Course : (WDDM120) -Web Programming Application	Assignment 1 of 4	Contribution:25% of course
Prof : Kadeem Best	Date Given: January 21st 2020	Date Due: February 3rd 2020

Notes for the Student: This Assignment is one of 4 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 a code 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.**
- **This assignment must be presented to me in class. Failure to do so would result in 0 being assigned for your mark towards the assignment. Demonstration day will be on February 4th 2020 (during your class time)**
- **Please review Humber's policies on Academic Integrity, specifically:**

"Academic honesty is central to the learning environment enjoyed by all members of The Humber College Institute of Technology and Advanced Learning (hereafter referred to as"Humber `` or"the College") and an expectation of all Humber applicants, students, faculty and staff. A breach of academic honesty is considered to be an offense against the academic integrity of the learning environment. This policy is intended to ensure adherence to Humber's standard of honesty and scholarly integrity in all activities relating to teaching, supervision, research, administrative and consultative work of faculty and staff and to protect the academic integrity of the institution.." ***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 4 Assignments.

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

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

Features

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 responsive 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 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 navigates 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 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

<u>Figure 1.1</u>

- 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.
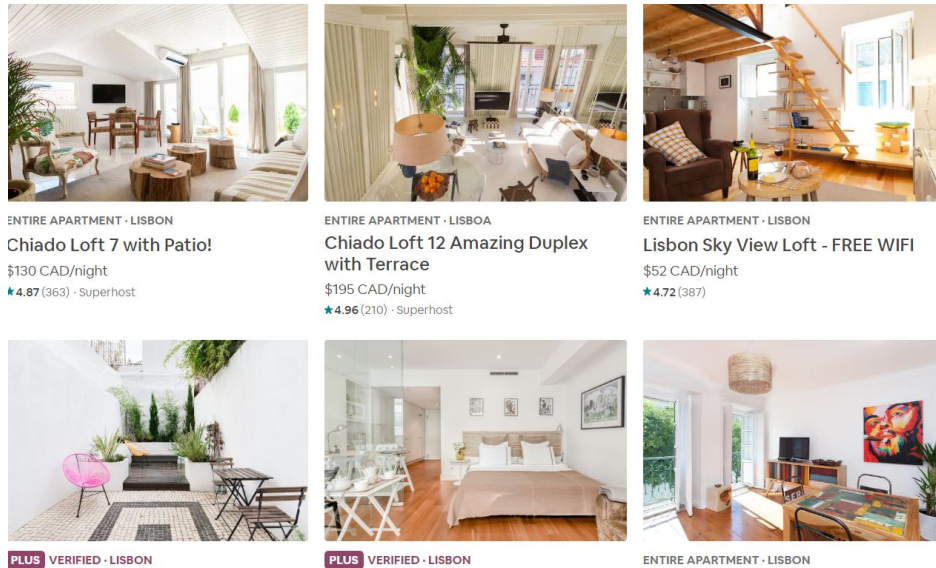
Login Form

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.

Room Listing page

You are required to build a **well designed responsive** 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
★4.96 (210) · Superhost

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

PLUS VERIFIED · LISBON

PLUS VERIFIED · LISBON

ENTIRE APARTMENT · LISBON

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** . 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

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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.

Rubric

Criteria	Not Implemented 0	Partially Implemented 1	Fully Implemented 2
Home View ● Header ● Navigation ● Booking search form ● Promotional Section ● Informational Section ● Footer			
Room Listing View ● Header ● Navigation			

● Room Listing Area ● Footer			6
Registration View or Popup ● Registration form			
● Login Form			
Registration form Validation ● Registration Validation (Checking for nulls) ● Login Form Validation (Checking for nulls) ● Advance Validation Criteria 1 (Registration Form) ● Advance Validation Criteria 2 (Registration Form)			
Overall look and feel ● Overall site is polished and looks good on all devices ● Used pleasing typography, color palettes, and imagery ● Color and layout are cohesive throughout the site ● Appropriate use of grids	**Poor**	**Average**	**Exceeds**

Total : 40 MARKS

THE END