Further Improvements.

Since no project is ever finished nor perfect, there are certainly many improvements that could have been made to our robot. The first pertains to the way the robot was built. We noticed that our robot would often get way too close to the walls and often make extremely tight turns. To remedy this, we could have put our motors close to each other. This would in turn reduce our turning radius dramatically as well as package our robot in a tighter and more compact frame.

Another area that could have been improved is the number of ultrasonic sensors used. Ideally, the best solution would be to place one came facing the front of the robot and one the side of the robot. That way we could constantly monitor both the side and front distances at the same time. We could have done this using a single sensor mounted to a motor that cycles through multiple different angles to take measurements. However, using this method would require us to limit our sampling rate which would cause the robot to hesitate under sudden changes.