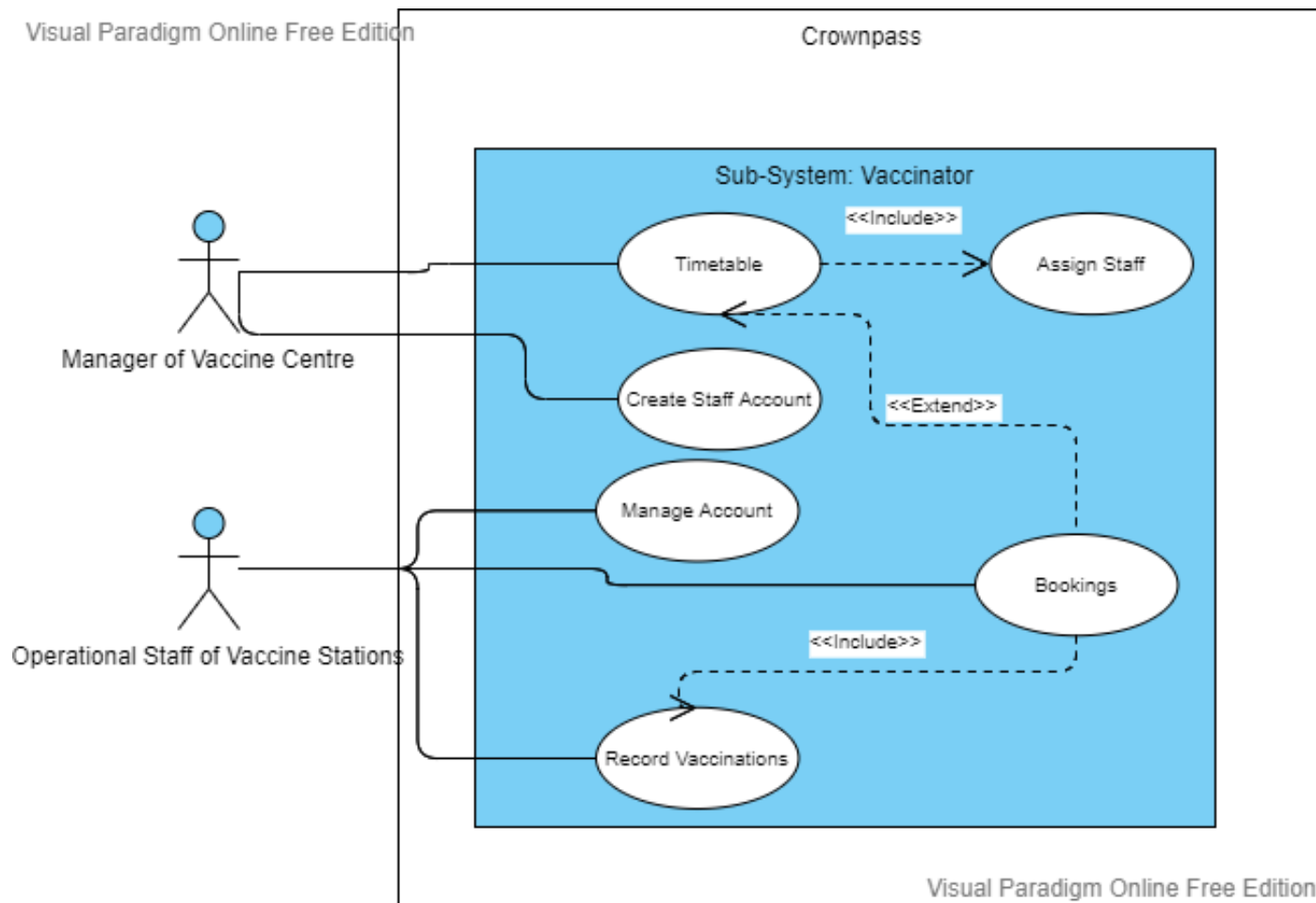
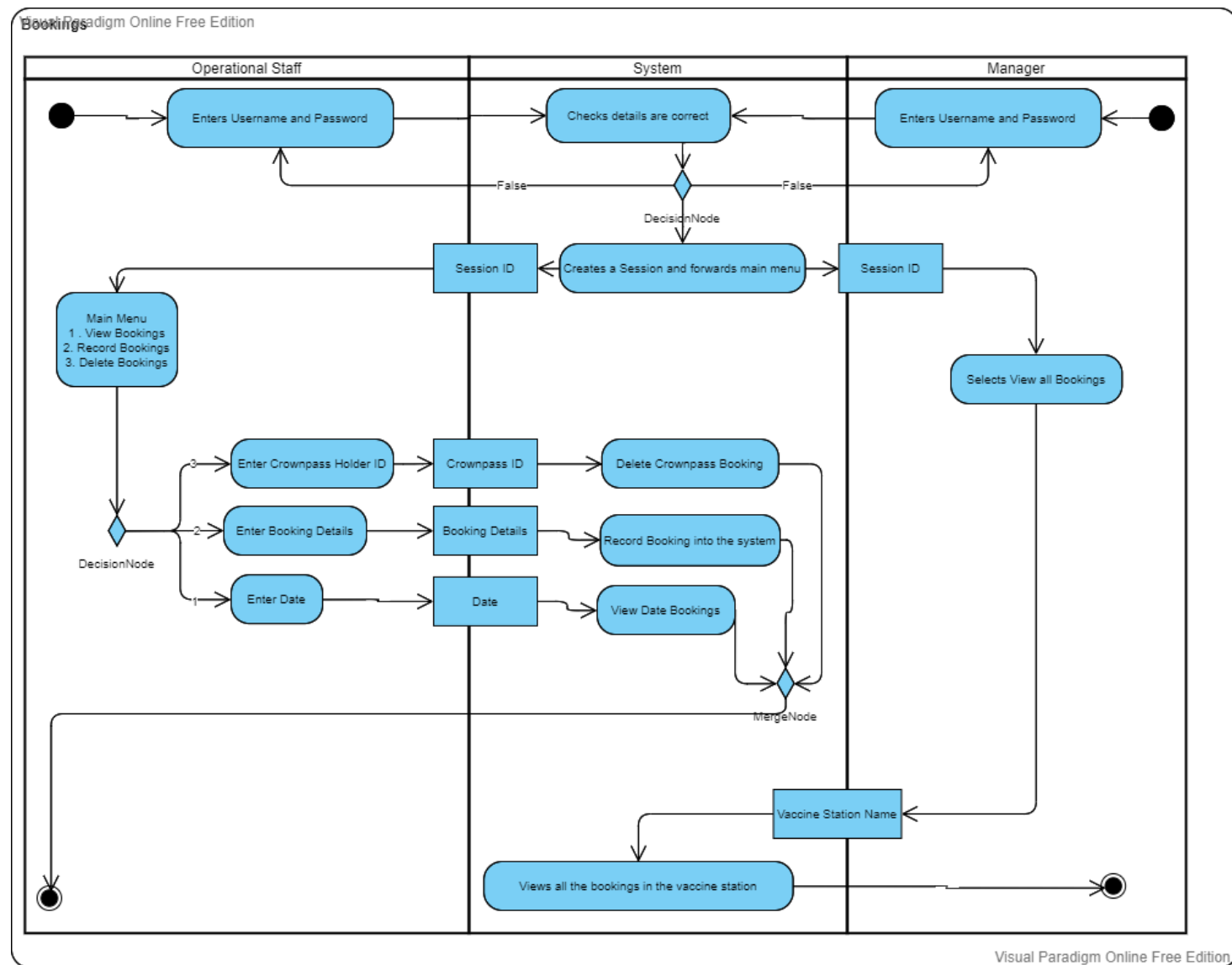


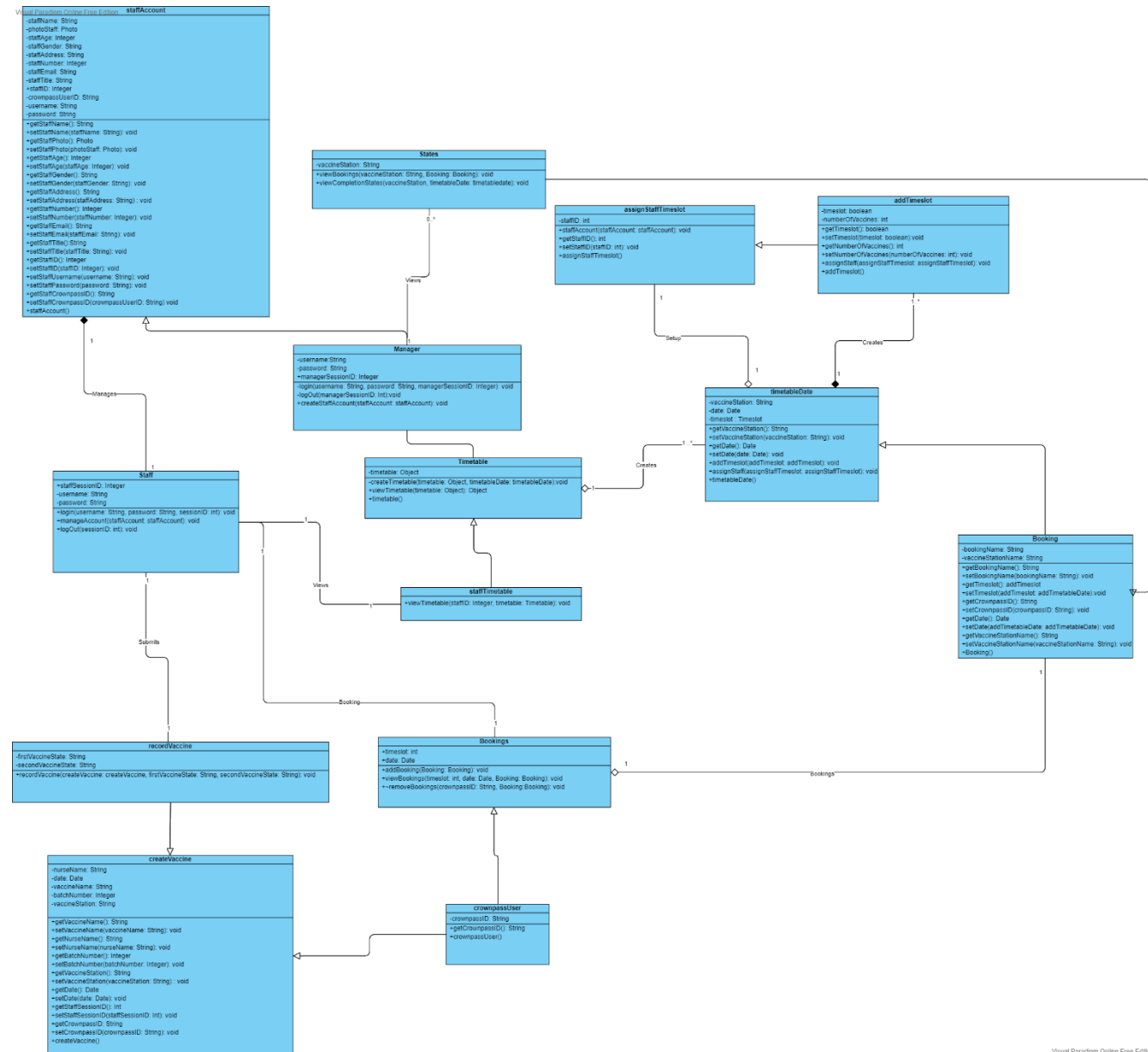
Use Case:



Activity Model:

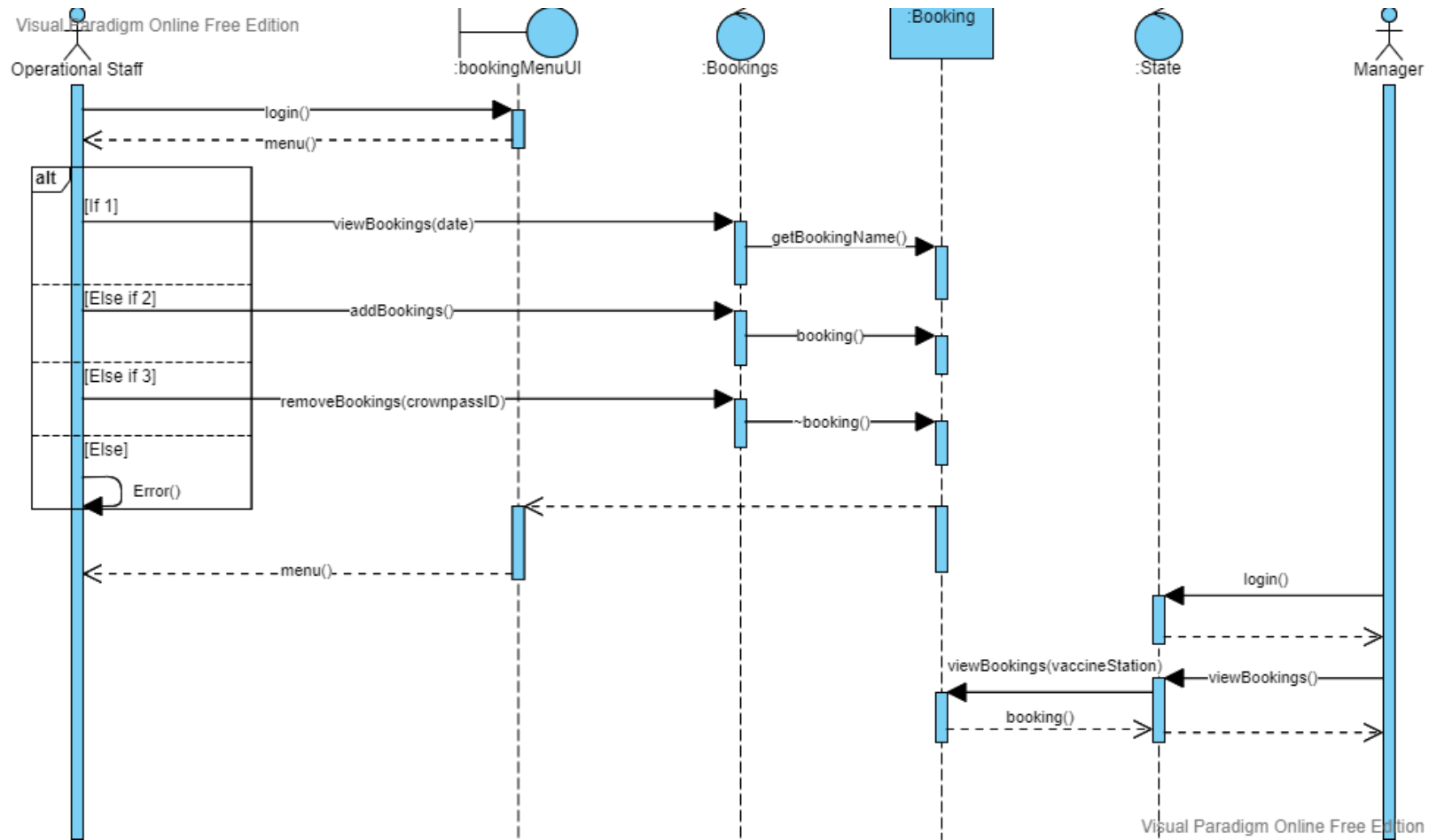


Structural Model:

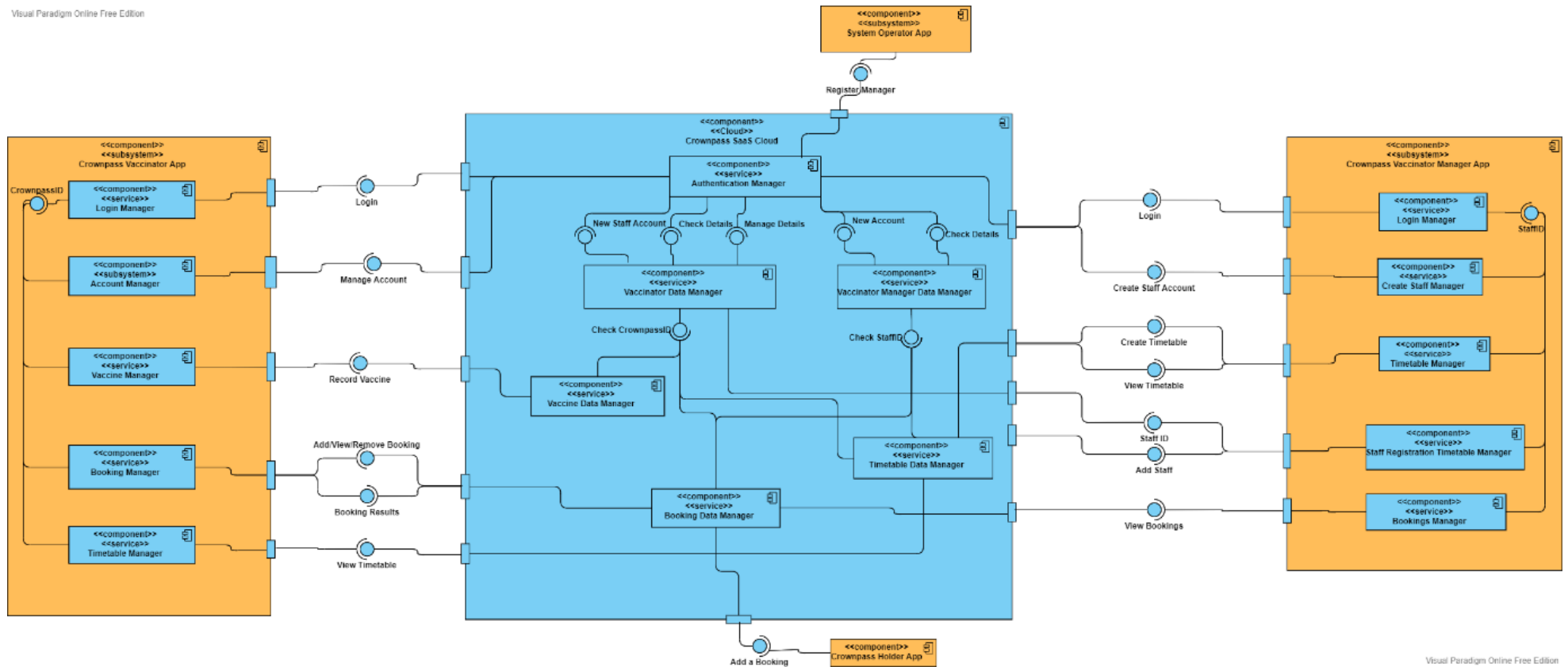


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Behaviour Model:



Architecture of the Subsystem:



Unit test plan for the class "staffAccount":

| Test Number: | Test Case: | Actor | Variables Used: | Functions Used: | Inputs: | Expected Result: | Required Expectations: |
|--------------|--|---------|----------------------|---|--------------------------|---|--|
| 1 | Add the staff members name and check that it has set it | Manager | staffName : String | setStaffName(staffName: String) getStaffName() | Name of the staff member | The setter should set the name and then the getter should get the name | N/A |
| 2 | Set the staff photo and check that it has uploaded | Manager | photoStaff: Photo | setStaffPhoto(photoStaff : Photo) getStaffPhoto() | Jpg or png of the photo | The setter will need to have an upload feature where the manager can upload the picture and then using the getter check the image | Staff Name |
| 3 | Set the staff member age and check that it has set it | Manager | staffage: Integer | setStaffAge(staffage: Integer) getStaffAge() | Age of the staff member | The setter should set the age using an input box and then the getter should show it | Staff Name Staff Photo |
| 4 | Choose the staff gender with an option list and check that it has worked | Manager | staffGender : String | setStaffGender(staffGender: String) getStaffGender() | Choose the staff gender | The setter should be an option select where you select the option of the gender from an option list and the getter that checks that the | Staff Name Staff Photo Staff Age |

| | | | | | | | |
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| | | | | | | gender has gone through | |
| 5 | Enter the staff address with different input boxes but then combine them with the setter and display it | Manager | staffAddress: String | setStaffAddress(staffAddress: String) getStaffAddress() | Address Line 1 and 2 Postcode City County | The setter should set the string in a format where the getter can then display them line by line | Staff Name Staff Photo Staff Age Staff Gender |
| 6 | Staff Phone Number should be entered in an input box with validation and then displayed to check it | Manager | staffNumber: Integer | setStaffNumber(staffNumber: Integer) getStaffNumber() | N/A | The setter should be used to get the input box and check that the phone number is valid by checking how many digits it has and then displaying it using the getter | Staff Name Staff Photo Staff Age Staff Gender Staff Address |
| 7 | Staff Email address needs to be entered in an input box with validation and then | Manager | staffEmail: String | setStaffEmail(staffEmail: String) getStaffEmail() | Email address | The setter should check if the email ends in either or .com, .co.uk, .org etc and has a @ in it so it's a valid email and then | Staff Name Staff Photo Staff Age Staff Gender Staff Address Staff Phone Number |

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|----|--|---------|-------------------------|---|--------------|---|---|
| | displayed to check it | | | | | getter is used to display it | |
| 8 | Staff Job Title can be chosen from an option list (Nurse, receptionist, doctor onsite manager) and then the display it to check it | Manager | staffTitle: String | setStaffTitle(staffTitle: String) getStaffTitle() | Choose Title | The setter should read from the option list and set the variable as that option only and the getter displays that title | Staff Name Staff Photo Staff Age Staff Gender Staff Address Staff Phone Number Staff Email |
| 9 | Staff ID should be generated using an algorithm | Manager | staffID: Integer | setStaffID(staffID: Integer) getStaffID() | N/A | The setter should be used to generate the numbers a unique 6-digit number and then the getter should display it. | Staff Name Staff Photo Staff Age Staff Gender Staff Address Staff Phone Number Staff Email Staff Job Title |
| 10 | Staff ID Optional | Manager | staffID: Integer | setStaffID(staffID: Integer) getStaffID() | N/A | If the Manager chooses the staff id can be skipped with a check box if not required | Staff Name Staff Photo Staff Age Staff Gender Staff Address Staff Phone Number Staff Email Staff Job Title |
| 11 | Generate the Crownpass | Manager | crownpassUserID: String | setStaffCrownpassID(crownpassUserID: String) getStaffCrownpassID() | N/A | Using the same generate algorithm used | Staff Name Staff Photo Staff Age |

| | | | | | | | |
|----|--|---------|------------------|------------------------------------|--------------|---|---|
| | User ID using the same methods as the other subsystem and displaying it to check it | | | | | for the other subsystems generates a string for the id using the setter method and display it to check with the getter | Staff Gender Staff Address Staff Phone Number Staff Email Staff Job Title |
| 12 | Staff User name can be inputted into input box however needs to meet a specification | Manager | username: String | setStaffUsername(username:String) | Username | The setter method should check that the username meets a specification so the username cant be guessed against an attacker | Staff Name Staff Photo Staff Age Staff Gender Staff Address Staff Phone Number Staff Email Staff Job Title Staff Crownpass ID |
| 13 | Staff Password can be entered into two input boxes to compare them and it is hashed | Manager | Password: string | setStaffPassword(password: String) | Password X 2 | The setter method compares two input boxes to make sure they match and makes sure that it meets the password spec for security strength | Staff Name Staff Photo Staff Age Staff Gender Staff Address Staff Phone Number Staff Email Staff Job Title Staff Crownpass ID Staff Username |
| 14 | All tests shown can be submitted | Manager | N/A | staffAccount() | N/A | The constructor with all tests setters can set all the user details | N/A |

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| | using the constructor | | | | | and then the getters are used to access that data when needed | |
|--|-----------------------|--|--|--|--|---|--|

System Test Plan for the use case “ Record Vaccinations” on the sub system “Vaccinator”:

| Test Number: | Test Case: | Actor: | Test Case Type: | Inputs (If Any): | Expected Results: | Notes: |
|--------------|---|-------------------|------------------------|-------------------------|--|--------|
| 1 | Be able to enter and check a valid crownpassID | Operational Staff | Functional Requirement | crownpassID : Int | The crownpass ID will be checked if its valid and be able to enter the next data set | |
| 2 | Be able to select the timeslot of the booking | Operational Staff | Functional Requirement | Option: int | The booking will appear on screen that the crownpassid which has been chosen and you just got to click that option and moves you on to the next data set | |
| 3 | Be able to select from an option panel which vaccine was injected | Operational Staff | Functional Requirement | Select (Option list) | Option is selected from the list with the vaccine provided from the centre as its more secure | |
| 4 | Be able to enter the batch | Operational Staff | Functional Requirement | vaccineBatchNumber: Int | The batch number is entered and | |

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| | number of the vaccine | | | | bought to the next data set | |
| 5 | Be able to select which nurse conducted the injection | Operational Staff | Functional Requirement | Select(Option List) | Select the nurse that is on duty at the time of the injection. | |
| 6 | Automated Staff ID | Operational Staff | Functional Requirement | N/A | The staff entering the information is automatically put on the form with the sessionID | |
| 7 | Be able to submit the form | Operational Staff | Required Design Feature | Submit Button | The form should be submitted and added to the storage of the crownpass id information | |
| 8 | The system should change the colour of the vaccinated state | System | Functional Requirement | N/A | When submitted the vaccine state should change to light blue if it is the first and dark blue if it is the second | Two submits on the same crownpass has to be done for this test to pass. |
| 9 | Be able to fill in the form in a mobile app version | Operational Staff | Required Design Feature | Test numbers 1-8 | Be able to complete all the tests in the mobile app version | The inputs are the tests conducted between 1 -6 so all of them tests must succeed on the mobile app for this test to pass |
| 10 | Be able to fill in the form in the desktop version | Operational Staff | Required Design Feature | Test numbers 1-8 | Be able to complete all the tests provided on the | The inputs are the tests conducted between 1 -6 so all |

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| | | | | | desktop web-based version | of them tests must succeed on the web-based desktop version for this test to pass |
| 11 | For the vaccine submission form the response time should be no less than 3 seconds | System | Performance | N/A | Set a timer and conduct the submission and it should be no more than 3 seconds | |
| 12 | Be able to enter the vaccine results at any time 24 hours a day, 7 days a week | Operational Staff | Reliability | Form | Test it at off peak times and collect data and monitor the servers | For this test to succeed, submit the forms at off peak times and the test will be passed |
| 13 | Mobile app failure rate for submitting the vaccine | System | Reliability | N/A | When using the mobile app for the vaccine submission the mobile app shouldn't fail. The failure rate per platform should be less than 0.3% | |
| 14 | Submitting the vaccine data failure rate | System | Reliability | Form | The failure rate when submitting to the system should be lower than 0.0001% | |

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| 15 | Automated state change failure rate | System | Reliability | N/A | The failure rate when submitting the form and the state is change should be less than 0.0001% | |
| 16 | The user should be able to see their vaccine data | Holder/ User | Security and Privacy Protection | N/A | The crownpassID used when entering the vaccine data should be able to see their results and state but not modify it | |
| 17 | For entering the vaccine results on the mobile app, the platform being used can be the top 5 operating systems and the top 10 makes and models | Operational Staff | Platform Compatibility | N/A | Try the top 5 operating systems and the top 10 makes and models and it works when submitting the vaccine data | |
| 18 | For entering the vaccine results on the desktop web based version, it should work on Windows, Mac and Linux operating system and | Operational Staff | Platform Compatibility | N/A | Test it on all the operating systems and on all the browsers listed in the test case and it should all work. | |

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| | works on Chrome, Firefox and Safari web browsers | | | | | |
| 19 | The mobile app GUI for entering the vaccine results should be easy to use and accessible | N/A | Usability | N/A | Let users try out the GUI on a beta test trial and make sure its easy to use | |
| 20 | The mobile app GUI for entering the vaccine results should comply with accessibility standards | N/A | Usability | N/A | Make sure that the system for adding the vaccine results comply with accessibility standards | |
| 21 | The mobile app GUI for entering the vaccine results should adapt the screen size automatically | Operational Staff | Usability | N/A | Try it out on different size devices like tablets and phones with different screen sizes | |
| 22 | The mobile app GUI for entering the vaccine results should be identical on different platforms | Operation Staff | Usability | N/A | Try it out on Android, Google Pixel, Apple and any other platform to make sure its identical | |

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