TODO outside the doc: update your **TeamInfo.md** with the teamName and project summary.

Data stored in the database

- Where is the data from?
    - It can come from the websites of leasing companies. It can also come from online groups that share information on leasing, or even from physically speaking, though the incomplete information and higher likelihood of duplicates means it probably would need to be manually entered.
- what attributes and information would be stored?
    - Rooms table will have attributes including the name of the person or office planning to lease the room, location, rent cost, start date, end date, cancel date, whether it can be subleased, and what utilities are provided. The utilities will be gas, electricity, water, and internet. The utilities will be listed as their costs, where they are 0 if they are provided with the lease, equal to the cost if they are provided separately, and -1 if you have to provide your own.
    - The Tracked Rooms table will be connected to the Rooms table by the Room table ID, and will have additional attributes related to communication with the potential lessor. This includes the most recent communication from the user, most recent communication with the leaser, and scheduled tour time. The place user sets where the user wants to know the distance from my apartment. Lastly, the table will also have the distance from the apartment and setting place.
    - The Provider table will have information (name, email address, phone number) about who is offering the room and which room they are offering.
    - In the User table, you will find information (name, email address, phone number) about the customer who wants to use the room and which room they have reserved.

Basic functions of the app

- What can users of this website do?
    - People who use the website will be split into Providers and Users.
    - Room providers will be able to insert, update, and delete entries into the Rooms table.
    - Users will be able to add rooms in the Rooms table into their own Tracked Rooms table.

    - Update Tracked Rooms based on communication with the lessor
- Which simple and complex features are there?
    - Order the available rooms and track rooms by different categories like price or entrance date.
    - For tracked rooms, it could notify when people or offices offering the room contact the user.

Creative component

- What is something cool that you want to include?
    - Put the Rooms you are currently tracking on an interactive map
- How are you planning to achieve it?
    - I am not sure, but I am hoping the Google Cloud Platform can somehow connect to google maps.

There are 2 possible creative components

1. Tracked rooms can be put onto an interactive map for easy viewing and also finding distances to important places on campus.
    a. If this is too complex or if we can't use an existing map application, room providers can just update their Room entries with distances to important campus places
2. It would also be helpful if the data sets for Rooms and Tracked Rooms could be converted to an excel spreadsheet format, which most users would probably be more familiar with.

Project Title

UIUC Apartment Hunt

Project Summary

Our application will be used to compile apartments and dorms for students looking for lodging at UIUC. There will be 4 tables, offers, tracked offers, users, and providers. The Offers table will have attributes including the name of the person providing the offer, location, rent cost, start date, end date, cancel date, whether it can be subleased, and what utilities are provided. The utilities will be gas, electricity, water, and internet. The utilities will be listed as their costs, where they are 0 if they are provided with the lease, equal to the cost if they are provided separately, and -1 if you have to provide your own. The Tracked Offers table will have a foreign key referencing the Offers table's ID, and will have additional attributes related to communication to the offer provider.

Another table or function might be required to calculate distances from important locations, like the engineering quad or undergraduate library.

The Provider table will have information (name, email address, phone number) about who is offering the room and which room they are offering.

The User table, you will find information (name, email address, phone number) about the customer who wants to use the room and which room they have reserved.

Description

The goal of the application is to make it easier for students to find and keep track of available apartments and dorm rooms on Campus. Qualities that students are often occupied with should be made more clearly visible compared to other applications. This includes filtering by whether they provide specific utilities or allow early move-ins.

Usefulness

Even if we can't find a way to automatically add apartments between websites while finding duplicates, the attributes of the Offers table can help guide the search for lodging. While a lot of applications and groups allow people to share lodging information, I haven't seen many that clearly present some important properties of the lease, like the ability to sublease or how utilities are handled.

Applications that also keep track of communication in potential leases are also not very common. However, this is probably because it is so specific and most people just create a list using an application like excel.

Realness.

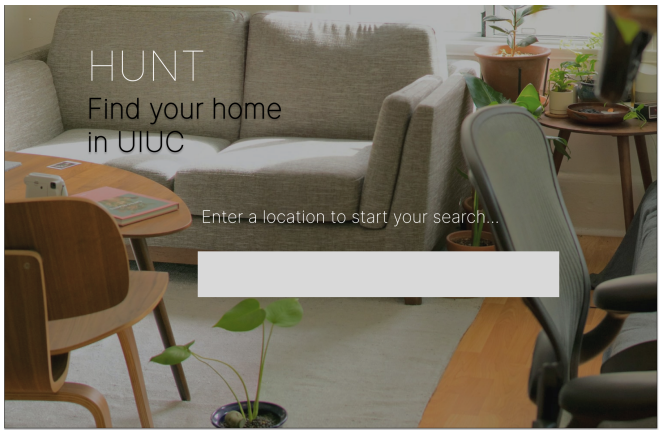
- Describe what your data is and where you will get it.
    - The data in Rooms represents unoccupied rooms and qualities of their leases, like price, duration, and rules that the residents have to abide by.
    - The data in Tracked Rooms represents the communication between Providers and Users, which includes contact information, the specific room being considered, and online or physical meeting times.
    - Data will be mainly from the Room Provider users, who will post the rooms they have ready to lease.
    - Users should still put their information into the Users table so that they can be easily contacted, and should also insert the entries into the Tracked Rooms.

The functionality of the website

- This is where you talk about what the website delivers.
- Talk about how a user would interact with the application (i.e. things that one could create, delete, update, or search for).
    - Users can search through the available rooms

    - Searcher users can select rooms from the Rooms table to add them to the Tracked table.
    - Users can more easily determine the apartment they want geographically by calculating the distance from the location they set to the apartment distance.
    - Providers will be able to close their rooms and provide a reason like accepting different occupants, which will update the Tracked Rooms table and will hide the room from the Rooms table or add it to an archive table. Entries for closed rooms won't be removed from the Tracked Rooms table for transparency, but Users won't be allowed to change them, only delete.
- Read the requirements for stages 4 and 5 to see what other functionalities you want to provide to the users.

Low fidelity UI mockup:



Project work distribution

- Insert new records (rows) to the database (3%): Matthew
- Search the database using a keyword search. (5%): Nandana
- Update records on the database (3%): Wonjun
- Delete rows from the database (3%): Matthew
- Integrate into your application both of the advanced SQL queries you developed in stage 3. (6%): This will be handled together through a Zoom call
- Transaction requirements: Nandana
- Stored procedure requirements:
    - Matthew will work on the stored procedures for the Users and Tracked Rooms
    - Nandana will work on the stored procedures for the Apartment Table
    - Wonjun will work on the stored procedures for the Users and Providers
- Trigger requirements:
    - Matthew will work on the trigger requirements for the Users and Tracked Rooms
    - Nandana will work on the trigger requirements for the Apartment Table
    - Wonjun will work on the trigger requirements for the Users and Providers