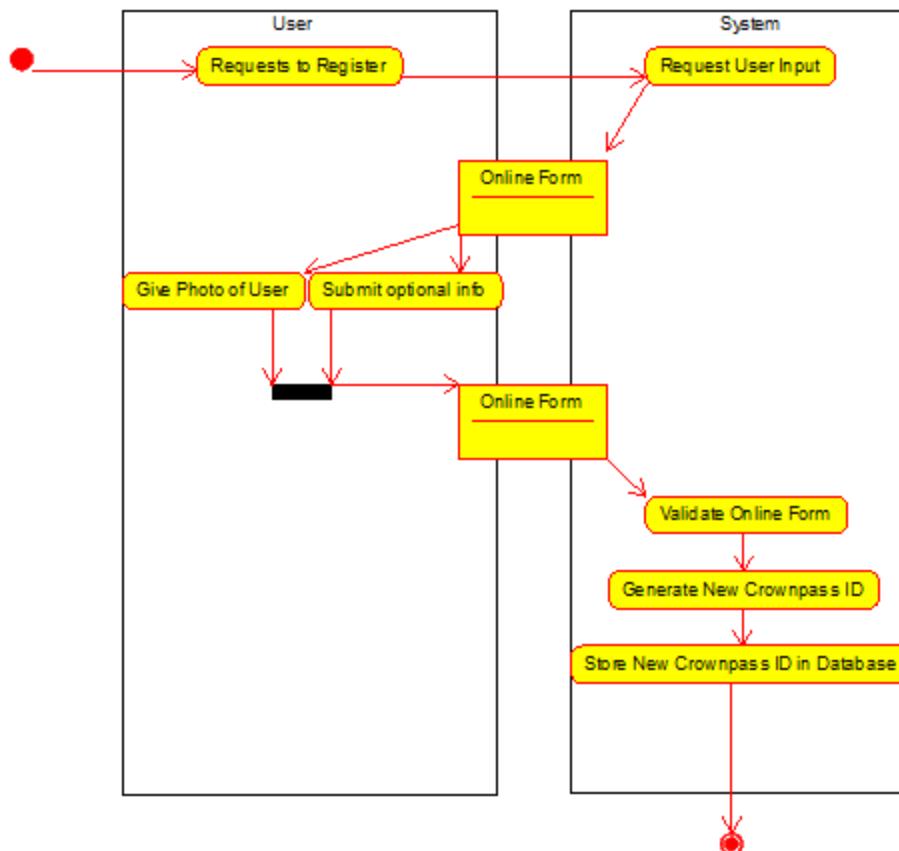
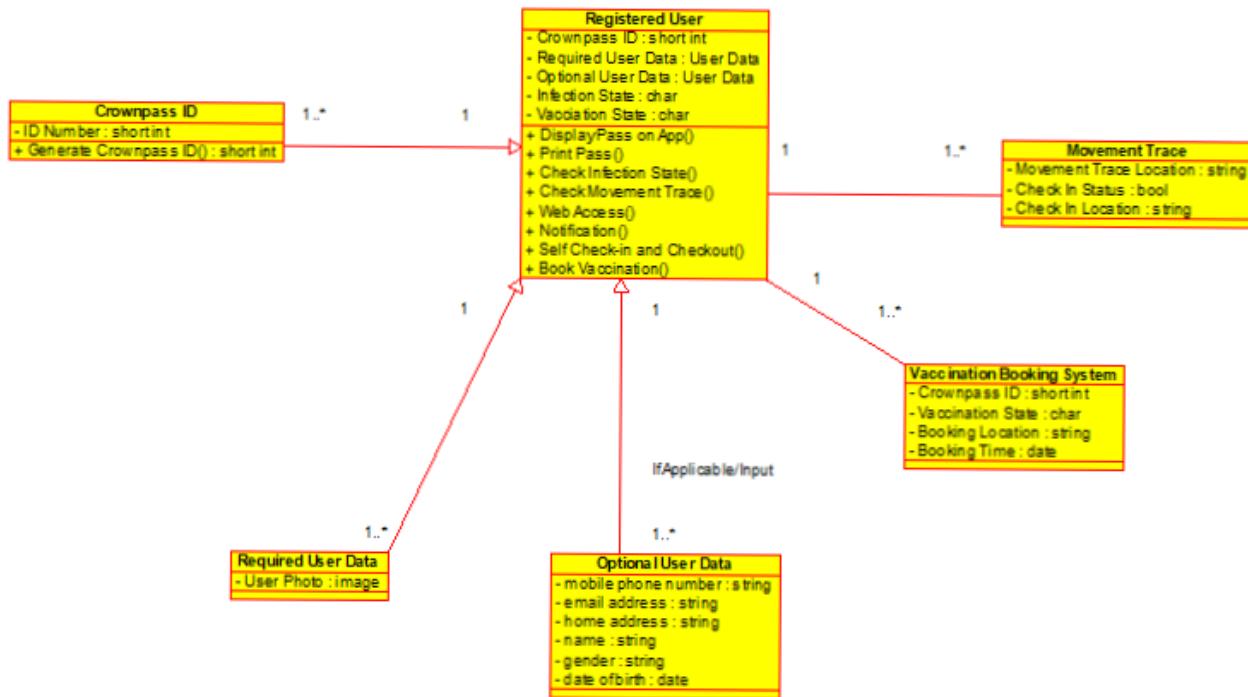


## Activity Diagram

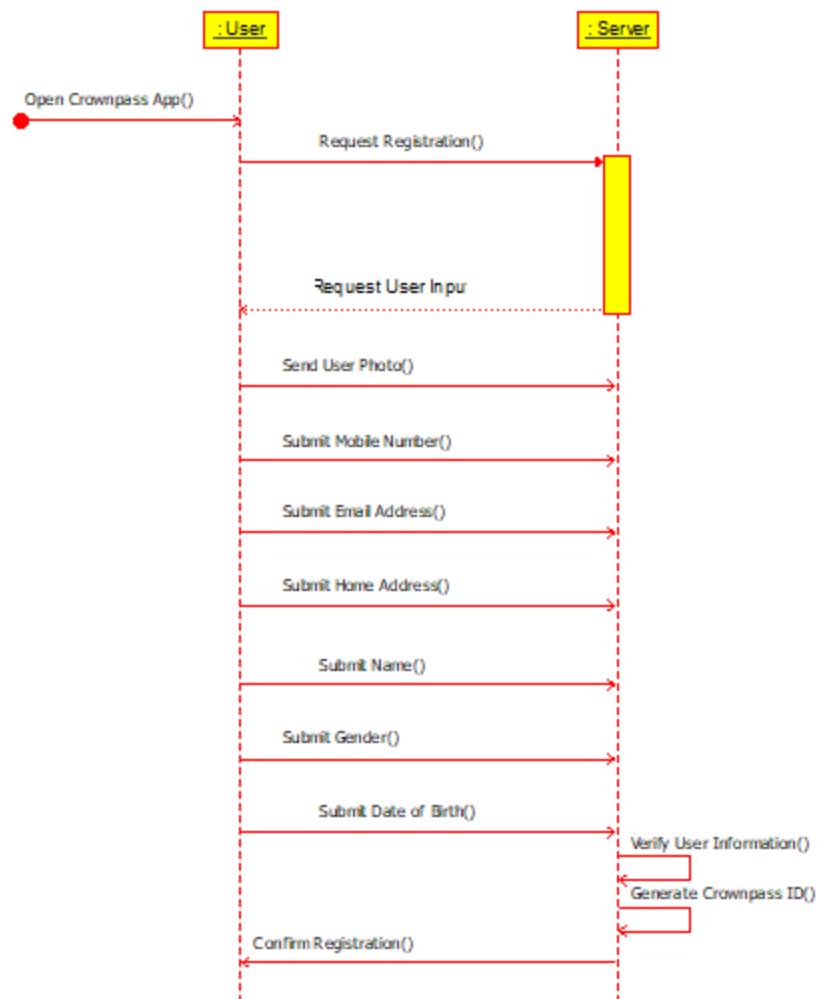
Several public users can register to the Crownpass system to obtain a Crownpass ID.



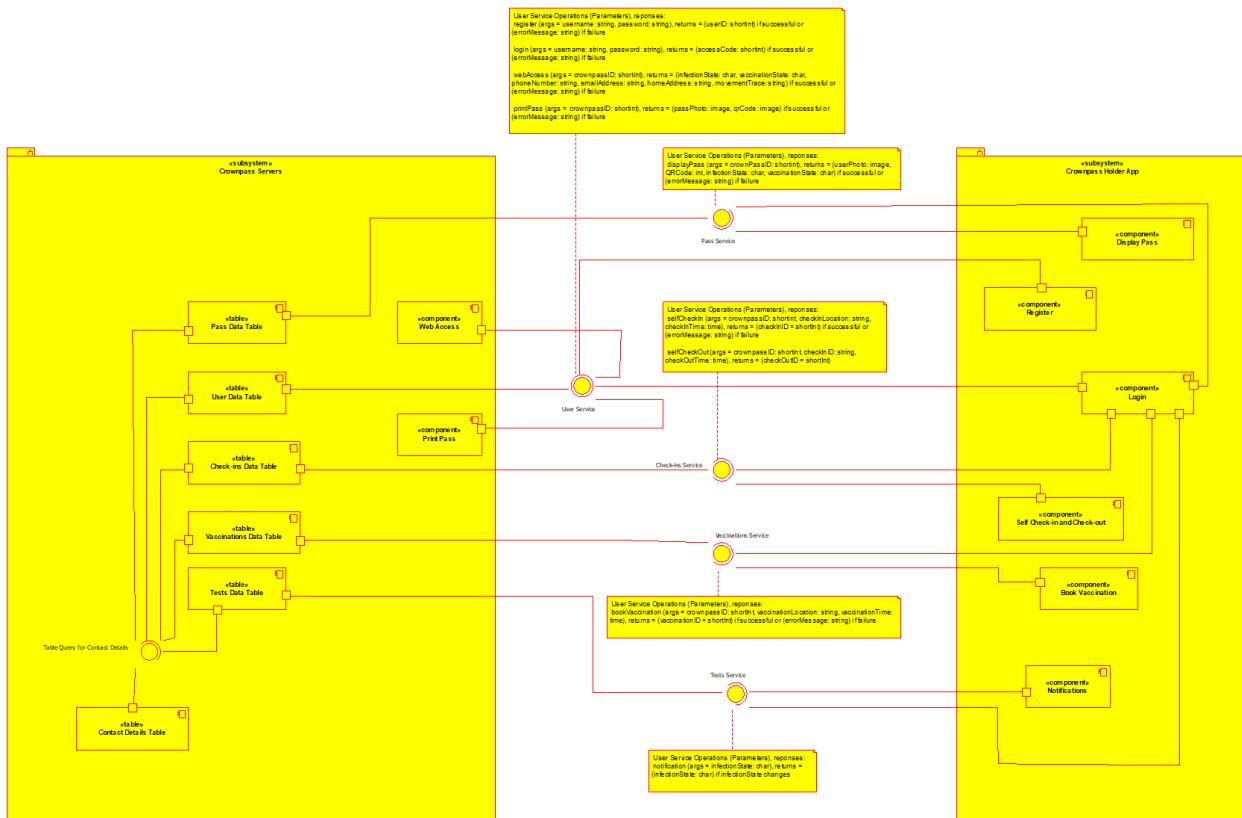
## Class Diagram



## Sequence Diagram



## Component Diagram



## **Unit Test Plan - Pass Service**

### **Class to test: Pass Service**

<b>Test Case</b>	<b>Method and Parameters</b>	<b>Expected Output</b>
Display Pass Successfully	displayPass(1)	userPhoto, QRCode, infetionState, vaccinationState  Of User where CrownpassID = 1
Display Pass Unsuccessfully via Incorrect Credentials	displayPass(2)	userPhoto, QRCode, infetionState, vaccinationState  Of User where CrownpassID = 2
Display Pass Unsuccessfully via Non-existent Credentials	displayPass(-1)	errorMessage

## **System Test Plan - Registration**

### **Use Case: Registration**

**Scenario: Successfully register into the system to become a Crownpass Holder**

<b>Customer</b>	<b>System</b>
1. Open Crownpass Holder app	
2. Request to register to the service (press the registration button)	3. Request user input
	4. Send registration form
5. Submit username and password, required user info (photo of user) and any optional user info (mobile phone number, email address, home address, name, gender, date of birth)	6. Receive information from online form
	7. Authenticate user info
	8. Generate new Crownpass ID
	9. Populate data tables with new user information and form associations.
11. Receive confirmation of registration	10. Send confirmation message to user

## **Test Data**

### Input

- Username
- Password
- Required user info: Photo of user
- Optional user info: Mobile phone number, email address, home address, name, gender, date of birth

### Stored Data

- On mobile device: None
- On cloud/server: Lists of already registered users (not empty), details of registered users (not empty), data associated with registered Crownpass holders

### Output

- User ID and a confirmation of success
- Or an error message of failure

## **Test Process**

1. Set up test context
  - a. Mobile device with Crownpass Holder app installed
  - b. Crownpass server with databases
2. Open Crownpass Holder app
3. Request to register to the service (press the registration button)
4. Request user input
5. Send registration form
  - a. Expected output: Online form sent
  - b. Check: If user received online form. If timeout (such as with a dropped connection, display error code.
6. Submit username and password, required user info (photo of user) and any optional user info (mobile phone number, email address, home address, name, gender, date of birth)
  - a. Expected output: Data accepted for processing
  - b. Check: If any data is incorrectly formatted, deny submission request.
7. Receive information from online form
8. Authenticate user info
  - a. Expected output: Data accepted and viable for new Crownpass Holder
  - b. Check: If details that must be unique (such as usernames, photos of the user, or email addresses) match already existing users. If so, deny registration to prevent duplicate users.
9. Generate new Crownpass ID
10. Populate data tables with new user information and form associations.
11. Send confirmation message to user
12. Receive confirmation of registration
  - a. Expected output: Confirmation displayed on device within app.