**University of British Columbia, Vancouver**
Department of Computer Science

# CPSC 304 Project Cover Page

Milestone #: <u>3</u>

Date: <u>September 30th, 2022</u>

Group Number: <u>10</u>

| Name | Student Number | CS Alias (Userid) | Preferred E-mail Address |
|---|---|---|---|
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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 the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

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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1. Timeline and task breakdown/assignment:

<mark>*Sarah will be in charge of the front end, Raifah will be in charge of the back end*
*(work is split 50/50, however Sarah will help Raifah with some backend if she finishes earlier)*</mark>

**Frontend Tasks(Sarah):**
1) Display Property Listings Table
   ➔ How to display table
   ● Add Listing Button
      ➔ How to create a button
      ➔ How to place the button in the desired configuration
   ● Update Listing Button
      ➔ How to create a button
      ➔ How to place the button in the desired configuration
   ● Delete Selected Property Button
      ➔ How to create a button
      ➔ How to place the button in the desired configuration
   ● Text Bars to fill in attributes for Property Listing
      ➔ How to create textbars that users can type in
2) Display Property Type Table
   ➔ How to display table
   ● Add Property Type Button
      ➔ How to make button
      ➔ How to place the button in the desired configuration
   ● Update Property Type Button
      ➔ How to make button
      ➔ How to place the button in the desired configuration
   ● Delete Property Type Button
      ➔ How to make button
      ➔ How to place the button in the desired configuration
   ● Text Bars to fill in attributes for Property Type
      ➔ How to create textbars that users can type in
3) Display Property Listings Table
   ➔ How to display table
   ● Text Bars to fill in Square Footage and Max Price
      ➔ How to create textbars that users can type in
   ● Column Select for Address, ListingID, SellerID
      ➔ How to create drop-down menu of selectable options
   ● Search Bar
      ➔ How to create search bar users can type in
4) Find an Apartment with Amenities Join Table
   ➔ How to display table

- Select options for Pool and Gym
  - ➔ How to create drop-down menu of selectable options
- Search Button
  - ➔ How to create search bar users can type in
5) Average Listing Price/Square Footage in each City Table
  - ➔ How to display table
  - Select Listing Price or Square Footage Bar
    - ➔ How to create drop-down menu of selectable options
  - Max Price Bar
    - ➔ How to create textbars that users can type in
  - Search Button
    - ➔ How to create search bar users can type in
6) Find all the sales a Real Estate Agent has made Table
  - ➔ How to display table
  - Text bar to fill in Agent Name
    - ➔ How to create textbars that users can type in
  - Search Bar
    - ➔ How to create search bar users can type in
7) Nested Aggregation with Group By Table
  - TO-DO (once covered in class)

**Backend Tasks(Raifah):**
1) Display Property Listings Table
  - ➔ How to create table
  - Add Listing Button
    - ➔ How to make listing with all its respective attributes show up in table once button is clicked
  - Update Listing Button
    - ➔ How to make updated attribute(s) show in table after button is clicked
  - Delete Selected Property Button
    - ➔ How to remove tuples from a table
  - Text Bars to fill in attributes for Property Listing
    - ➔ How to use user input to create new tuples for table
2) Display Property Type Table
  - ➔ How to make table
  - Add Property Type Button
    - ➔ How to make sure new tuple is added to table on button click
  - Update Property Type Button
    - ➔ How to make updated attribute(s) show in table after button is clicked
  - Delete Property Type Button
    - ➔ How to remove tuples from a table
  - Text Bars to fill in attributes for Property Type
    - ➔ How to use user input to create new tuples for table

3) Display Property Listings Table
- ➔ How to create table
  - ● Text Bars to fill in Square Footage and Max Price
    - ➔ How to use user input to select information from tables
  - ● Column Select for Address, ListingID, SellerID
    - ➔ How to filter out search results when finding information from tables
  - ● Enter button
    - ➔ How to make sure results are retuned on button click
  - ● Search Bar
    - ➔ How to use user input to generate correct query and results

4) Find an Apartment with Amenities Join Table
- ➔ How to create table
  - ● Select options for Pool and Gym
    - ➔ How to select certain attributes from a table
  - ● Search Button
    - ➔ How to use user input to generate correct query and results
    - ➔

5) Average Listing Price/Square Footage in each City Table
- ➔ How to create table
  - ● Select Listing Price or Square Footage Bar
    - ➔ How to select certain attributes from a table
  - ● Max Price Bar
    - ➔ How to use user input to select information from tables
  - ● Search Button
    - ➔ How to use user input to generate correct query and results

6) Find all the sales a Real Estate Agent has made Table
- ➔ How to create table
  - ● Text bar to fill in Agent Name
    - ➔ How to select certain attributes from a table
  - ● Search Bar
    - ➔ How to use user input to generate correct query and results

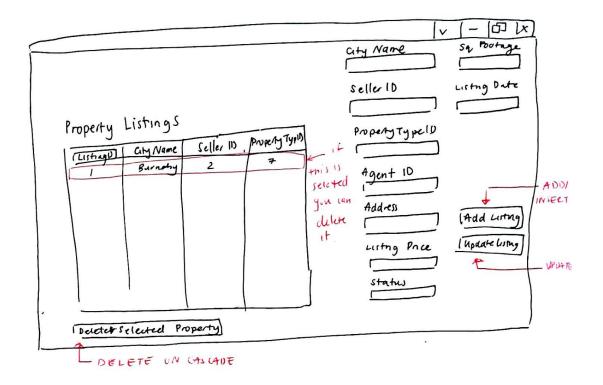7) Nested Aggregation with Group By Table
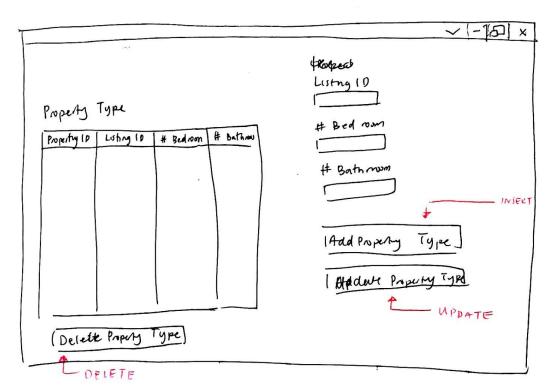  - ● ==TO-DO (once covered in class)==


**Timeline**
1) SQL script to create all the tables and data in the database - Nov. 8th
2) Make commits to repository such as read.Me file - Nov. 8th
3) Use SQL to generate queories based on milestone 5 - Nov. 11th
4) Implementing UI and linking to backend - Nov. 25th

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2. Images that demonstrate what the front end of your project (i.e., what the user will see/interact with) will look like. These images can be hand drawn or created using a drawing application. The images should be saved in a file format that does not require extra software to open (e.g., png, jpg, svg, pdf).

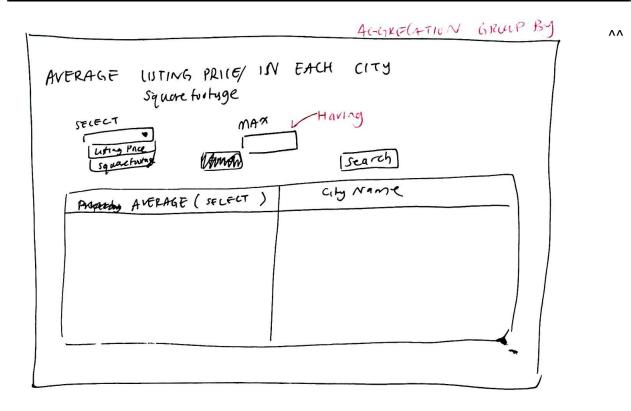Your TA may ask you to explain the design during the meeting.

SELECTION

Find A PROPERTY

Square Footage.

[_____]

Price Max

[_____]

COLUMN SELECT

[ Address ▾ ]

[ Listing ID ▾ ]

[ Seller ID ▾ ]

[ Enter ]

PROJECTION

[ Search ]

Property Listing Table

| Listing ID | City Name | SellerID | Property Type ID | Agent ID | Address | Price | Sq Footage |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |

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JOIN   [ − | ⊡ | x ]

FIND AN APARTMENT W/ AMMENITIES

POOL [ YES ▾ ]
GYM [ YES ▾ ]

[ Search ]

Joined table ([Listing ⋈ Property Type] ⋈ Apartment )

AGGREGATION GROUP BY

^^

AVERAGE LISTING PRICE/ IN EACH CITY
Square footage

SELECT

▼

| Listing Price |
| Square footage |

MAX

Having

[____]

| commit |

[Search]

| Property AVERAGE ( SELECT ) | City Name |
|---|---|
|  |  |
|  |  |
|  |  |
|  |  |

DIVISION

FIND ALL THE SALES A REAL ESTATE AGENT MADE

AGENT ID

[____]

[SEARCH]

| Purchase ID | Selling Price | Date . |
|---|---|---|
|  |  |  |
|  |  |  |
|  |  |  |

*the Agent Id will just be the agent Name