Submission Date	2018-02-05
Project Name	180-Switch
Student Names	Piyush Rana and Tunde Olokun
Project repository	https://github.com/PRana02/USB-Microphone-Alexa-Skills-Based-
SensorsEffectors choices	USB Microphone
The database will store	details that include users' information (names, email-id, history of messages or commands,etc), built in commands for Amazon Alexa, services and server files that supports Amazon Alexa on the devices.
The mobile device functionality will include	an android app that uses voice recognition and allows the user to create an account on the app that uses firebase database and connects him to the hardware using Raspberry Pi. User can ask or type in a text for the information about the weather, news, current time, etc. to the audio assistant which would be connected to the Raspberry Pi and Database. In addition to that, user will also be able to convert text into audio and vice versa.
I will be collaborating with the following company/department	Humber Prototype Lab
My group in the winter semester will include	Tunde Olokun - N01046746
50 word problem statement	is the people with disabilities like impaired vision or hearing problem cannot not perform some task succesffully. To help them, we are making voice recognition application with hardware as well. The challenge is to connect the hardware to the firebase database and implementing the task successfully. The persistence of the device could be tested during the task implementation since it is a bit vulnerable.The main problem is to recognize the voice due to different accent of users and to fulfill the expectations of the user thorugh this device. The other problem is that we ended up buying two Raspberry Pi since it was individual project last semester but we figured out the solution for that too.
100 words of background	A new year brings new technological advances. We live in a society where smartphones are owned by mostly everyone from teens to young adults, from adults to seniors. With the idea that many consumers already own smartphones, we can assume that this will make our project more affordable for most users, as it will lower the total cost value. With that being said, the intention of our project is to create a device that can help both the impaired and the unimpaired. We intend to make the ability between individuals easier, providing users with global information at the tip of their fingers, as well as giving users with a fun & interactive device.
Current product APA citation	Alexa. (n.d) alexa-avs-sample-app Retrieved from https://github.com/alexa/alexa-avs-sample-app/wiki/Raspberry-Pi

Existing research IEEE paper APA citation	Reader instrument of basic texts to the teaching of blind people (2002, Aug 06) Retrieved from http://ieeexplore.ieee.org/document/802666/
Brief description of planned purchases	Raspberry pi from ***Amazon*** *: CAD $90,* USB Microphone from ***Amazon*** *:* CAD $10 and Speakers from ***The Source*** *: CAD $30*
Solution description	We both bought Raspberry Pi and other required materials, since it was an individual assignment last semester. To take advantage of this we would be creating a backup of our each and every task in the second Raspberry Pi in case if it gets corrupt or undesired thing happened. To overcome the problem of the voice recognition, we will be providing user with the feedback on success and failure of the activity. We will be providing user on how to use the app/device in efficient way with different test plans and guide. To backup the user data, we will be creating the copy of database for the users.