

Apple and Google building Coronavirus Tracking Tech for iOS and Android, Coming in May

The two companies are working together, representing most of the phones used around the world.

By Ian Sherr, Richard Nieva, Stephen Shankland
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Two of the tech industry's biggest players are working together to fight the coronavirus, announcing a new set of tools that could come to a majority of smartphones around the world.

The new technology, outlined in white papers published by Apple and Google on Friday and further discussed in a call with reporters Monday, relies on Bluetooth wireless radio technology to help phones communicate with one another, ultimately warning users about people they've come in contact with who are infected with the coronavirus.

Apple and Google have been working on the project for two and a half weeks so far, and plan to initially release these tools in May so apps from public health authorities can use the contact tracing technology. Then in coming months, the companies plan to build them directly into iOS and Android software to help more people tap into them.

"Through close cooperation and collaboration with developers, governments, and public health providers, we hope to harness the power of technology to help countries around the world slow the spread of COVID-19 and accelerate the return of everyday life," the companies said in a joint statement.

Google CEO Sundar Pichai on Friday touted the project on Twitter, saying the two companies "are committed to working together on these efforts." Apple CEO Tim Cook added in his own tweet that the new initiative "respects transparency and consent."

Apple and Google's efforts are just the latest by tech giants to help mitigate the impact of the novel coronavirus. The pandemic has forced nearly all Americans to shelter in place to help slow the virus' spread and reduce the strain on hospitals.

Big tech companies in particular have been working on initiatives around the coronavirus since it struck. Verily, the life sciences arm of Google parent company Alphabet, last month launched a website that gives people in California information about virus testing. The website, developed in partnership with the

White House, lets people fill in symptoms and complete an online screener.

Google also last month said it's committing more than \$800 million to help small businesses and crisis responders dealing with the coronavirus pandemic.

Apple and Google have both also begun making and distributing protective equipment for health care workers.

Now, with this new coronavirus tracing technology, two of Silicon Valley's biggest rivals are hoping to help create apps that'll help us regain a sense of normalcy as we wait for a vaccine or other ways to fight the virus.

"All of us at Apple and Google believe there has never been a more important moment to work together to solve one of the world's most pressing problems," the companies said.

Contact tracing

Apple and Google's technology is meant to support contact tracing, which historically has been a manual process in which health care workers painstakingly comb through a patient's history to figure out who they were near and may have exposed to infection.

Apps could potentially speed up that process. People who're marked as having coronavirus in an app on their phone could then wirelessly transmit alerts to anyone they come in contact with, potentially leading people to take extra precautions or self-quarantine to slow any further spread.

Apple and Google representatives said they chose to create this joint technology in part because they wanted to ensure interoperability between different phones. The companies also chose to build the system into their iOS and Android software in order to reduce the impact this technology could have on battery life.

To ensure as many people have access to the technology as possible, Google will include the tracking data in an update to its "Google Play services" feature for phones powered by its Android software. As a result, more people will have access to the technology even if their phone isn't being actively updated by manufacturers anymore.

What the companies didn't know is how many people need to sign up to make the system work, in part because the crisis itself is unprecedented. But

together, the companies' software runs nearly all the billions of smartphones and tablets in use today.

And when the crisis has ended, they've promised to shut down the tracking tools too.

More efforts

Google and Apple aren't the only ones looking at using phones to help with contact tracing. Another similar project is an MIT-led effort called Private Automated Contact Tracing, or PACT, which uses a similar approach to the one Apple and Google are using. With it, infected people with health care approval could upload the digital IDs their phone broadcasts, and others could check that database to see if there's a match with any of the IDs their phones logged. Other contact-tracing apps, including COVID Watch and Pan-European Privacy-Preserving Proximity Tracing, have also been developed to deal with the pandemic.

Already, state and local governments appear to be warming to these ideas. But there are potential privacy concerns.

Among them, the American Civil Liberties Union warned in a report earlier this week that contact tracing apps could lead to increased government surveillance, particularly if data isn't properly protected. The organization also noted that GPS and Bluetooth signals can sometimes be inaccurate or untrustworthy, further muddying these apps' effectiveness.

The PACT team knows about some of the challenges, starting with getting Android and Apple phones to communicate reliably, said Ron Rivest, a PACT leader and cryptography expert famous for helping invent the pioneering and widely used RSA encryption technology. It can be hard to measure range with Bluetooth, and results vary depending on the way a phone is oriented, whether it's held against somebody's head for a phone call or tucked inside a purse.

"People will only trust these systems if they protect privacy, remain voluntary, and store data on an individual's device, not a centralized repository," said Jennifer Granick, an ACLU surveillance and cybersecurity counsel. And, she noted, all these concerns don't even include larger questions, like how to help people who don't have access to newer smartphones that would power these efforts.

To ultimately tell whether Apple and Google's technology is reliable, we'll have to wait until the two

companies begin publicly releasing it, but online-privacy group the Electronic Frontier Foundation noted that both companies highlighted people's consent and protecting data as part of the project. "We appreciate that Apple and Google have made a commitment to protect privacy," said Kurt Opsahl, the EFF's deputy executive director and lead lawyer.

CNET's Alfred Ng contributed to this report.

Link

<https://www.cnet.com/news/senator-asks-google-and-apple-ceos-to-be-personally-liable-for-covid-19-tracking-project-privacy>