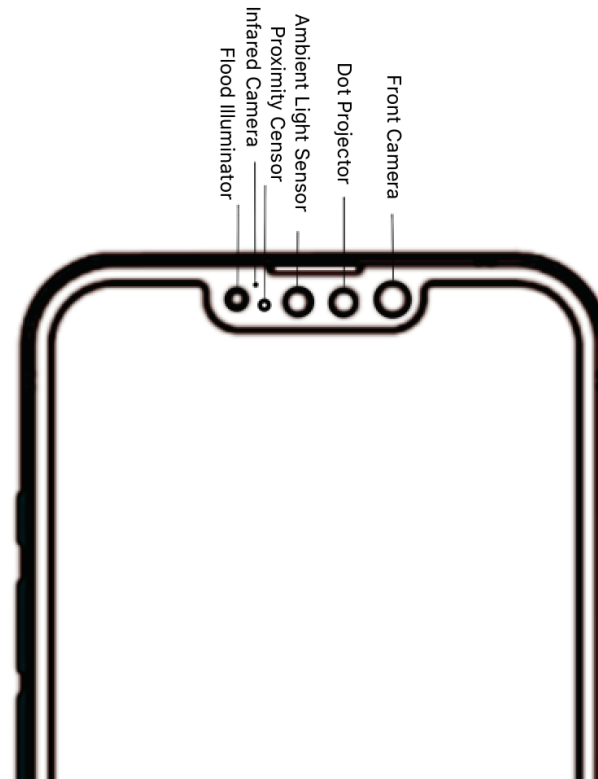*Phoebe Poon & Theo Bhat*

The Face ID

Is the Face ID really secure?

The Face ID

Phoebe Poon & Theo Bhat

In recent years the progression of technology has resulted in many new features in the iPhone such as wireless charging, touch ID and the most recent Face ID. In 2017 Face ID first came out with the new IPhone X at the time. Face ID was Apple's new method to unlock their phones which would not only save time and effort on using a passcode or Touch ID it would also mean that it was a fool proof way of keeping your phone locked as only the user's face could unlock the phone. Face ID is the most recent method of unlocking the iPhone by using the 'True Depth' camera system, the system captures an infrared image of the user's face and also captures accurate face data by projecting and analysing thousands of invisible dots to create a depth map of your face which is then encrypted and protected by the secure enclave. There are also other parts in the camera system that help with Face ID with its purpose like the flood illuminator which adjusts light settings on the front camera and the proximity sensor which judges the distance of the face from the front camera and allows for a more accurate

Flood Illuminator
Infared Camera
Proximity Censor
Ambient Light Sensor
Dot Projector
Front Camera

analysis of the user's face. During 2017, Apple decided to surprise the public with the new Face ID feature. As the term 'Face ID' carries a straightforward meaning, this feature has its own advantages and unique utility. According to an academic article from Research Gate, the unique functionality behind this technology is the name 'Face ID' where this feature requires a 3D visual scanning of one's identity. Not only this technical invention sounds unique, but the convenience behind it is having a variety of security options such as Touch ID and Passcodes gives an advantage to users who are not comfortable with facial scanning as there might be security tracking involved. Hence, the new invention of Face ID puts forth the advancement and growth of technology. Additionally, another convenience behind Face ID is the ability to use Apple Pay and also other third party apps. According to TechCrunch, Face ID provides the option to use facial scanning such as logging into your bank account or even making a payment through Apple Pay. With this convenience this decreases the wait time for impatient users.

As the ongoing feature of Face ID progresses there are also disadvantages of this Apple feature which results in concerning consequences. The fear of security and accuracy of the Face ID while there are systems in place to combat like the anti tamper systems which means if tampering with the Face ID camera or system is ever detected the whole phone will shut down. While this is a very adequate security measure another issue is the inaccuracy of Face ID. There have been several reported incidents with face recognition where if the user has a photo of another user that owns the phone, that phone can be unlocked through Face ID within that photo. Moreover, some family relatives that have similar facial features as the phone user can also unlock the iPhone through Face ID. Due to this technical issue from Apple iPhones, another issue with the Face ID is raising concerns. According to Mirror, the opinionated article analyses the continuous racism targeting Chinese users, this comes into correlation with the failure of identifying people, the inaccuracy and racism with Face ID can cause consequences such as ruining the reputation of Apple and an impact on its economy.
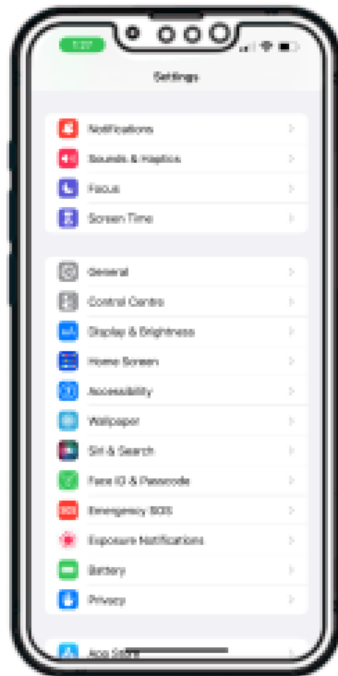
Overall while there were and probably will be many more critiques and issues regarding Face ID in Apple Phones, overwhelmingly positive reaction to the feature and increased growth of the company convinced Apple to keep the feature. The company did acknowledge the issues regarding Face ID that needed to be addressed and fixed. Apple also stated that they will always do their best in keeping the feature up to date and secure by providing regular updates to the phones which they continue to do to this day.
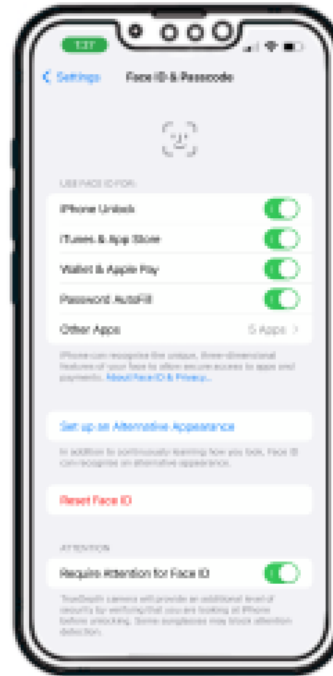
Infared Camera Scan

References:

Perez.S, Lunden.L, (2017). 'Face ID will work with Apple Pay, third party concerns.'TechCrunch. Retrieved from 17th October, 2021. https://techcrunch.com/2017/09/12/faceid-will-work-with-apple-pay-third-party-apps/
Curtis.S, (2017). 'iPhone X Racism Row: Apple's Face ID fails to distinguish between Chinese users.' Mirror. Retrieved from 15th October, 2021. https://www.mirror.co.uk/tech/apple-accused-racism-after-face-11735152

Face ID. (2017). Apple. Retrieved October 14, 2021, from https://support.apple.com/en-au/HT208108.

Mainenti, D. (2017). 'User Perceptions of Apple's Face ID.' ResearchGate. no.1, pp 2. Retrieved from 12th October, 2021. https://www.researchgate.net/publication/321795099_User_Perceptions_of_Apple's_Face_ID.

Tillman, M. (2021, September 17). What is Apple Face ID?Retrieved October 14, 2021, from https://www.pocket-lint.com/phones/news/apple/142207-whatis-apple-face-id-and-how-does-it-
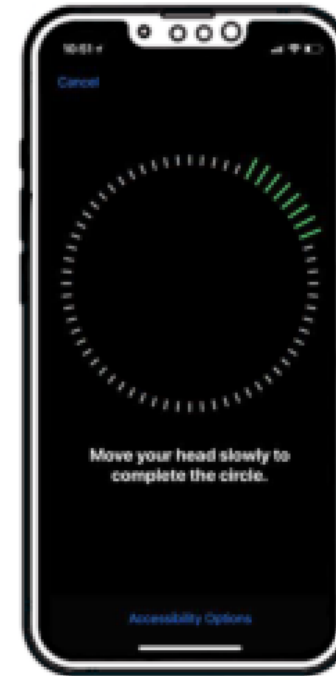
How to set up Face ID

1. Click settings application and press Face ID.

2. Click on 'Reset Face ID'

3. Finish the steps and your Face ID will be complete.