

CPSC 304 Project Cover Page

Milestone #: 3

Date: Oct. 31, 2022

Group Number: 20

Name	Student Number	CS Alias (Userid)	Preferred E-mail Address
Ding Ma	69680510	n3q8v	dingthema@gmail.com
Phuoc Dat, Nguyen	52301215	b7e6r	alex.ng0976@gmail.com
Hadrian Ho	63531909	d3e2b	wowhead25s@gmail.com

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.)

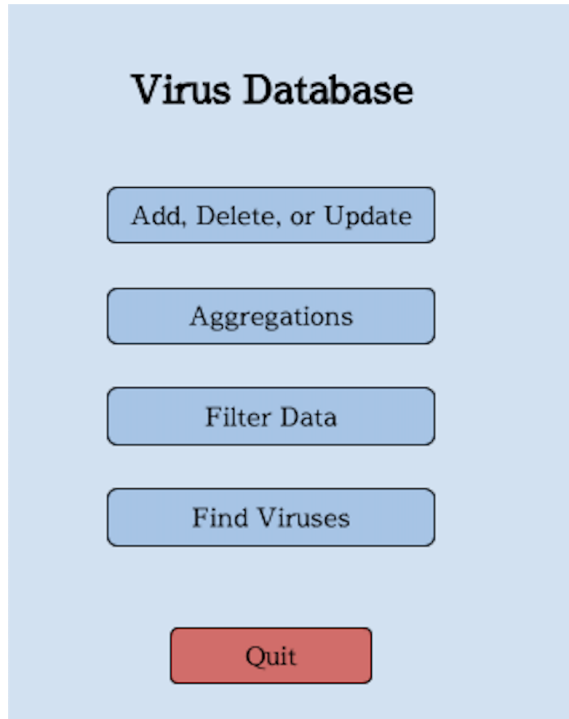
In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

Timeline/Tasks (Rubric items 3 & 4):

- Tasks are divided end-to-end, and each member is responsible for the back/front end of their assigned queries (subjected to change depending on actual workload):
 - Alex: selection, projection, division, join
 - Hadrian: initialization script, insert, delete, update
 - Ding: all aggregations, menu
- 1. SQL initialization script for creating all tables and data - Nov. 9th
 - a. Familiarize with Oracle.
- 2. Back-end for all queries - Nov. 18th
 - a. Learn basics of PHP necessary to develop the backend - Nov. 11th
 - b. Atleast two of assigned queries implemented (each member) - Nov. 14th
- 3. Front-end for all queries and menu - Nov. 23rd
 - a. Learn basics of CSS and HTML - Nov. 20th
 - b. How to create buttons, tables, dropdown menus, and accompanying text.
 - c. How to style the above items.
 - d. How to refresh the page/table for a new query.
 - e. How to create multipage navigation.
- 4. Canvas submission and README - Nov. 25th
 - a. Project description
 - b. Changes to the schema
 - c. Copy of schema and screenshots of data from initialization script
 - d. List of SQL queries
 - e. Screenshots of sample outputs for each query
 - f. Any changes to README

UI Design:

1. Main menu page:



Menu for the application. The first button corresponds to queries that uses insert, delete, and update. Second button maps to aggregation (placeholder for now, not covered). Third button maps to selection and projection queries. Fourth button maps to division and join queries.

2. Insert/Delete/Update Page

Common name:	<input type="text" value="Enter Common Name"/>
<div><input type="button" value="RNA"/> <input type="button" value="DNA"/></div>	
Genome Shape:	<input type="text" value="Enter Genome Shape (DNA)"/>
Sense:	<input type="text" value="Enter Sense (RNA)"/>
Genus:	<input type="text" value="Enter Genus"/>
Status:	<input type="text" value="Enter Status"/>
Transmission Type:	<input type="text" value="Enter Transmission Type"/>
<div><input type="button" value="Insert"/> <input type="button" value="Delete"/></div>	
<div><input type="button" value="Update"/></div>	

Users enter the data they will like to insert, update, or delete. After putting in the information, user presses insert, delete, or update. If the users tries to do an invalid action, an error at the bottom will pop up giving details of what went wrong. For example, inserting genome shape after selecting DNA virus. Another example would be deleting something that does not exist.

3. Selection/Projection Page

Selection:

Table:

Enter the number of conditions:

Condition:

	<input type="text" value="attribute 1"/>	<input type="text" value="op"/>	<input type="text" value="value"/>
<input type="text" value="op"/>	<input type="text" value="attribute 2"/>	<input type="text" value="op"/>	<input type="text" value="value"/>

Users will choose available tables from the list and determine the number of conditions needed. After clicking the add conditions, the page will generate the number of dropdown options for attributes, operation and text fields for values based on the number of conditions. Once the users are satisfied with the inputs, they will click the submit button. **Note:** Condition span will be empty at first; however, the screenshot above shows the case of 2 conditions are needed for the selection

Projection:

Table:

Dropdown for tables

Choose table

Select:

- ☒ attribute 1
- ☒ attribute 2
- ☒ attribute 3

Add conditions

int

	attribute 1	op	value
op	attribute 2	op	value

Submit

Users will choose available tables from the list. After clicking the choose table button, the page will generate the checkboxes for according attributes. Optionally, users apply conditions for their preferred selected tuples otherwise it will have no effect on the submit button .

Join/Divide Page

Find all Viruses that:

Dropdown for options

Submit

Refresh

Result:

The drop down menu will provide preset options for queries that uses division or join (e.g. find the name, family, and genus of all viruses that was involved in an outbreak).