

Course : (WEB322) -Web Programming Tools and Frameworks	Assignment 1 and 2 of 5	Contribution:20% of course
Prof : Sharmin Ahmed	Date Given: September 26th 2020	Date Due: October 31st 2020

Notes for the Student: This Assignment is one of six that is designed to give you practical experience in building Server-Side Web applications using Node.js and Express.

Background: You will need to have access to an IDE or good text editor. You will also need a thorough understanding of HTML5, CSS3, Vanilla JavaScript, Node JS, Express and Heroku.

Assignment Submission Requirements

- An electronic copy of your work (both the web application and a written report) should be uploaded to the Blackboard by midnight on the deadline date.
- **Submit the link of your hosted Heroku project in Blackboard.**
- The written report must be in pdf format and must contain the following :-
 - A cover page.
 - A table of contents.
 - Screenshots of your website, with relevant descriptions, detailing whether the functionality was met or not met, as specified below.

Assignment Regulations

- **This assignment must be done individually.**
- **Please review Seneca's policies on Academic Integrity, specifically:**

"Each student should be aware of the College's policy regarding Cheating and Plagiarism. Seneca's Academic Policy will be strictly enforced. To support academic honesty at Seneca College, all work submitted by students may be reviewed for authenticity and originality, utilizing software tools and third party services. Please visit the Academic Honesty site on <http://library.senecacollege.ca> for further information regarding cheating and plagiarism policies and procedures.

.” Thus, ensure that your code or any part of it is not duplicated by another student(s). This will result in a percentage of zero (0%) assigned to all parties involved.

Technical Requirements

- All back-end functionality **MUST** be done using **Node JS and Express**.
- You are required to deploy the working web application to Heroku.

Detailed App Specification

AirB&B is a travel website that allows people to book rooms around the world. You have been contracted as a Full Stack developer to emulate the AirB&B website.

The implementation of the entire functionality for the website will be spanned over 6 Assignments.

In this assignment, you will **ONLY** focus on building the views for your website/web application. **No database connectivity is required for this Assignment.**

REMINDER:

All back-end functionality **MUST** be done using **Node JS and Express**.

Specifically, you are **ONLY** required to implement the following :

Features

[Express Web Server Set up](#)

[Set up of Routes and implementation of route handlers](#)

[Creation of the following views :](#)

- [Home Page](#)
- [Room Listing Page](#)
- [Registration Page](#)

Express web server set up

Create an Express web server that listens to incoming HTTP requests.

Route Handlers Implementation

Ensure that you create route handlers that will direct users to specific views when they navigate to the following routes:

- Home
- Room Listing
- User Registration

Home Page

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

- **Header** - The header **MUST** contain the logo of your AirB&B website and could contain the navigation bar and any other content you deem necessary.
- **A Navigation bar** - The navigation bar can be within the header or defined as an entirely new area. It **MUST** have links that navigate visitors to a sign up page.
- **A booking search form**- The form can be placed anywhere you deem aesthetically pleasing, the top area of the web page may be the most favourable. The form should be designed similarly to the **Figure 1.1** and should capture the following data from the user :
 - City in Canada where the user wants to book a room. This should be a drop down list of at least four (4) cities/provinces in Canada
 - Check-in Date
 - Check-out Date
 - No of guests

Figure 1.1

Book unique places to stay and things to do.

WHERE
Anywhere

CHECK-IN CHECKOUT
Thu, 19th Sep Sat, 21st Sep

GUESTS
1 guest

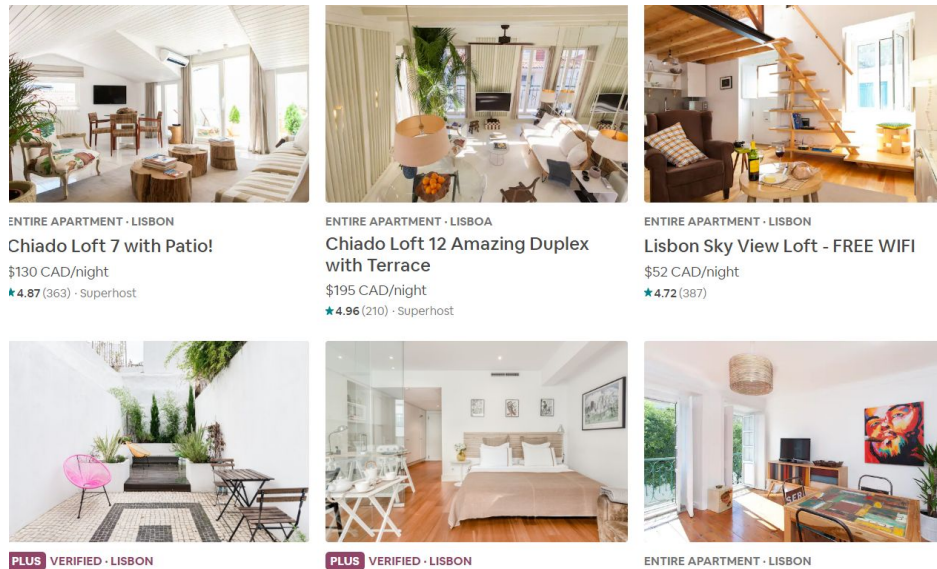
Search

- **Promotional Section** - This section should present a banner depicting a promotion for your website .
- **Informational Section**- For this section you **must** provide content, images and a video explaining why “**AirB&B**” is to the visitors/customers.
- **Footer** - This section must include footer menu items, social media links, and any other information you deem necessary.

Room Listing page

You are required to build a **well designed** room listing page that lists **6 sample rooms in a 3 X 2 grid**, as shown in the below Figure 1.2 :

Figure 1.2



Note, every room must have an image, title, and price rate per night. This view must also have a header, navigation and footer like the home page.

Registration Page

You are required to build a **well designed** user registration form as shown in **Figure1.3** . Please ensure that the page maintains consistency regarding its structure, header, nav, footer, etc as the home page.

Figure 1.3

Sign up with Facebook or Google

or

Email address

First name

Last name

Create a Password

Birthday

To sign up, you need to be at least 18. Other people who use Airbnb won't see your birthday.

Month Day Year

We'll send you marketing promotions, special offers, inspiration, and policy updates via email.

Sign up

Login Form

You must add a login form to your website. The login form must contain fields that will allow a user to enter their username and password. You can choose how you want this to be rendered and implemented on your website.

Server Side Validation

You are required to implement **Server-Side validation** for both the login and registration form.

For the login form, you are required to **ONLY** check for nulls (i.e, check to see if the user entered a value in the respective text fields). However, for the registration form, **you have to check for nulls AND implement at least 2 complex validation criteria using regular expressions**(For example, enforcing that the user must enter a password that is 6 to 12 characters and the password must have letters and numbers only) .

All error messages must be rendered on their respective pages or areas and must be styled properly.

User Registration Form (Sending Emails)

When a user fills out the registration form and then hits the submit button, provided that all the validation criteria were not violated, your website must then **redirect the user to a dashboard page**. For now, the dashboard page should contain information welcoming the user and should be properly styled.

REMINDER:

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