



# Accelerating UKHSA's COVID-19 mobile app testing.

## Overview

**Customer:** UKHSA

**Industry:** Public Sector Health Care

**Location:** London, UK



UK Health  
Security  
Agency

## The Client

United Kingdom Health Security Agency. A Government department responsible for government policy on health and adult social care.

## Business Challenge

- This critical government programme was set up from scratch, to help control the spread of COVID-19 by ensuring that people can be tested when necessary, and by identifying close contacts of people who have tested positive.
- Government and policy decisions announced at short notice which required a quick turnaround of business changes released to production with adequate testing.
- The customer required a Quality Assurance & Testing partner to support the solutions underpinning this critical programme.
- Test resource requirements were fluid based on the regular Government updates, flexible resource fulfilment was required at short notice to meet demand.
- The scope included test delivery and assurance for the end to end test & trace applications. There was a key focus on automation testing of the COVID-19 App, test booking web portal journeys, Quarantine hotel booking portals, and Salesforce Supply Chain platform.

## Solution

- Sogeti deployed a team of specialist test consultants, which comprised of a Delivery Lead, Test Managers, Test Leads, Automation Architect, and Test Engineers (Manual and Automation) delivering to the customer's requirements.
- Automation Testing responsible for direction setting including the development and maintenance of secured test automation frameworks and automation test scripts.
- NHS COVID-19 Mobile App Testing:
  - iOS and Android Functional automation, backward compatibility, data analytics, and end to end journey testing.
  - Automated approximately 450 test cases using Java, Appium and Cucumber for the NHS COVID-19 mobile application platform, to be run at every release reducing the testing cycle time by approximately 50%. This has helped the automation team to dramatically reduce the effort and time to test functional features, analytics and backward compatibility for the application.
  - Integrated the tests with Browserstack for cross platform and cross device testing.
- Developed and maintained an automated regression pack of around 800 test cases across the various streams, including mobile applications, web portals, Salesforce platform and E2E tech integration. Regression suites are run on demand for every release and periodically to ensure the health of the applications.

- Implemented 'one click' automation with integration of regression test packs with the AWS CI pipeline. Regression packs are triggered remotely or scheduled to run every day with detailed execution reports emailed to the stakeholders.
- Integration of CI pipeline / automated test cases with Elasticsearch monitoring to generate execution analytics reports using ML (Machine learning) analysis technology.
- Introducing the concept of AI (Artificial Intelligence) to the current automation, with bots powered automated development and maintenance of automated test cases via self healing capability of the tool - implementation is in progress.

### Benefits

- **Agility:** Flexible resourcing provided at short notice to meet demand.
- **Efficiency:** Reduction in average test cycle time by 60%.
- **Coverage:** Increased test automation coverage from 0% to 90%.
- **Quality:** Reduced the frequency of P1/2 incidents in production by 80% by identification of defects earlier in the development lifecycle with automation.

### Find out more

Interested in implementing a low-code strategy for your organization? Want to respond faster to business needs, facilitate growth and agility, and keep control of your app development?

Contact us at [enquiries.uk@uk.sogeti.com](mailto:enquiries.uk@uk.sogeti.com)

## About Sogeti

Part of the Capgemini Group, Sogeti makes business value through technology for organizations that need to implement innovation at speed and want a local partner with global scale. With a hands-on culture and close proximity to its clients, Sogeti implements solutions that will help organizations work faster, better, and smarter. By combining its agility and speed of implementation through a DevOps approach, Sogeti delivers innovative solutions in quality engineering, cloud and application development, all driven by AI, data and automation.

Capgemini is a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided everyday by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of over 340,000 team members in more than 50 countries. With its strong 55-year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fueled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering and platforms. The Group reported in 2021 global revenues of €18 billion. Get the Future You Want

Visit us at

[www.sogeti.com](http://www.sogeti.com)