Submission Date	9/11/2018
Project Name	Power Switch
Student Name	Juan Rodriguez
Project repository	https://github.com/JuanRodriguez19/SensorEffector
SensorEffector choice	CAP1188 8-channel Capacitive Touch (0x2A).
The database will store	The database will store the timestamps of when the buttons are pressed and the corresponding light turns on.
The mobile device functionality will include	Displays the issue when the button is pressed but no lights are turned on so that the user knows what is wrong.
I will be collaborating with the following company/department	Shield Canada Security
My group in the winter semester will include	Johnson Dinh, Jordan Pulido
50 word problem statement	Sometimes when a button is pressed, its hard to tell whether the button actually accomplished anything as there is often no indicator telling the user if there was an issue with the execution. This could lead to major problems when it comes to a security power switch that is not functioning.
100 words of background	The switch would consist of 4 wires connected to a raspberry pie that in order to function properly, must be pressed at the same time so that the light would turn on. If only some of the wires are in contact, the light would not turn on as it's a secruity measure. The app would display a message saying there was a problem and explain why the light did not turn on. For instance, wire 3 and 4 was not pressed etc. If for whatever reason the button press does not turn on or that it did not meet the criteria required, the app would display the reasoning behind it.
Current product APA citation	Capacitive Touch Switch. (n.d.). Retrieved from https://www.noritake-elec.com/products/capacitive-touch-switch?gclid=EAIaIQobChMIztenvrmz3QIVh4SzCh1j_gzHEAAYASAAEgJz2vD_BwE
Existing research IEEE paper APA citation	Chul Nam, Young-Gun Pu and Kang-Yoon Lee, "12×12 capacitive matrix touch sensing unit for SoC application in 0.18um CMOS process," 2009 International SoC Design Conference (ISOCC), Busan, 2009, pp. 305-308. doi: 10.1109/SOCDC.2009.5423788