University of British Columbia, Vancouver
Department of Computer Science

CPSC 304 Project - Subletter

Milestone #1

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Group Number: 11

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above.

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

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Project Description

We are aiming to model the domain of a local marketplace aimed for student use. We would essentially like to create a social media platform to facilitate student buying and selling, with a special emphasis on dorm services such as subletting. Our application restricts services to students, to mitigate the necessity for Facebook Marketplace and some aspects of personal marketing for troubles such as buying new furniture or finding appropriate sublets. Users will be able to login to their account (through username and password), and get access to the marketplace for their specific school. Users can create and view listings, make comments on listings, make reviews on certain residences so that the general public will gain background knowledge on the condition of each residence, and they can receive notifications about new listings or updates on listings they showed interest in.

The database for this project will model the specific **users** who are potentially buying/selling items, the **schools** users belong to, the **residences** of those schools, **reviews** of those residences, the different **listings** on the marketplace, **comments** associated with those listings, and **notifications** users can receive.

Database Usage/Specification

A database will heavily benefit this application because it will hold all the necessary information that ensures the functionality of the application. It will be used to hold user information, school information, and will allow the application to keep track of listings and all the information related to them. Furthermore, a database will allow this application to be more scalable which would be beneficial if we ever decide to launch it as a real application and need to add more schools and users. The database will also add the functionality of querying listings, so that if users ever need to find listings of a specific type (e.g. an open sublet but only for a specific residence) they could do so with ease. Given the dynamic nature of the application, with the potential for listings to constantly be added, updated, or removed, a database will be crucial in allowing this functionality.

Platforms

The tech stack for our project is as follows:
Backend - Node.js/Express.js
Frontend - React.js
Database - The CPSC department's Oracle SQL database system

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ER Diagram