**Project Description**

Accessing COVID 19 vaccination reports from the database for Alberta patients.

**Use Case Diagram**

Use case for our project: “Accessing COVID 19 vaccination reports from the database for Alberta patients” is explained below for better understanding. Our use case involves 4 actors as follows: Patient, User agent, AHS admin agent, and System database agent. The roles of the actors are explained below:

Patient: A person who gets the vaccine and able to access the vaccination report.

User agent: An agent who manages the user and gets the vaccination report on behalf of the user to be displayed.

AHS admin agent: An agent who stores data related to COVID 19.

System database agent: It represents the back end of our software where all the database information is stored/retrieved/updated. System database agent will manage reports as well.

Diagram

Description automatically generated

First use case “Login” is responsible for the Logins of the actors in the system.

“Request report” is a use case in which patient request the report information.

“Display final report” is a use case in which user agent display the report information to the patient.

# Flow of Events/Scenarios

We have included flow of events for all use cases, they are mentioned below.

**1) Login:** This use case is related to all the actors in the system that needs to login in order to use the system.

|  |  |
| --- | --- |
| **Use Case 1: Login** | |
| Primary Actor: Patient, User agent, AHS admin agent | A person who is involved in the working of the whole system. |
| Secondary Actor: System database agent | The system where all the login credentials are verified before using the system. |
| Trigger | Primary actors by filling in the login credentials trigger the system. |
| Pre-Condition | * The actors need put their information in the web portal. * The network connection to the system database needs to be active. |
| Post-Condition | * System database notifies the actor when successfully logged in and also in case of login failure. * Allows to access the system facilities. |
| Main Flow | 1. Primary actor opens the login page. 2. Patient, User agent, AHS admin agent enter login credentials. 3. Once the credentials are verified, the primary actors can continue with their individual roles/responsibilities. |

# To describe the use cases ----Should we use the above method (Flow of Events/Scenarios

**)?**

**OR the below method?**

**System Database Agent**: - Performs the role of managing the database.

Design: Manages database records like adding or storing – in this case, the covid-19 reports can be added to the database by the database agent, updating, or editing – the covid 19 reports can be modified, deleting records- also the covid 19 reports can be deleted if the report is no longer in use or not required to be stored in the database. Also, the database agent has full access control over the database. The agent has permissions and rights to create a new table for covid 19 patients with records of the date of immunization, type of vaccine, where the vaccine was received(AHS or pharmacy) and finally the patient info (Age, first and last name, date of birth) . Also, the database agent can enter information in the database related a patient’s history, for instance if the patient was previously infected with covid 19 or not.

Requirements: The Agent requires a Database to maintain the covid 19 patient records, so that it can accessed whenever needed. The data model should be in such a way that all the information are stored for long term use.

Use Cases:

1. The system database agent is able to access the database created for covid-19 patients and is able to see the vaccination reports for all patients in Alberta.

2. The agent is able to manage the covid 19 vaccination reports in the database – i.e all covid 19 vaccination information related to that patient, i.e., first and second dose reports and check the status if the patient is fully vaccinated and also records related to a patient if he/she was previously infected with covid 19.

3. The agent is also able to retrieve data, i.e., he can pull up records relating to a patient’s covid 19 history and the vaccination reports of 1st and 2nd dose.

4. The agent is also able to add or modify any information related to the existing covid 19 information stored in the database for a patient.

5. The system database agent also keeps track of how many patients are fully vaccinated in the entire population and how many of them still needs to be vaccinated.