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 bugs

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

1) Determine capabilities of magnetometer to show direction to nearby magnet

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

3) locating and traveling to the nearest magnet using the magnetometer

4) Determine if magnets can be identified using magnetometer to avoid repeat detections

5) Navigation using the 360 degree 2D LIDAR (need for ultrasonics and bump?)

a) open room

b) obstacles

c) Localization(encoders/accelerometers)

6) Path planning using LIDAR and magnetometer

a) simple open room

b) one obstacle

c)multiple obstacles

7) set up like final demonstration

a) get to work no time limit

b) with time limit

8)optimization