University of British Columbia, Vancouver

Department of Computer Science

CPSC 304 Project Cover Page

Milestone #: 3

Date:October 31, 2022

Group Number: 7

Name	Student Number	CS Alias (Userid)	Preferred E-mail Address
Richard Lee	79839403	q9v6m	richardzhyulee@gmail.com
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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.

TODO List:
- Queries
    - Insert
    - Update
    - Delete
    - Selection (need to have user specified conditions)
    - Projection (3-5 attributes)
    - Join (at least 2 tables meaningfully & provide interface for user to execute at least 1 condition)
    - Aggregation
        - Group by (i.e. average/min/max/count & provide interface for user to execute)
        - Group by with having (same thing but needs having)
        - Nested group by (need more info)
    - Division
- Frontend (React, TypeScript)
    - Pages
        - User login & profile (Join)
            - User login
                - account
                - vehicleOwner
            - Vehicle creation & attachment (Insertion)
                - Vehicle OR electricVehicle
                - permit
                - Manufacturer
            - Vehicle owner details
                - vehicleOwner
            - Vehicle details (Update, Deletion)
                - ticket
                - permit
                - vehicle/electricVehicle
                - manufacturer
                - parkingSessions
        - Parking history (Stats)(Aggregation GB, Projection)
            - parkingSessions
            - tickets
            - vehicleOwner
            - Vehicle OR electricVehicle
        - Parking lot selection (creating a parking session) (Selection)
            - Selecting from existing spots & choose options (filtering for electric, accessibility, duration, height)

- parkingSessions
    - Current parking session (maybe something like paybyphone)
- Stat page for parking lots (Aggregation HV, Division, Nested aggregation)
    - parkingLots
    - parkingActivities
    - Chargers
    - parkingSpots
    - electricSpots
    - accessibilitySpots
- Backend (Nodejs, Express, OracleDB)
    - REST API
    - Initial Database creation & records
        - Set up DB connection

LEGEND:
- Blue: Asad
- Red: Richard
- Green: Jim

Timeline:
3rd Nov
- Discuss project with TA (Project Check in)
- Ask for clarifications regarding the implementation of project (types of queries)
- Ask about the final project deadline
- UI design
- Request feedback
- Questionnaire
    - Do we need to write raw queries?
10th Nov
- Frontend: User login & profile (Asad)
- Backend: Test connection, DDL for all table & data (Richard, Jim)
17th Nov
- Frontend: Stat page for parking lots, Parking lot selection (Asad)
- Backend: Rest api for users, parking activities, parking lot selection, stats for parking lots (Richard, Jim)
23rd Nov
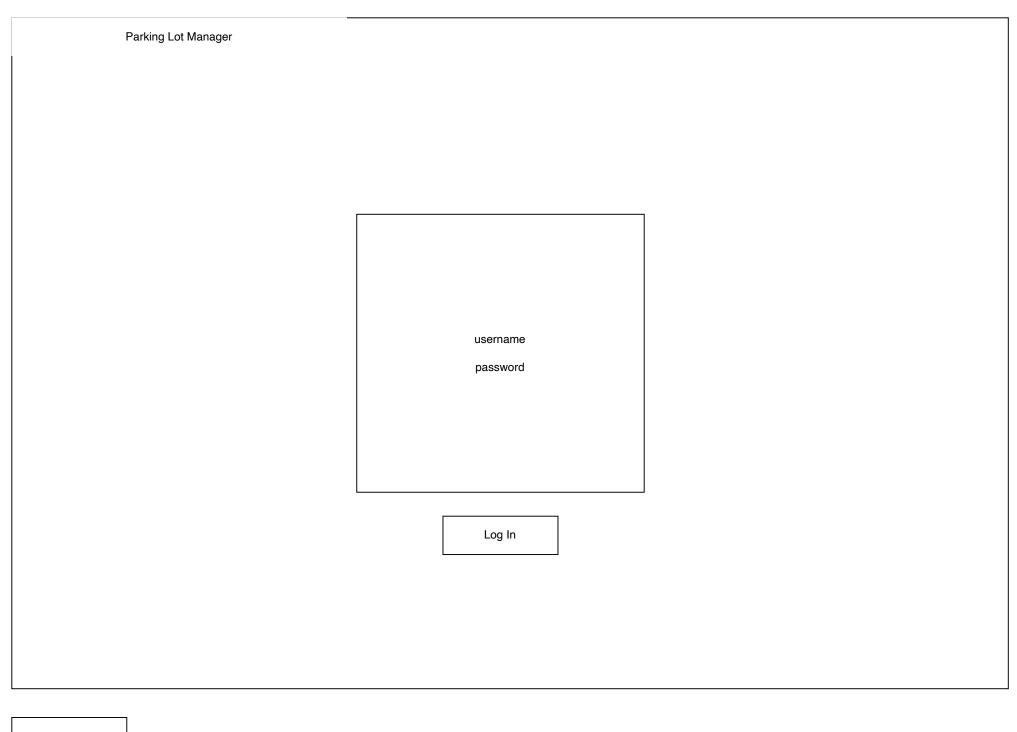- Frontend: User previous parking activites (Asad)
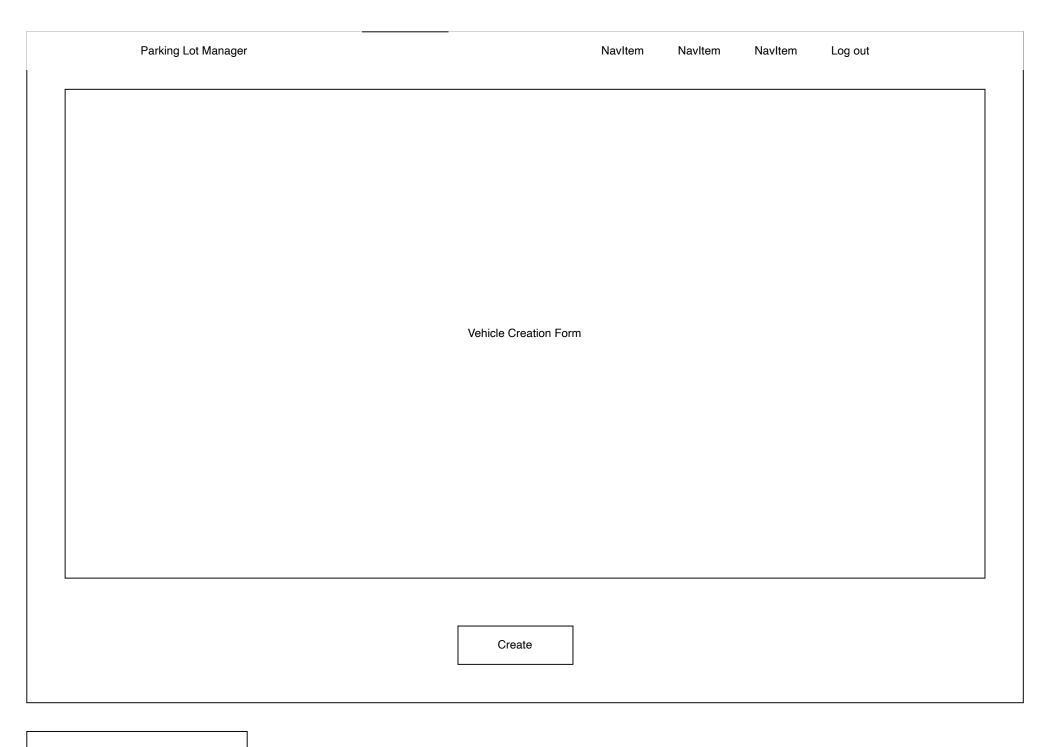- Make sure frontend & back end is connected (Asad, Richard, Jim)
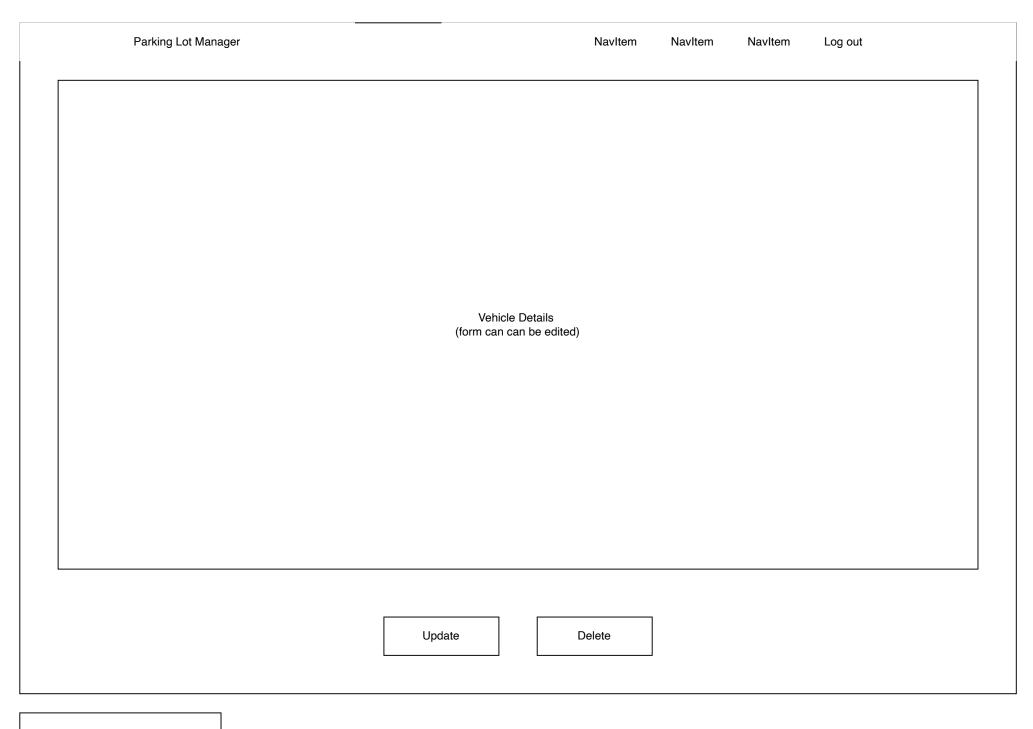25th Nov
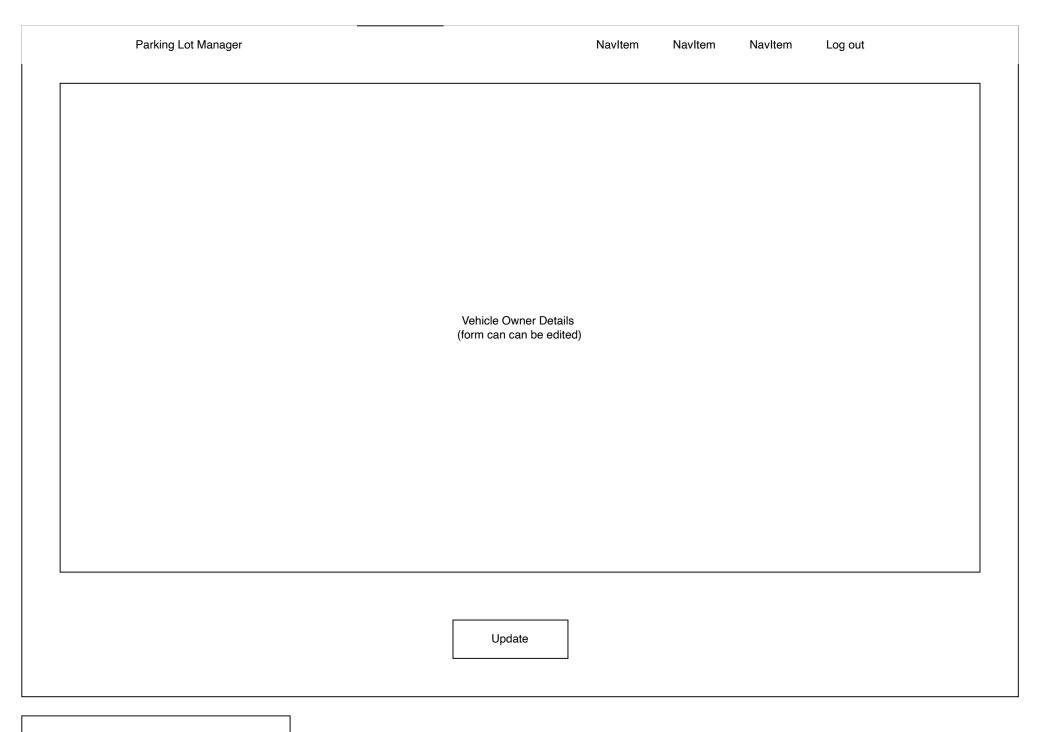- Implementation deadline

28th Nov (Week)
- Group demo for the project

Parking Lot Manager

username

password

Log In

Sign in

NavItem   NavItem   NavItem   Log out

Vehicle Creation Form

Create

Vehicle Creation

Vehicle Details
(form can can be edited)

Update

Delete

Vehicle Details

Vehicle Owner Details
(form can can be edited)

Update

Vehicle Owner Details

NavItem   NavItem   NavItem   Log out

Some sort of filters, or checkboxes

List of previous parking sessions

Some sort of graph

Some sort of aggregate information

Parking History

Parking Lot Manager

| Electric checkbox | Location dropdown | Other filters like height |

Select you Vehicle from dopdown

List of spots available

Select

Parking lot selection

Select Parking Lot

Some sort of filters

Bunch of stats and graphs showing info for filtered fields for the parking lot

Stats for paking