# CMPT 433 Project

## Iteration 1


Team SFU Mindstorm

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The intention of our project is to implement a system using the BeagleBone Black and a bluetooth dongle that communicates with the NXT brick to map a room using the robot's sensors and bringing the mapped information onto a webpage. As suggested in our proposal, for our first iteration deadline, we were hoping to get the following completed.

- Assemble robot
- Set up and configure bluetooth
- Send simple movement commands to the NXT robot
- Receive data from NXT robot

So far, we got the NXT brick robot assembly completed and managed to pair the robot with the bluetooth dongle on the BeagleBone Black. We ran into some errors and problems with pairing but with more research and attempts, we were able to get it to connect to the NXT brick successfully. Likewise, we are also experiencing problems cross compiling between the two devices. Because of this issue, we are pushed back in our schedule with our original plan of sending simple commands as well as receiving data from NXT robot. Below is a link to a partial guide we have written for connecting to the NXT using bluetooth:

https://docs.google.com/document/d/1M2VRbVg3d61bH4jBped4FAGGb7T3NEk_ogYxywOaadk/edit?usp=sharing

In terms of expected project changes, we are now planning to have the robot rotate in a single spot. Previously we wanted it to move around a given area to map it. Due to unpredicted difficulty, we thought that this would be an easier approach.