Hospital

GET IT ON Google Play

Download on the App Store

PASS & GO

Download

COVID-19 FREE PASS

User

OR

Kim Jian

Data Base Pool

Basic Medical Info
Birthday
Gender
Option
Vaccination
date
etc.
....

Input by Medical Institute

Medical Information DB

Government Institution

Identity Verefication

Kim Jian

Kim Jian

Test Kit

Public Institutions

Positive

OR

Negative

- To improve the reliability of the self-diagnostic test results, you may be asked to record a video of yourself taking the test or to have someone else guarantee the result of your test.

- A part of the revenue generated from the service will be donated to charities for distributing diagnostic kits.

Blockchain

COVID-19 Test Result

N Hours

- The app allows companies, venues or authorities to customize the valid time windows of test results which they would require for entry.

- Users can track their antigen/antibody test results and vaccination records on the app.

Immigration/ Border Control

Government Institutions

Corporate Organizations

QR Code Reader

Transportation

Hotel/ Events

Restaurant/ Shop

In 2020, COVID-19 swept our world. Most countries closed their borders and locked down, fundamentally changing every aspect of our lives. Despite our efforts to contain COVID-19, the pandemic is still not under control and continues to dictate our way of life. Businesses cannot operate normally and our behaviors remain to be shaped by social distancing guidelines. Meanwhile, governments have been criticized for their lackluster COVID-19 responses.

To combat these problems, GG56 and TrueChain, a blockchain technology developer, have created the **Pass & Go** App. Using the most of big data and blockchain technology, we can understand people's health in real time, ease the transition to pre-COVID lifestyles, and allow the healthy to return to work.

1. INTRODUCTION

- **Pass & Go** is a mobile application that securely stores individuals' infectious disease-related medical records such as antigen/antibody test results and vaccination status. The app then creates digital credentials to enable those without viruses or with immunity to engage in social and economic activities.

- **Pass & Go** is available for both Android and iOS.

- Anyone can download and register the app, from the general users to medical professionals and immigration officers.

- Or you can simply scan the QR code found on the COVID-19 diagnostic test kit to download the app.

2. <u>REGISTRATION</u>

- The registration process is very simple and easy. Take a picture of yourself holding your valid ID next to your face.

- Once your ID verification is approved, you can register an account and set up the password.

- Set up the password, then the user registration is completed.

3. <u>GET TESTED AND UPLOAD RESULTS (SELF-TEST)</u>

- Open the test kit box and scan the QR code printed on the pouch.

- The test kit number is automatically entered and the test will begin.

- Open the pouch, spit your saliva into the tube and drop the mixture of buffer and saliva into the sample hole. To prevent manipulations during the test, you are asked to record a video of yourself taking the test with showing your face.

- After the required time, the test result will appear on the result window and the result will be automatically read and uploaded via the app.

- The test results are encrypted and securely stored in the blockchain.

4. <u>GET TESTED AND UPLOAD RESULTS (BY CERTIFIED MEDICAL PROFESSIONALS)</u>

- Authorized medical professionals can conduct testing in certified medical institutions and directly upload the test results and medical records such as antigen/antibody tests or vaccination records on the app.

- For privacy protection, your information such as name, date or birth can be encrypted and only shown in an encrypted identifier.

- Even an authorized medical professional cannot access to your personal information, test results or medical records without permission.

5. <u>GET ACCESS</u>

- Based on the test result, **Pass & Go** will generate a health certificate or pass in the form of a QR code to enter restaurants, hotels, conference venues and even countries.

- You can submit your QR code that only conveys information such as whether you have a valid test result or indicators the place you want to visit require for entry.

- When your ID and QR code is verified, the message allowing your entry will pop up and you are allowed to enter the place.

- Since the QR code only carries the encrypted hash codes of your private information and do not reveal any sensitive personal information or medical records, your privacy is safely protected from leakage.

6. <u>WHY BLOCKCHAIN TECHNOLOGY?</u>

- For new data entry, blockchain records the new data by re-encrypting it and previously encrypted data. You cannot make an even slight modification without fundamentally changing the whole dataset, and thus, it virtually impossible to manipulate, modify and change the data stored in the blockchain.

- As a blockchain is a distributed and decentralized database, storing encrypted data across a number of different computers, it not only protects the data from corruption and loss, but resolves many issues related to the information monopoly of a certain country or authority.

7. <u>EXPECTED BENEFITS/OUTCOMES OF USING **Pass & Go**</u>

- Based on the blockchain technology, **Pass & Go** limits the range of data to which each user, venue and government can access.

  - When you are submitting your QR code to enter a restaurant, only your face and test-related information can be retrieved.

  - On the other hand, when you pass border controls, an immigrant officer can access to not only your face and test-related data on but other information such as your passport or visa numbers, which are required for country entry.

- Moreover, ***Pass & Go*** allows companies, venues or authorities to customize indicators they would require for entry.

  – A hospital may ask a visitor information on COVID-19 test results and temperature check for entry, but a company may require their employees to show vaccination records as well as test results and temperature checks.

  – Or, a conference hall only accepts a negative disease test result obtained within 24 hours, while a country may require visitors to present negative test results that have been issued within 72 hours prior to departure.

- ***Pass & Go*** will facilitate shifting the paradigm of public health intervention in managing outbreaks.

  – Rather than identifying the confirmed cases and restricting free movement of public, ***Pass & Go*** focuses on finding and certifying the ones without diseases or with immunity and allows them to engage in social/economic activities.