HSBC - IBMish

Spec to tech

Imperial College London - EIE

Users can register and receive a unique private ID

Anyone suspicious they may have contracted COVID-19 can self-report

Users can be tested by NHS certified professionals

4. Medical professionals update users' status through an online platform

Users in contact with an infected person are advised to be tested and get a new Amber status

The system uses interaction data stored on phones to notify other users if they are at risk

These users then receive notification of their new Green/Red status

Register

UserID
Status
Location

DB

1. **Randomly** generated ID changes frequently
2. Interaction **stored locally.** < 14 days
3. Daily backup on cloud to **avoid system overload.** < 4 days
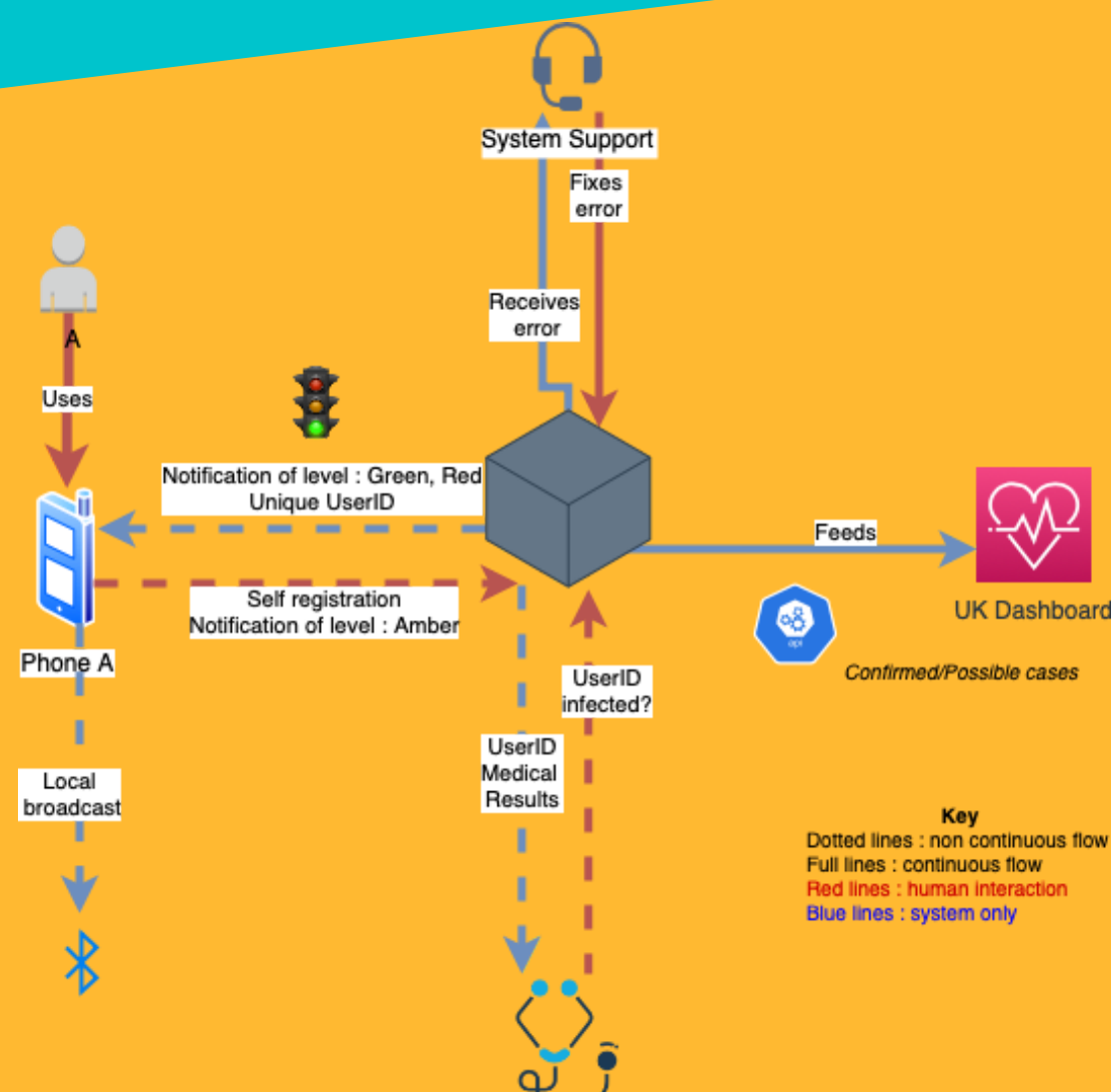
Using our application

Self Report.

A. Status is automatically updated to minimise user workload.

B. You will receive a notification for each status update and book a medical test through this app.

Medical Report.

A. Take a test with NHS registered professionals.

B. Minimal workload for medical staff who can batch test.

C. Once available, medical results are sent to users.

Healthcare professionals

Safety, Security

System Support

Fixes error

Receives error

Notification of level : Green, Red Unique UserID

Self registration Notification of level : Amber

Phone A

UserID infected?

UserID Medical Results

Local broadcast

Uses

A

Feeds

UK Dashboard

Confirmed/Possible cases

Key
Dotted lines : non continuous flow
Full lines : continuous flow
Red lines : human interaction
Blue lines : system only

1. Old data is **permanently deleted.**
2. Current **data backup** on database, cloud, device storage.
3. **System support** to notify suspicious change of status .
4. The "**Cone spread**" for non-direct interactions notifies users of their risk of infection.
5. Real-time **dashboard** shows virus spread in the UK, updated by the **3-level memory**.
5. **Scalability** of the system - can be adapted to smaller or bigger group of people