WEB322 – Web Programming Tools and Frameworks

Professor: George Kougioumtzoglou

Assignment 1 of 5

Total Weight: 10%

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 HTML 5, CSS3, Vanilla JavaScript, Node JS, Express and the Handlebars templating engine.

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.
- This Assignment WILL NOT BE ACCEPTED VIA EMAIL.
- 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.
- Your views MUST be created with Express-Handlebars

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 5 Assignments.

In this assignment, you will **ONLY** focus on building the views for your website/web application. **No database connectivity is required for Assignment 1.**

REMINDER:

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

Your views **MUST** be created with **Express-Handlebars**

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 Airbnb's 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. Please note, instead of creating a separate page for the sign up page, you can render it as modal pop-up boxes. Check: https://www.airbnb.ca/ for example and inspiration.
- 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 favorable. 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	СНЕСКОИТ
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 "**Airbnb**" 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



ENTIRE APARTMENT · LISBON

Chiado Loft 7 with Patio!

\$130 CAD/night

\$4.87 (363) · Superhost



ENTIRE APARTMENT · LISBOA
Chiado Loft 12 Amazing Duplex
with Terrace
\$195 CAD/night



ENTIRE APARTMENT - LISBON
Lisbon Sky View Loft - FREE WIFI
\$52 CAD/night
\$4.72 (387)





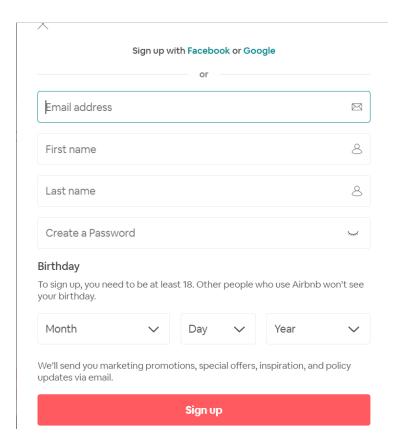


Note, every room must have an image, title, and price rate per night. This view must also have a header, navigation and footer like the home page.

Registration Page

You are required to build a **well-designed** user registration form as shown in <u>Figure 1.3</u>. This can be implemented as an entirely new page or as a pop-up modal. In the event you implement this as a new page then you must ensure that the page maintains consistency regarding its structure, header, nav, footer, etc. as the home page.

Figure 1.3



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. You can implement it as a modal or within an area on your home page or on an entirely separate page.

REMINDER:

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Your views **MUST** be created with **Express-Handlebars**

Rubric

Criteria	Not Implemented 0	Partially Implemented 1	Fully Implemented 2
Home View (25%)	Not included	Included but not functionally or visually acceptable.	Included. Visually and functionally acceptable.
Room Listing View (25%) Header Navigation Room Listing Area Footer	Not included	Included but not functionally or visually acceptable.	Included. Visually and functionally acceptable.
Registration View or Popup (25%) Registration form Login form	Not included	Included but not functionally or visually acceptable.	Included. Visually and functionally acceptable.

Overall look and feel (25%)	Poor	Average	Exceeds
Overall site is polished			
 Used pleasing typography, color palettes, and imagery 			
Color and layout are cohesive throughout the site			
Appropriate use of grids			

Total: 100 MARKS

THE END