High level privacy and security design for NHS COVID-19 contact tracing app

NCSC technical paper about the privacy and security design of the NHS contact tracing app developed to help slow the spread of coronavirus.

This technical document provides a high-level overview of the security and privacy characteristics of the app that is in development by NHSx, the digital innovation unit of the National Health Service, to help manage the COVID-19 crisis in the UK.

Download the technical paper

This is not a full description of the entire system, the socio-technical design, epidemiological modelling or the plethora of other work being performed outside of this application development. Nor does this document detail the significant, diverse, expert input to the overall system and oversight of its development.

Disclaimer

Code is truth. This document is correct at the time of writing, but the system is still in development, so there may be detail changes before release.

In the interests of expediency, this paper concentrates on the most important privacy and security challenges involved in building a contact tracing app that is part of a wider public health management effort. There is much more in the security and privacy design, but those issues are not unique to a contact tracing app.

We intend to open source our codebase once the design is finalised. The documentation accompanying that released will supersede this paper.

There will be multiple releases of the app as the government's response to the COVID-19 virus progresses. Not all features detailed here will necessarily be in the initial release.

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WRITTEN FOR

Cyber security professionals

Public sector