## Functional and Non-Functional Requirements of **CrownPass Tester**

## **Functional Requirements of Test Centre Staff**

**FR-ST-01: Enter Test Result**. The system should enable the staff of Covid-19 Virus Test Centres to enter test results to the Crownpass tracking system. When a test result of a Crownpass holder becomes available, the test result will trigger the transition of the state of the Crownpass as follows:

1. If the test result is POSITIVE, the Crownpass state must be changed into RED, no matter which state the Crownpass is currently in.
2. If the test result is NEGATIVE, the Crownpass state should be changed into GREEN no matter whichever state the Crownpass is currently in.
3. If the test result is UNDECIDED, the state of the Crownpass should remain as it is.

(*Priority: High*)

**FR-ST-02: Create New Crownpass**. The system should enable the staff of Covid-19 Virus Test Centres to create a Crownpass for a person who is being tested but has not been registered to the Crownpass tracking system in the same process as if he/she is registering for him/herself. (*Priority: medium)*

* ***Non- functional requirements***

## Performance:

**QR-PF-10: Setting up a Test Centre**. The response time for each operation in the process of setting up the mobile application for a staff of a test centre should be no more than 5 seconds.

**QR-PF-11: Enter Test Result**. The response time for the operation of entering a test result to the system should be no more than 5 seconds.

**QR-PF-04: Change Pass State to Red**. The time that a Crownpass’ state is changed into RED should be no more than 1 second after the Crownpass holder’s virus test result being positive is entered into the system.

**QR-PF-06: Change Pass State to Green**. The time that a Crownpass’ state is changed into Green should be no more than 5 seconds after the pass holder’s virus test result being negative is entered into the system.

**QR-PF-07: Notification of State Change**. The notification of the state change to a Crownpass holder should be sent out within 10 seconds after the state change takes place, if the notification is required.

## Reliability:

**QR-PC-02: Desktop/Web-based Application Platform**. The desktop/web-based computer systems for a disease control centre, test centre and vaccination management should be available for the Windows, Mac and Linux operating systems and compatible with Chrome, Firefox and Safari web browsers.

* 1. Scalability

**QR-SC-04: Test Centre**. The system should be able to provide services to staff of test centres to the scale that the total number of Test Centres is around 10,000 nationally, and on average about 20 staff members in each test centre. The setup operations for test centres will take place in the first 3 days when the system rolls out. The number of tests of viruses per day may increase from 200,000 to 500,000.