the author, description, and keywords, were provided and entered correctly. The file "server.js" was built from the code snippet provided on Blackboard. The header at the top has been filled in correctly. The bottom portion of the file is unaltered. All routes have been set up with the correct URL. The rentals, login, and registration routes return a string using res.send(). A static folder was correctly configured to delivery assets. The HTML for the home page is contained in an HTML file within the "views" folder and returned using res.sendFile(). Home page look and feel. Page is polished (for example, there are no broken links, and all images display correctly). Used pleasing typography, color palettes, and imagery.

Full **Deductions** No **Partial** Deduction (0) Deduction (1) Deduction (2) A front-end CSS or JavaScript No Exactly one More than one framework was used. An unapproved NPM package was No Exactly one More than one installed. Additional deductions may occur if the requirements outlined in this document are not followed precisely.

Total: 24 Marks

Note: Half marks may be awarded.

Submitting your work

Make sure you submit your assignment <u>before the due date and time</u>. 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, <u>do not use 7z, RAR</u>, <u>or other compression algorithms or your assignment will not be marked</u>.
- 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 <u>unlimited</u> 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.