

Submission Date	9/15/2017
Project Name	Fingerprint Reader
Student Name	Heakeme Williams
Project website	thekeme.github.io/SensorEffector
My project will	read the physical characteristic of the human finger and store it on the device. It will also allow more atleast two different fingers to be read and store per user.
The database will store	The fingerprint read by the reader.
The mobile device functionality will include	This device will used a capacitive scanner/reader to measure the user's finger electrically. When the user lays his/her finger on the device the ridges on the finger will be touching the surface while the hollow part is not; the reader will measure the distance and save it.
I will be collaborating with the following company/department	I haven't decided on the department/company yet.
My group in the winter semester will include	Vyacheslav Perepelytsya and Erick Cantos
50 word problem statement	Having a fingerprint will decrease any sort of security risk in the future. You will be able to open your phone with a single touch hence saving you the tedious time of typing in a password/passcode. You can also put a lock on your app with a different finger hence increasing your security.
100 words of background	Technology is an on steady train moving as fast as light. Everything is done electronically now from accessing doors, buying groceries and even communication; with this ongoing train towards a technological future , people are trying to stay ahead of it for the fear of being left behind and having someone put a false pretense in order to fraud or con them. Hence when it comes to security you want to to be personal, safe and easy - that's why fingerprint reading will play an important role in this, even the biggest facilities such as NASA uses biometrics. The UI is completely user friendly and completely cogent.
Current product APA citation	How fingerprint scanners work - optical, capacitive, and ultrasonic variants explained. (n.d.). Retrieved from http://www.androidauthority.com/how-fingerprint-scanners-work-670934/
Existing research IEEE paper APA citation	Clark, P. C., Cook, G. R., Fisher, E. L., Fulp, J. D., Linhoff, V., & Irvine, C. E. (2010). New pathways in identity management. IEEE Security Privacy, 8(6), 64–67. https://doi.org/10.1109/MSP.2010.183 Fried, L. (2017).
Brief description of planned purchases	\$100 raspberry pi kit(with power supply and micro chip). Capacitive scanner - \$60
Solution description	Fingerprint Reader is my proposal. Security is a demand on the market and I strongly believe that bimoetrics will be the place to turn too, since genetically we are all different.