1. Selection of requirements for experimental validation
   1. Distance between the object and the camera
   2. Indoors
   3. Outdoors
   4. Speed of the moving object

List of 2-3 experiments to be conducted next semester

1. As the quality of an image depends on how close or far the object is to the camera, the first experiment we will conduct will be to set the system to detect an image far from normal range. We will test how far the system will be able to get the right target. This will help as to know the system limitations for future improvements.
2. Another experiment to be conducted is a scenario where the target to be tracked is indoors. Since there could be factors within the walls of the room or house that could limit the smooth running of our system, it is important to test the device in that aspect.
3. Another scenario we will consider is to all the system to run or detect a target outdoors where there is extensive amount of light. These three experiments will help us determine how adaptive our system is to its environment.
4. Also we expect the device to be able to detect the desired target as quick enough to prevent target from leaving the scene before the camera get there. Therefore, we will test how fast the camera is able to track the object. This will help us do the right debugging of our code to correct it.