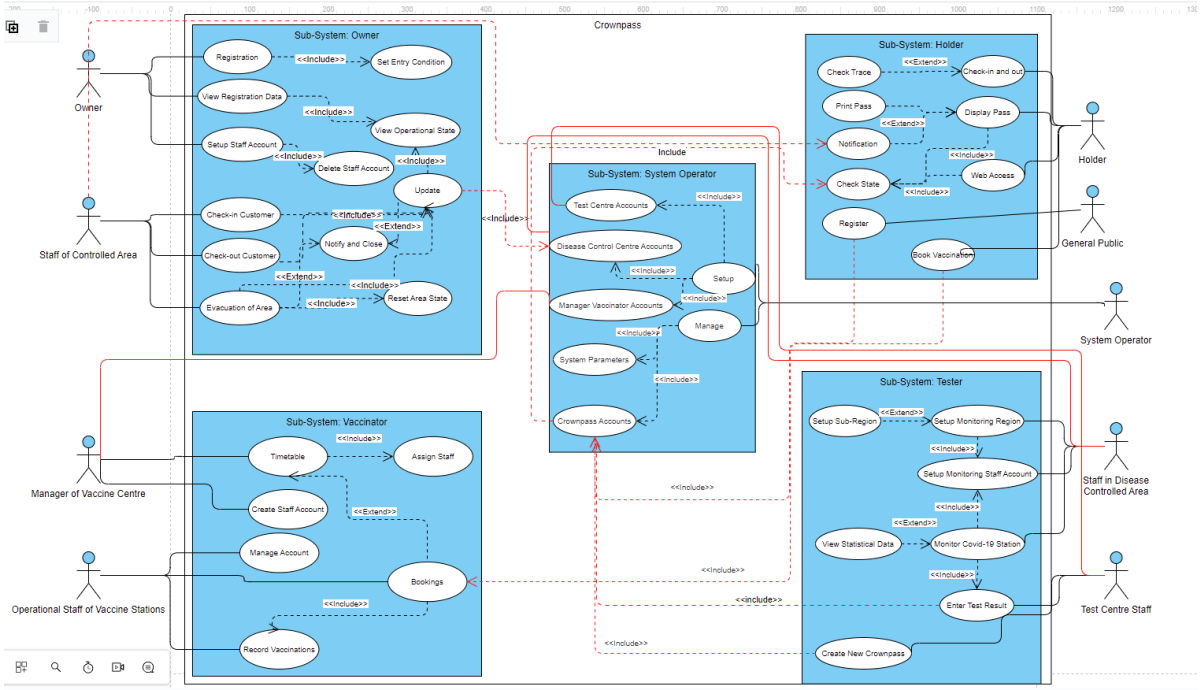
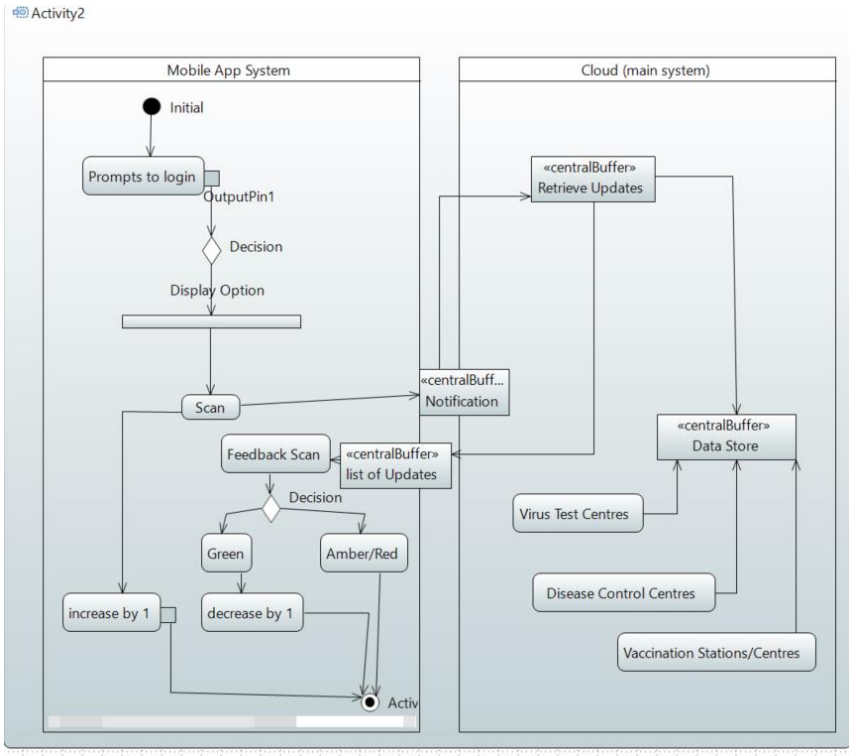
18047277

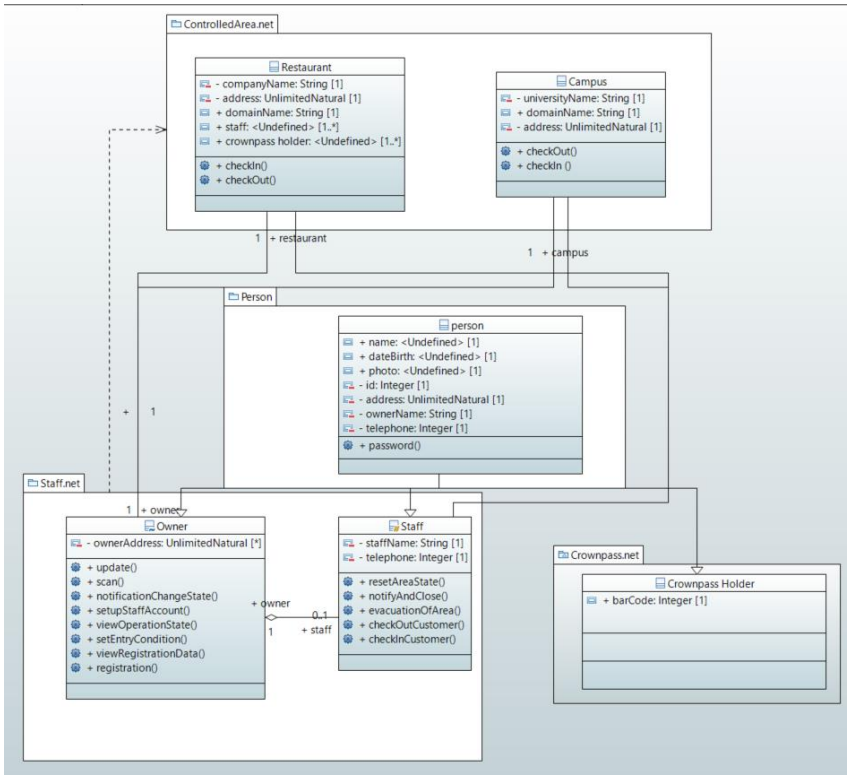
Use Case Model



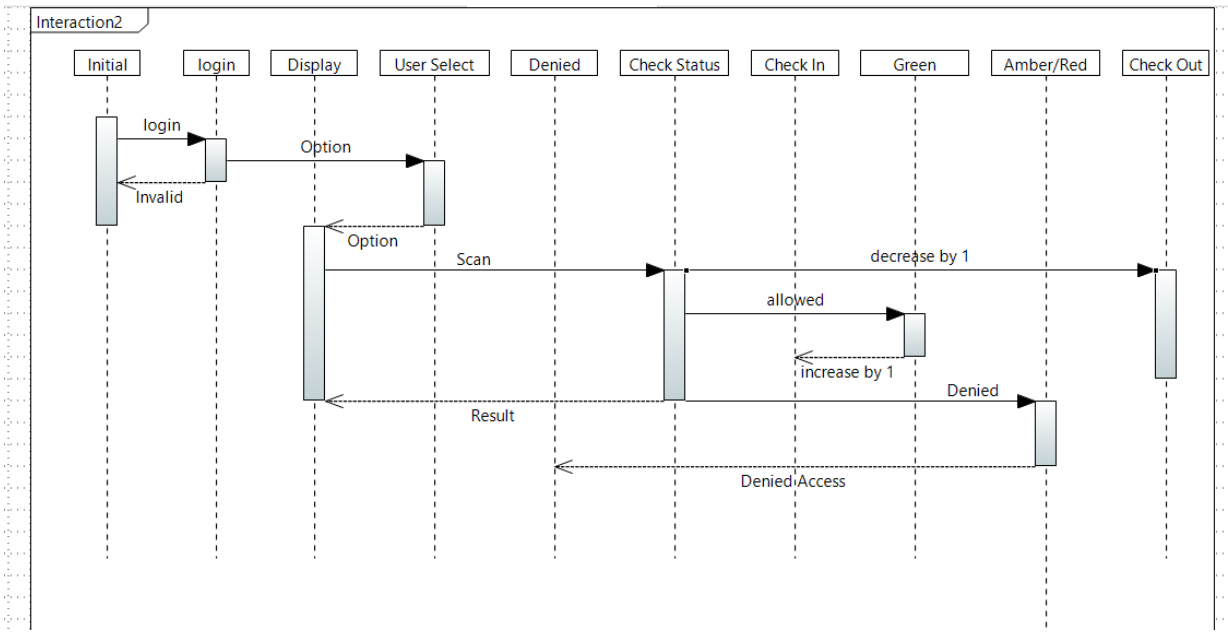
Activity Model



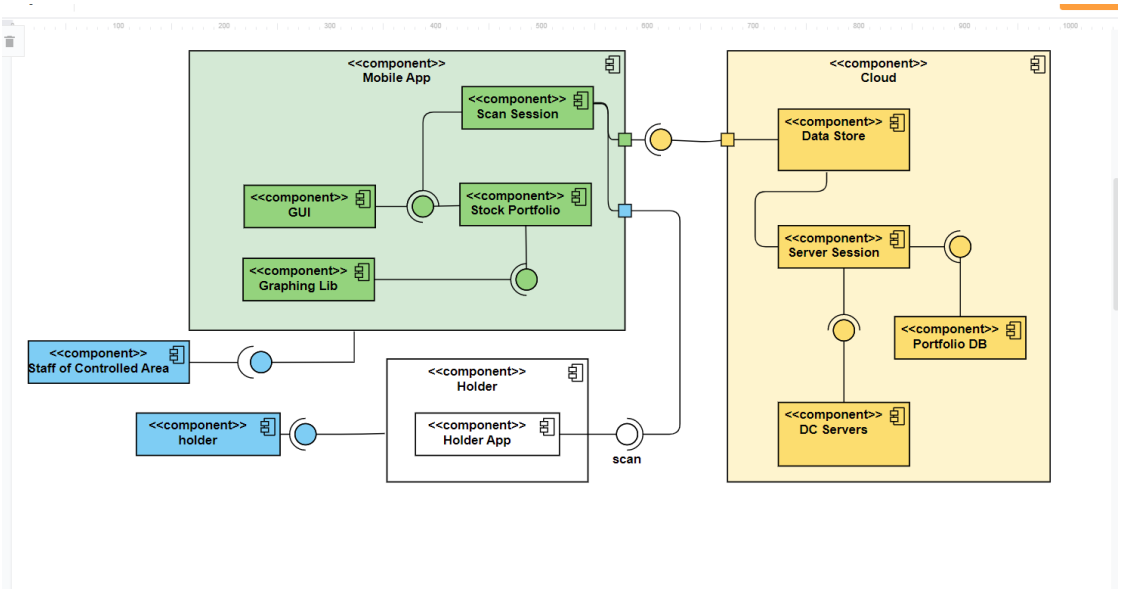
Structural Model (Class Diagram)



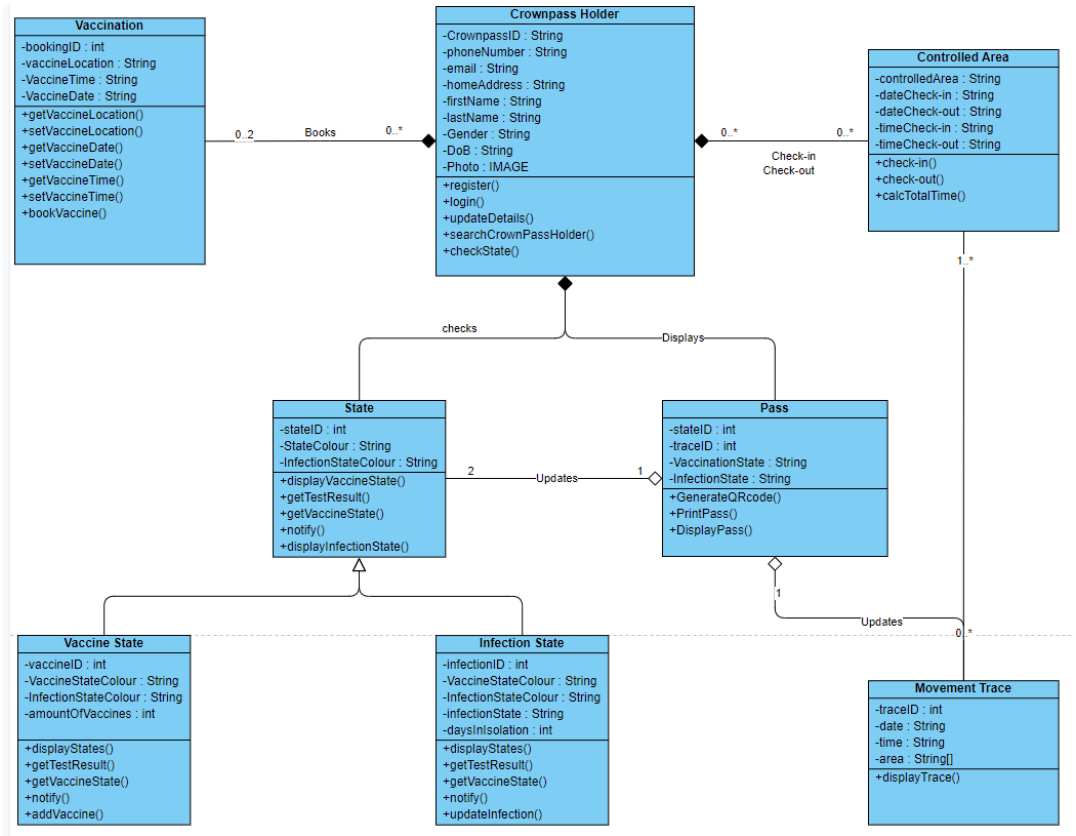
Behaviour Model



Architecture of the subsystem



Class Diagram Subsystem



3. a) Here is a test for the controlled area subsystem.

Unit Case Tested	Expected Result	Actual Results
Scan Check-In	The controlled area checks on and verifies the crown pass holder matches the customer by checking the crown pass id, the status of the crown pass holder is, check the controlled area capacity	If the status is green and the capacity of the controlled area is less then allow the customer in the controlled area and increase the capacity by one
Scan Check-Out	The customer has finished his operation in the controlled area and wants to leave	Check out customers and decrease the capacity of the controlled area by one
Receive Notification	The system scans the status of the customer status and if there is any red status	Notify controlled area staff when the status of any custom changes to red
Reset Area State	Some customers may fail to check out this check to see if such customers exist. The system checks for customers not checked at the end of the day	The controlled are staff resets the number of customers in the controlled area
Disable Check In	If the status of the customer changes to red the check-in function is disabled	Disable check-in function such that it cannot operate again unless it is reset.

3. b) System test plan, from the controlled Area one of microservice in your architectural design that was developed test plan. It should include a set of test cases that adequately cover all possible service requests and responses.

Test case	Expected	Actual results
Select the update-controlled area data	After selection, the controlled area service interacts with the controlled area database	Request submitted
Send request	The request interacts with the controlled area database and loads the form	Display editable form
The client fills the form	The form fields are populated with data	A controlled registration that is fully populated
Submit form	The update-controlled area process interacts with the database and the update is populated in the controlled area database controller	Successfully updated control area data in the controlled area database controller
Navigate to the registration page	The controlled area navigates to the page that requires him or her to register the controlled area page	Display the registration page
Display registration form	The controlled area staff click clicks on the register area button	The system loads and displays the fillable registration form
Populate the form with data	The controlled area staff fill all the required details about the controlled area	A filled registration form

Submit registration data	The user clicks on submitting the form details.	The system submits the form data and verification occurs
Save data	If the form details were filled in correctly data saved to the database	Save controlled area data
Successful registration message	Display the operation message	Success message displayed Else Failure to save the message