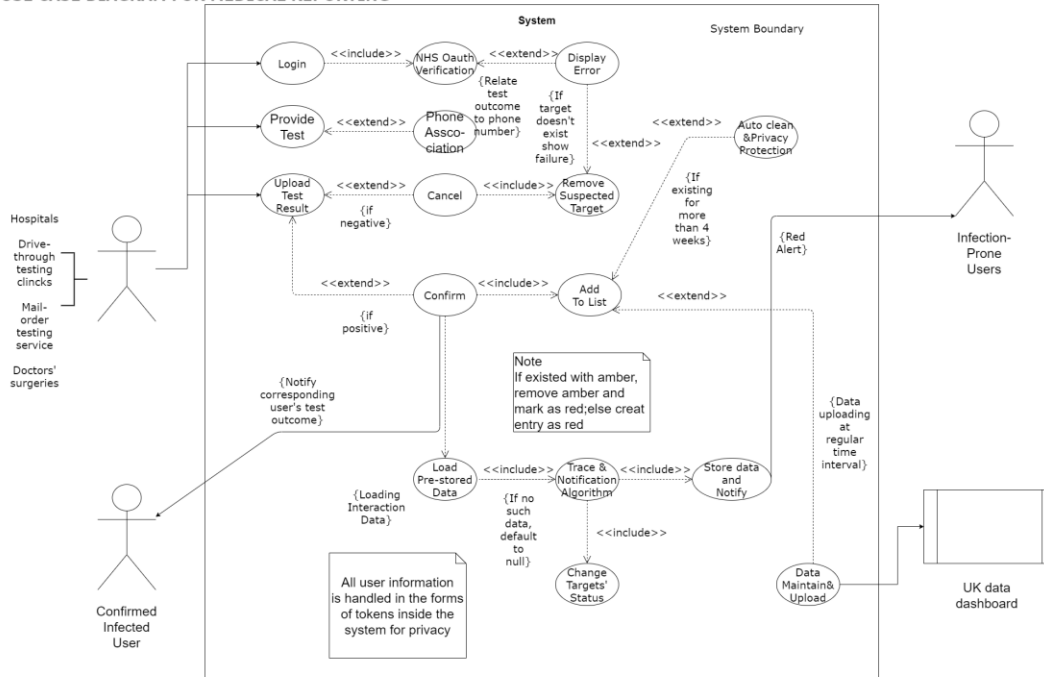


USE CASE DIAGRAM FOR MEDICAL REPORTING



Description ---Text---

Medical professionals or certified testing services may confirm COVID-19 tests result for suspected cases or medically report to system about an individual.

Actors -----

- Medical professional or certified testing service (named MP in this use case for short)
- Individual user (named User in this case for short)

Pre-conditions -----

- Internet access is available.
- MP has a registered account in the system.
- MP has a valid login credential for the national NHS user authentication system.
- MP is authorised as a qualified user via OAuth access delegation system.
- MP is logged in to mobile app on UI.
- User has a registered account in the system.
- User has self-reported and is a suspected case in the system.
- User seeked and finished a test.
- User's phone is associated with MP.
- MP has the result of COVID-19 test of User.

Post-conditions -----

- User is removed from suspected case list.
- User is added to the confirmed case list if result is positive.
- All users who have been directly or transitively contacted with the user are removed from amber-status list related to this case.
- If test result is positive, all users who have just been removed from amber-status list are registered as red-status users in the system.

Main Scenario -----

- 1. MP enters test result in the app UI and links it with User's phone.
- 2. If the result is positive, move user info from the back-end list of suspected case to the back-end list of confirmed cases, move all users info in the amber status list related to this case to red status list.
- 3. If the result is negative, remove User's info from back-end suspected case list, remove all users info in the amber status list due to this case.
- 4. Notify the app front-end to show completion.

Alternative Scenarios -----

User doesn't exist in suspected cases list, result is negative

- 3. Try to remove User's info from suspected case list: User doesn't exist.
- 4. Notify the app front-end to show failure. Ask whether to retry?
- 4. If retry, go to 1: Re-enter test result and re-link the result with User's phone.
- 6. If not retry, exits.

back-end list info deletion or move failed or partially failed

- 2/3: Back-end manager failed to add user info completely into any of the list.
- 4. Notify the app front-end to show failure. Ask whether to retry?
- 5. If retry, go to 2.
- 6. If not retry, recover all lists.

Failure Situation -----

1. User didn't self-report but was confirmed by medical professionals. If this user doesn't log in as we request, then his or her interactions with other people cannot be tracked. This can partially be solved by requesting concerned users to log in to the system and accepts interaction data request after being confirmed, but users may not choose to conform.
2. User didn't register into the system but was confirmed by medical professionals. Information about user's region is unknown thus the data reported to the government is incomplete. We must encourage as many users as possible to register with the system.
3. Medical professionals have been compromised so that third-party organisations can tempt with data; this is solved by using strong authentication methods.