## University of British Columbia, Vancouver

**Department of Computer Science** 

### **CPSC 304 Project Cover Page**

Milestone #: 1

Date: Sep. 28th, 2022

Group Number: 20

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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

#### **Project Domain:**

- a. The domain of our application is viral epidemiology. This area of study is concerned with the distribution and determinants (causes and factors) of viral diseases. Often, this involves collecting and analyzing data related to the frequency, patterns, and risk factors of viral infection events.
- b. For our database, we have decided to model a select few areas of this domain, which include: Classification of viruses, availability of vaccines, the tropism of a virus, infectious diseases caused by viruses, viral outbreaks and associated countries, and the application of viruses in modern technology. This domain should be unique and does not overlap with the blacklisted topics. Note: Tropism refers to the capability of a virus to infect specific types of cells, tissues, and hosts.

#### **Database Specifications:**

a. In terms of functionality, our database will enable information to be looked up. The "Virus" entity set relates to several other entities. So, one way a user can use the database is, given the identity of a virus, to have it pull up information such as available vaccines, range of cells, tissues, and hosts the virus infects, past viral outbreaks involving the virus... The input of a query doesn't necessarily have to be the virus, most of the entities can serve as the input (e.g. given a country, show any viral outbreaks involving that country).

#### **Application Platform:**

- a. The platform of our project will be PHP.
- b. Apart from the language, we expect to also use Oracle as our DBMS and HTML for building the UI with PHP.

# ER Diagram:

