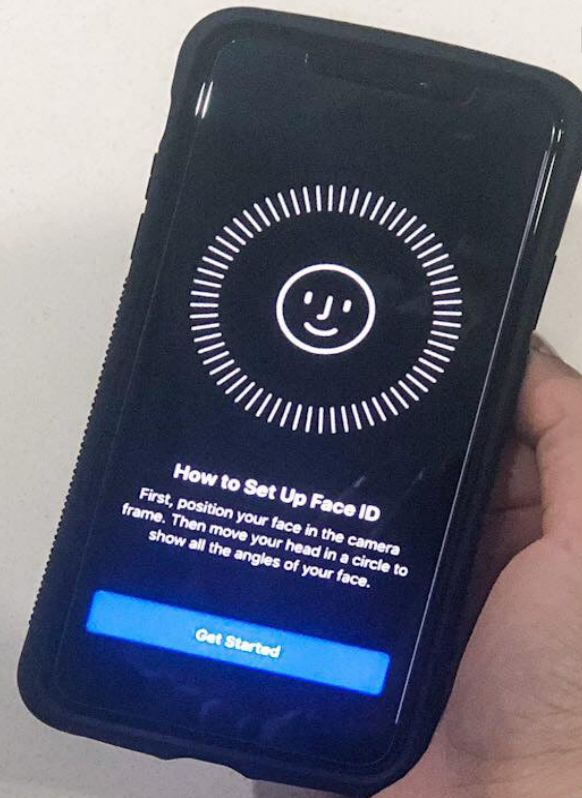


Ashley Laoh & Mariam Dee

It's You Again

Facial recognition, the safest password
phone protection



It's You Again

Ashley Laoh & Mariam Dee



Apple's iPhone has changed drastically over the years. Since its arrival in 2007, Apple has improved the new iconic device to fulfil its service effectively and efficiently to the world. The first iPhone was introduced on the 9th of January 2007 and released on the 29th of June 2007. Critics said however the phone was too expensive to do well in the market, it went up for sale in June starting at \$499. A year after Apple's launch of the first iPhone, Apple rolled out its successor, the iPhone 3G. The iPhone 3G offered more storage and was cheaper. The new model could also connect to faster 3G networks and built in GPS.

"Location services is going to be a really big deal on the iPhone" said CEO Steve Jobs
"Its going to explode"

Moving to 2010 the iPhone 4 introduced Facetime video chat on the newly-renamed IOS 4. The iPhone 4 also introduced the arrival of the first high-resolution "Retina" screen. In 2013 Tim cook the new CEO of

Apple released not one but two iPhones, iPhone 5S and the colourful iPhone 5C. The iPhone 5S introduced its first Touch ID with a 63-bit A7 SoC system on a chip. In 2015 iPhone 6s and 6S Plus represented upgrades from 2014 iPhone 6 models. It includes A9 chip, live photos, advanced Touch ID security and a new force touch technology called 3D Touch. Fast forward to 2017 to commemorate a decade of iPhones, Apple introduced the iPhone X ("ten"). Touch ID and the home button have been removed in favour of a new biometric security, Face ID.

Face ID uses a TrueDepth camera system made up of a dot projector, infrared camera and flood illuminator. The TrueDepth camera captures accurate face data by projecting and analysing 30,000 invisible dots to create a depth map of your face. Face ID automatically adapts to the difference appearance of a persons face, such as wearing makeup or growing facial hair. If iPhone recognises a significant change to your face, Face ID will confirm your passcode and updates your face data. The Face ID has also introduced other features

such as Animoji. Animoji's are custom, animated of popular emoji characters. The Face ID creates a 3D character that mirrors your own facial expressions. Face ID is also used in Apple pay which allows you to purchase from your phone using your face as security.

Apple Face ID.

How secure is it? Although there are many hackers and government agencies worldwide, the equipment needed to hack an IOS model, is beyond imaginable. Not only does Apple offer a touch screen, fingerprint password protection system, they also offer facial recognition. The facial recognition system, uses the geometry of your face, after being scanned by the extremely advanced technology. The advanced technology system used by Apple is the TrueDepth camera system.

Apple claims that they have created one of the most worldwide leading and progressive programs to date. The TrueDepth camera system creates 30,000 invisible dots which are then inspected and studied across

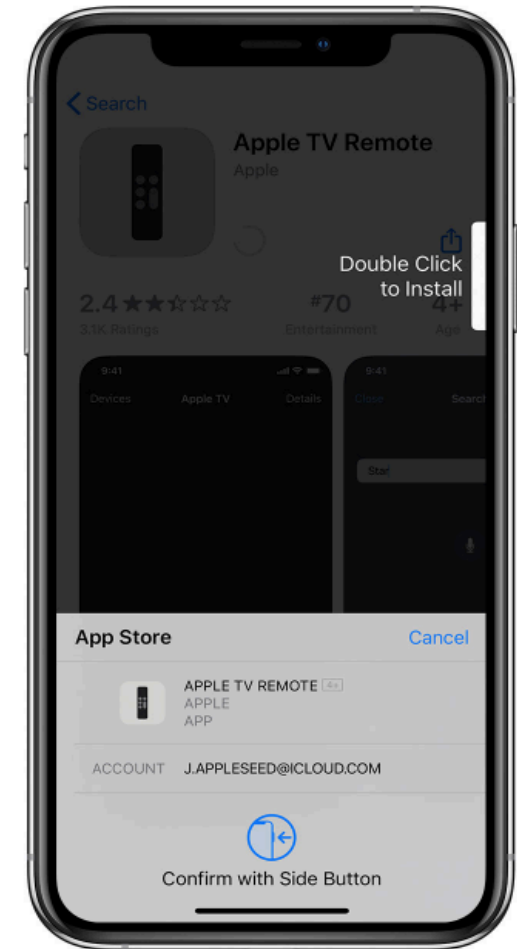
the individual's face. The chance of being hacked in, by another person who may look similar is; 1 in 1 million.

The TrueDepth system also adapts to new changes, like;

- New hair style
- Glasses/no glasses
- Makeup/No makeup
- New moustache/Beard or clean shaven.

The iPhone will still grant access to the individual through facial recognition.

Although facel ID can be hackable, it is highly unlikely that it'll happen to the average person, due to the fact that extremely expensive materials and high tech machines are needed to do so. Apple also protects it's users as much as possible by refusing to aid Government or other services in accessing iPhones without the consumer's permission. services in accessing iPhones without the consumer's permission.



References:

Apple. (2020). *About Face ID advanced technology*. Retrieved from <https://support.apple.com/en-au/HT208108>

Tillman, M. (2020). *What is Apple Face Id and how does it work?*. Retrieved from <https://www.pocket-lint.com/phones/news/apple/142207-what-is-apple-face-id-and-how-does-it-work>

Conner, C.(2020). *The Evolution of the iPhone: Every model from 2007-2020*. Retrieved

from <https://www.iphonelife.com/content/evolution-iphone-every-model-2007-2016>.

Apple. (2020, March 2). *About Face ID advanced technology*. Retrieved October 16, 2020, from Apple Support website: <https://support.apple.com/en-au/HT208108>

Percentage of Apple users using security measures

