

## Project Description

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

## Requirements:

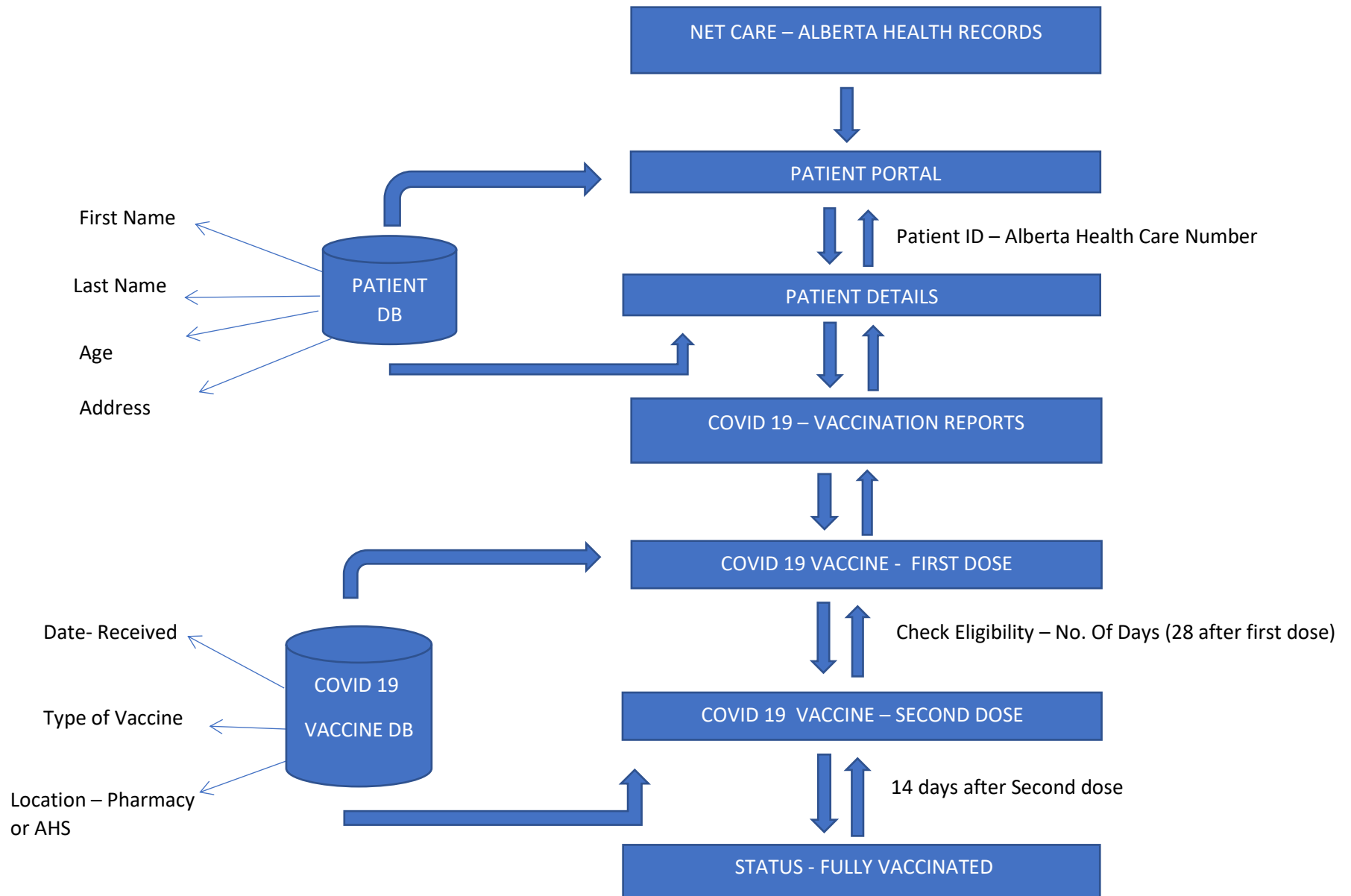
There are 4 actors - agents/roles that are required in the project as given below:

1. Patient Agent
2. User Agent
3. AHS Admin Agent
4. System Database Agent

The workflow and the steps involved is given below:

- Web Portal to access the Covid 19 records.
- A user or a patient(patient agent) who can login to the NET CARE - web portal using Alberta Health Care Number, Date of Birth and Year of Vaccine.
- Once the user enters the required information on the screen, it connects to the server or the database (System database agent) to pull up the records for that particular user.
- The report related to covid 19 is displayed on the screen and the user is able to download the form from the portal.
- To modify any information related to the patient information – such as Name, date of birth, the patient submits a request online on the form or calls the customer service (user agent) – who can send a request on behalf of the patient to make the necessary changes.
- This request is being transferred to the Database agent who handles all the operations related to the database (Add, update, delete) and has full access and control over the database.
- Once the necessary modifications have been made, the changes get reflected on the web portal where the patient is able to see the updated covid 19 report and download the modified report.
- The patient's eligibility to get a second dose based on the number days can also be determined by contacting the customer service- user agent or the AHS admin agent
- Once the patient receives the vaccine in an AHS location or pharmacy, the AHS admin agent is able to input all the covid 19 vaccine details in the system such as name and date of vaccine and also patient information.
- Once the patient receives both the doses the status of the patient is "Fully Vaccinated".

## Flow Chart – Pictorial Representation



## Use Case Diagram and Use Cases

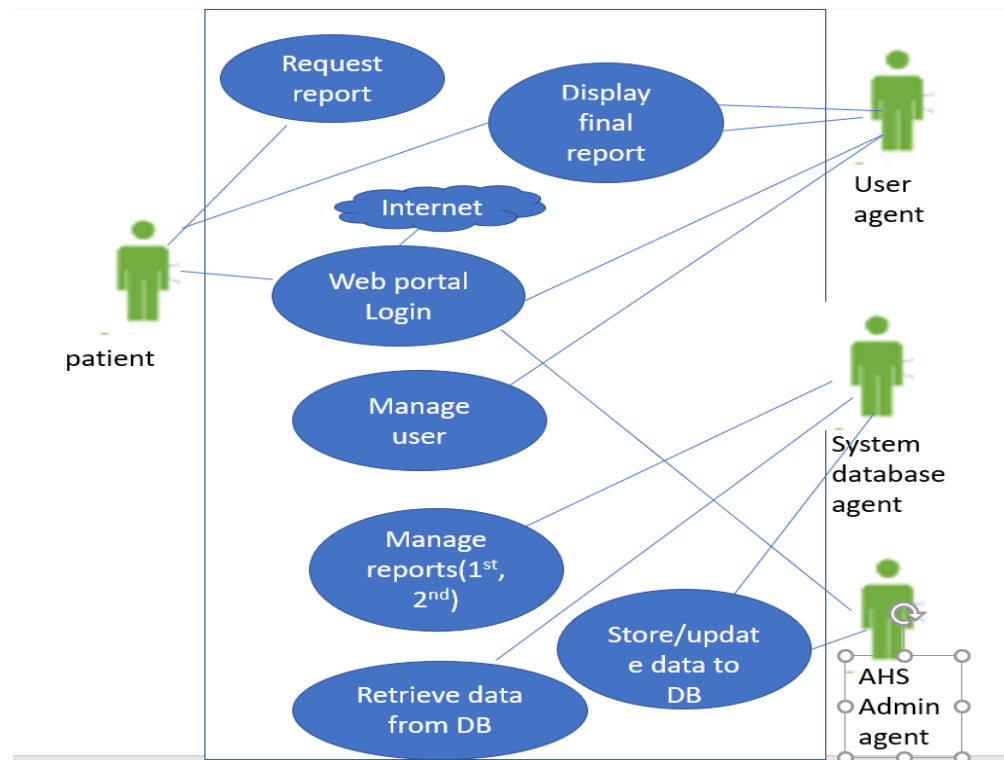
The role of each agent is described below

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.



# Role Model

Role Model					
Role Schema		Generate Vaccine Reports	Role Schema		User Database Managemenet
Description		Generates and Displays Vaccine reports requested by user which includes User informtion, QR Code, Vaccine	Description		Manages User Information Database which includes send, add, update, remove operation.
Protocol & Activities		GetUserInfo, RequestReportData, GenerateReport, SendReport.	Protocol & Activities		UserDataAdd, UserDataUpdate, UserDataRemove, SendUserData, GetUserInfo, SendRespond
Permission		Read: VaccineDatabase, User Information from web portal Write: Send Vaccine Report to web portal.	Permission		Read: UserDataBase, Information from Webportal Write: UserDataBase
Responsibilities	Liveness	GENERATE_REPORT (GenerateReport) = GetUserInfo.RequestReportData.GenerateReport.Send	Responsibilities	Liveness	SHOW_USER_DATA = GetUserInfo.SendUserData ADD_USER = GetUserInfo.AddUserData.SendResp
	Saftey	Successful connection with vaccine database		Saftey	

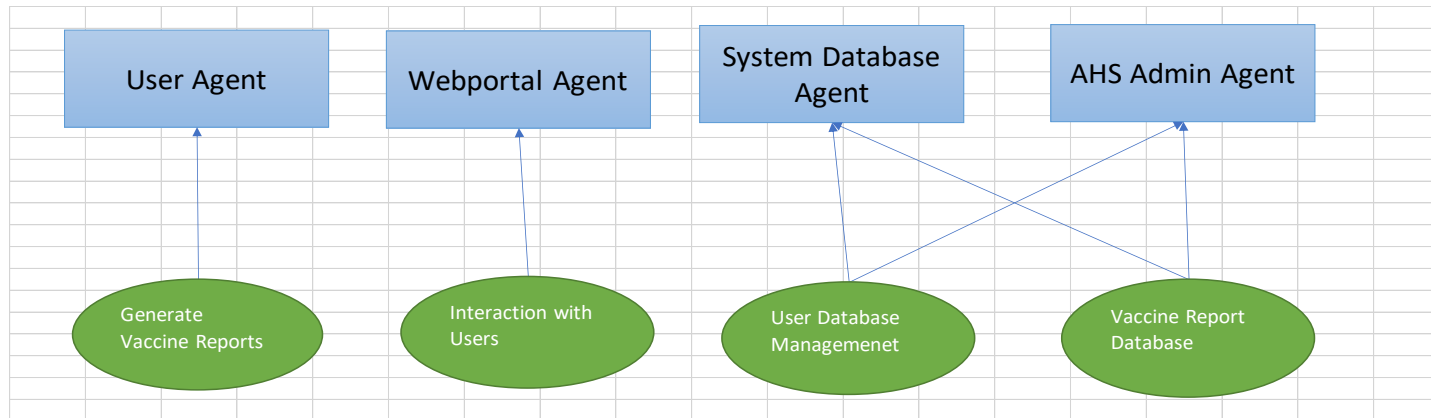
<b>Role Schema</b>		<b>Interaction with Users</b>	<b>Role Schema</b>		<b>Vaccine Report Database Management</b>
<b>Description</b>		Login system, Gets user information, Displays Vaccine Report, Interaction with user/vaccine database	<b>Description</b>		Manages Vaccine Reports Information Database which includes send, add, update, remove
<b>Protocol &amp; Activities</b>		GetLoginCredentials, VerifyLoginCredentials, GetUserInfo, RequestGenerateReport, DisplayReport,	<b>Protocol &amp; Activities</b>		ReportDataAdd, ReportDataUpdate, ReportDataRemove, SendReportData, SendResponse
<b>Permission</b>		Read: Information from Web portal Write: Display Data on WebPortal	<b>Permission</b>		Read: VaccineDatabase, Information from web portal Write: VaccineDatabase
<b>Responsibilities</b>	<b>Liveness</b>	LOGIN = GetLoginCredentials.VerifyLoginCredentials DISPLAY_REPORT = GetUserInfo.RequestGenerateReport	<b>Responsibilities</b>	<b>Liveness</b>	SHOW_REPORT_DATA = GetUserInfo.SendReportData ADD_REPORT_DATA = GetUserInfo.ReportDataAdd
	<b>Safety</b>	Successful connection with Vaccine Database & User Database Display Webportal pages according to user level		<b>Safety</b>	Successful connection with WebPortal

Interaction Model:

Protocol	RequestGenerateReport	RequestUserData	RequestUserData(Update/Add/Remove)	RequestReportData	RequestUserData(Update/Add/Remove)
<b>Purpose/Parameters</b>	Request to Generate Report. Parameters includes patient info. The response includes Vaccine Report File with User information, QR Code, Vaccine Information(Dose Type, Date, Place, Doctor name)	Request to get patients' all information. Parameter includes patient Name/ HCNo. The response includes all the information(Name, DOB...)	Request to add/update/remove patients' information. Parameter includes patient Name/ HCNo and the information which needs to be removed/added/updated. The response includes operation success/fail messages.	Request to get patients' all Vaccination Information. Parameter includes patient Name/HCNo. The response includes all the information (VaccineName/Type, DosesDates)	Request to add/update/remove patients' vaccination information. Parameter includes patient Name/ HCNo and the information which needs to be removed/added/updated. The response includes operation success/fail messages.
<b>Initiators(s)</b>	User (Patient/AHS/Database admin) /Interaction with Users	User(AHS/Datbase Admin)/Interaction with Users	User(Database Admin)/Interaction with Users (Add, Update, Remove) User(AHS)/Interaction with Users (Add Only)	User(AHS/Datbase Admin)/Interaction with Users	User(Database Admin)/Interaction with Users (Add, Update, Remove) User(AHS)/Interaction with Users (Add Only)
<b>Receiver(s)</b>	Generate Vaccine Reports	User Database Managemenet	User Database Managemenet	Vaccine Report Database Managemenet	Vaccine Report Database Managemenet

Processing	<p>Patient inputs his/her information via webportal. Webportal requests "Generate Vaccine Reports" to generate report. Webportal gets actual report in reponse and displays on the screen.</p>	<p>AHS/Database Admin inputs any patient's name/HCNo via webportal. Webportal requests "User Database Managemenet" to get the patient data. Webportal gets the data in response and displays on the screen.</p>	<p>AHS/Database Admin inputs any patient's name/HCNo and the information which need to be updated/removed/added via webportal. Webportal requests "User Database Managemenet" to do the operation on patient database. Webportal gets the data in response and displays on the screen.</p>	<p>AHS/Database Admin inputs any patient's name/HCNo via webportal. Webportal requests "User Database Managemenet" to get the patient vaccination data. Webportal gets the data in response and displays on the screen.</p>	<p>AHS/Database Admin inputs any patient's name/HCNo and the information which need to be updated/removed/added via webportal. Webportal requests "User Database Managemenet" to do the operation on patient database. Webportal gets the data in response and displays on the screen.</p>
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## Agent Model:



## Service Model:

Service	Inputs	Outputs	Pre-conditions	Post-conditions
<b>Generate Vaccine Reports</b>	1) Patient Name/HcNo	1) Vaccination Report File	1) Webportal instance is created and associated with the user	1) User Enters his Name/HcNo
<b>Interaction with Users</b>	1) Login Page: LoginID/Password 2) Display Report: Patient Information (Name, HcNo.) 3) Show/Add/Remove/Update User/Report Databases: Patient Information (Name, HcNo.)	1) Verify Login cred. and jumps to next page accordingly. 2) Display final vaccination report. 3) Display Database entries or Add/Remove/Update operation success/failure message.	1) Webportal instance is created and associated with the user, Webportal is initialized with login page. 2) Webportal instance is created and associated with the user, "Get Report page" on webportal is initialized 3) Webportal instance is created and associated with the user, "Show/Edit Database" page on webportal is initialized	1) User enters LoginID/Password 2) User Enters Name/HcNo. 3) User Enters Name/HcNo.
<b>User Database Management</b>	1) Patient Name/HcNo, Operation Type: Show, Add, Remove, Update	1) Sends records from database or success/failure message in the case of Add, Remove, Update Operation Types.	1) Webportal instance is created and associated with the user, Webportal is initialized with "edit form page" in case of Add/Remove/Update or with "Table" page in case of Show operation type.	1) User enters operation type and information accordingly.
<b>Vaccine Report Database Management</b>	1) Patient Name/HcNo, Operation Type: Show, Add, Remove, Update	1) Sends records from database or success/failure message in the case of Add, Remove, Update Operation Types.	1) Webportal instance is created and associated with the user, Webportal is initialized with "edit form page" in case of Add/Remove/Update or with "Table" page in case of Show operation type.	1) User enters operation type and information accordingly.



## Acquaintance Model:

