

Submission Date	09/11/2017
Project Name	Fingerprint Scanner
Student Name	Richard Dip
My project will	richarddip.github.FingerprintScanner
The database will store	Utilize a fingerprint reader to identify the user as Owner, Friend, or Stranger. This will unlock the use of a small elevator to pre-approved floors for the user, if not blacklisted.
The mobile device functionality will include	Fingerprint data of all current and future users. Blacklists. Permissions. Identity Information. Dates used.
I will be collaborating with the following company/department	I will not be collaborating with any company or departments.
My group in the winter semester will include	Kenneth Tudo, Adrien Yong
50 word problem statement	Allowing for an extra layer of security in condos and apartments. Preventing blacklisted users from entering restricted levels can potentially reduce crimes.
100 words of background	Biometric Access Control for elevators is not a new thing, but its not ubiquitous in multi-dwelling units. According to the FBI, statistics for household burglaries shows it is twice as likely to happen in apartments than houses, and chances go down as income rises. Hence integration of biometric access control for lower income residences are important in adding extra security, reducing crime, and ultimately saving lives.
Current product APA citation	I will not be collaborating with any company or departments.
Existing research IEEE paper citation	I will not be collaborating with any company or departments.
Brief description of planned purchases	Raspberry Pi 3, Fingerprint reader, DC motor, pulleys, battery, copper wire.
Solution description	The plan is to design a system that allows any user to enter from the 1 st floor. The second floor will be a Permission floor, meaning only the user and my registered friends can enter. Strangers and Blacklisted users will have their fingerprint record and dates logged.