Covid-19 QR Tracking Project Proposal

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Background

This project is based off the vaccination system that Ontario and other provinces/countries are implementing around the world. This database will contain multiple stores which store vaccination data from multiple users in order to keep statistics on the vaccination of the general population, and to better track outbreaks of covid (between vaccinated and unvaccinated populations). It will query up and notify users who test positive if the database notices a positive user.

Application Requirements

R1.1) The QR code will be placed at the entrance to every store on the outside of the building.

R1.2) When a client visits a store, they need to scan the QR code which will give their vaccine passport data and location to the store database.

R1.3) If a client tests positive for COVID-19 then they will notify the store who will put in the database that the user was positive on the day they came into the store.

R1.4) Clients who used the store the same day that the positive client used it will be queried and notified to rapid-test and possibly quarantine.

R1.5) The application will be available through web access for clients/

Many to many would be 1) a store will get many customers , and 2) multiple customers go to multiple stores

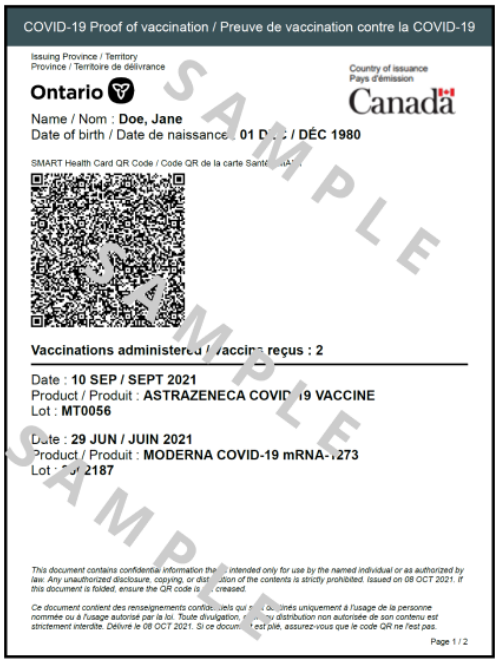
Due Diligence

There would be a terms and conditions that the user would sign which would explain the use of the app and negate any legal responsibility if anything were to occur. Since users are voluntarily joining and giving their data to the application there wouldn't be any privacy disagreements, and the database is kept privately only for restricted access by trusted individuals (of these would be official government workers who have passed a background check)

Sample Documents

Someone scanning a QR code to give the server their information.

The Application will show all of the details shown in this proof of vaccination sample here except for the physical QR code (date of vaccinations, name, DOB, etc.)



COVID-19 Proof of vaccination / Preuve de vaccination contre la COVID-19

Issuing Province / Territory
Province / Territoire de délivrance

Ontario

Country of issuance
Pays d'émission

Canada

Name / Nom : **Doe, Jane**

Date of birth / Date de naissance : **01 D / DÉC 1980**

SMART Health Card QR Code / Code QR de la carte Santé

Vaccinations administered / Vaccins reçus : 2

Date : **10 SEP / SEPT 2021**
Product / Produit : **ASTRAZENECA COVID-19 VACCINE**
Lot : **MT0056**

Date : **29 JUN / JUIN 2021**
Product / Produit : **MODERNA COVID-19 mRNA-1273**
Lot : **2187**

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SAMPLE
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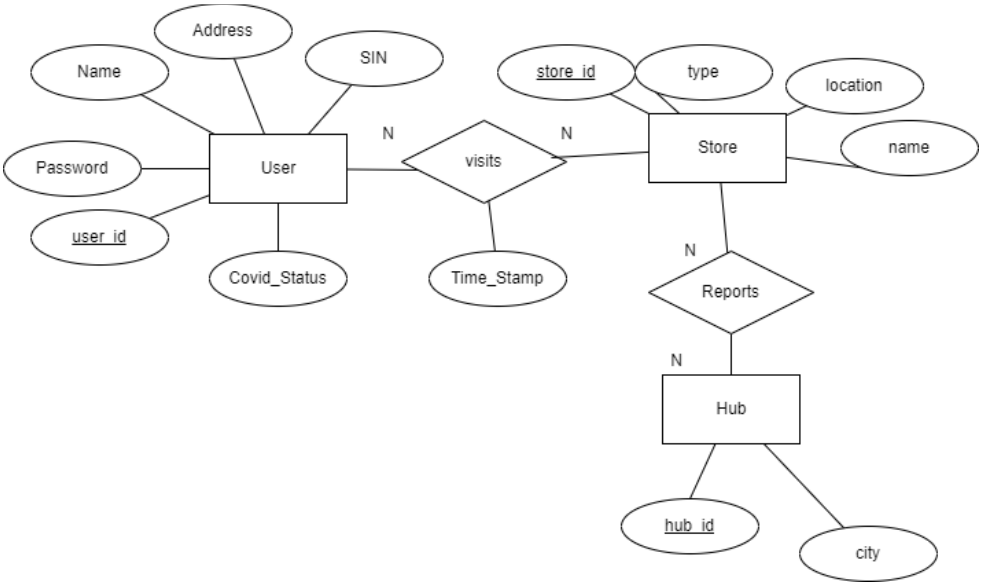
SAMPLE

ER Model

Unique: User_id, store_id, hub_id, city



User

User_id	Name	Password	Address	SIN	Covid_Status

Visits

QR_Code_JSON	Time_STamp	Covid_Status

Store

Store_ID	type	location	Name

Reports

Store_id	Hub_id

Hub

Hub_id	city

Extra information:

Attribute	Comment
UserID	User Identification Number
Name	Full Name of User
Password	User Password
Address	Full Address of user
SIN	User's social insurance number
Covid_Status	Covid status of the user
Qr_Code_Json	User store visit timestamp Data
Store_ID	Unique ID of the shopping store
Type	Type of store (produce, electronics, warehouse etc)
Location	Address of the store
Name	Name of the store
HubID	Unique identifier of regional Covid hub
City	City for which the hub is responsible

Users can have only one UserID, Name, Password, Address,SIN.

The UserID and SIN uniquely identify the user

Qr_Code_Json uniquely identifies a Store_ID, UserID,Location

Many people can visit a place, and a place can be visited by many people.

Many stores can send their data to a hub.

The Qr_Code_json will give a unique time and date

User_Id, Sin -> Name, Address, Password, Covid_Status

UserId, StoreID -> Qr_Code_Json

StoreID -> type, location, name

HubID -> City

User_Id,Sin->Name

User_Id,Sin->Address

User_Id,Sin->Password

User_Id,Sin->Covid_Status

UserId,StoreID->Qr_Code_Json

StoreID->type

StoreID->location

StoreID->name

HubID->City

[User_Id,Sin | Name,Address,Password,Covid_Status]

[UserId,StoreID | Qr_Code_Json]

[StoreID | type,location,name]

[HubID | City]