***Personal Project:***

*Description:*

A robot that continuously checks up on people. Applications would be in healthcare facilities such as hospitals, retirement homes etc. I would like to first go to one of these facilities and survey a few people staying at the facilities and those who are working at the facilities. Just so I can get a perspective and hopefully design something that can be useful. After that I would like to test my robot at one of these facilities (if it is possible).

***MoSCoW:***

* Must:
  + Have two (or more) ways of perceiving its surroundings
  + Be controllable
  + Be able to autonomously drive in any environment
  + Detect specific objects
* Should:
  + Create digital maps of its surroundings
  + Plan a whole path using perception data
* Could:
  + Communicate with external devices
  + Interact with its surroundings
* Would:
  + Learn from its environment

***Learning outcomes:***

* Robotics Motion Control
  + I can write software that controls robotic limbs.
  + I can test software that was written for limbs in a simulation environment.
* Robotics Perception
  + I can use data obtained from sensors to preform calculations.
  + I can implement AI functionality in robotic systems.
* Robot-Human-Interaction
  + I can design & implement a robotics
  + I can analyze the target demographic and adjust accordingly.
* Robotics Communication
  + I can setup communications between IoT devices