**System integration:** While all physical systems are already installed in SMART, the software is under development by multiple programmers. To ensure that the code will run smoothly, all programmers are to comment code thoroughly, and try to use similar terminology. For final compilation, one programmer will read through all the code and take care of naming issues, inefficiencies, and other sources of conflict.

Testing the landmine detecting robot will progress as follows. These are guidelines for testing, but are subject to change. By the time of submission, some of these tasks may have been completed

1) Magnetometer capability testing

a)Determine capabilities of magnetometer to show direction and distance to nearby magnet

b) Orienting the robot to face the magnet using magnetometer to indicate direction of strongest magnetic field

2) Navigation Testing

a) Testing of path planning and positioning algorithms

b) Testing of obstacle avoidance algorithm

c) Testing of magnetic detection algorithm

d) Testing of detection repetition avoidance algorithm

3) Trial runs in a mock competition setup

a)With no time limit

b) With time limit

4) Optimization

a)