Handshake

Track your proximity to COVID-19.

Idea overview

Handshake is an id**ea to help with tracing of Covid-19.**

Key part of idea

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tl;dr

When people meet, ***one person scans the QR code of the other***, registering the connection.
People can report whether they have Covid-19 or not, matched with the connection data.

That simple idea may be all you **need to take this idea and make a fully-fledged version (I am not in a position to do so). But if you're curious about further thoughts on it, please read on.**

Finer details that could differ between implementations

Privacy

Here are a few options:

- **Have a centralised server keep the data recorded private.**
- **Have the data publicly available, but manage privacy by using a hash of the user's email and a passphrase (or some other method).**
- **Have the system only give out data that is intentionally slightly less accurate time-wise so that re-identification is harder (or other fuzzing).**

Centralisation/Decentralisation

- **Centralise the logins, making it easier to be able to offer push notifications to vulnerable people.**
- **Centralise the data, making privacy easier to handle.**
- **Decentralise the 'logins', making there be no requirement for a central authority in control of the logins.**
  This however makes spoofing easy and relies on trusting that people don't spoof the system.

Web-page vs App

- Make it a web-page, allowing for easy access without installation of an app.
- Make it an app, allowing for quicker access when people want to Handshake and other benefits.
- Make it both, allowing for the best of both worlds.
- Start with a web-page and later develop an app.

Use of free tools vs a paid server etc

- Free - The whole setup can be replicated for free by anyone.
  (Works best with public datasets that could be joined together).
- Paid - Many more possibilities for implementation.

Further details

For further details and a basic working implementation of this idea see:

https://github.com/Coda-Coda/handshake

The implementation makes a few of the design choices described above, but the central idea is simply to have one person scan the QR code of the other when they meet (or have QR codes for locations).

Specifically, the basic working implementation uses a hash of a user's email and a passphrase to aid privacy (or just a unique phrase), a centralised data store (Google Sheets), decentralised 'logins', is a web-page, and uses only free tools.

If you want to get involved

Get involved on GitHub

or

Send an email to get.involved.handshake@gmail.com