

Team 3 Consolidation Report

Daïem Nadir Ali
Farnando Morillo

Hochschule Bonn-Rhein-Sieg

03/05/2014

Structure

The following modules were consolidated on the bases of
(1)**Completeness** of functionality. (2)The **approach** to the
underlying problem (3)**Implementation** (simple and
understandable code).

1. Omni Velocity Controller
2. Wallfollower
3. Bug Brain

Omni Velocity Controller

Completeness:

Task	Ali	Morillo
Vehicle drives in a straight line to goal	Yes	Curve Path
Combination of linear and angular motion	Yes	Yes
Robot decreases speed when its near the goal	Yes	based on distance(not good)

Approach:

Morillo approach achieves all tasks.

Implementation:

Morillo has good documentation and understandable code.

Wall Follower

Completeness:

Task	Ali	Morillo
Robot is able to follow a straight wall	Yes	Yes
Robot can also handle convex and concave curves	No	Yes
Variable distance to wall	No	Yes
Switchable right/left wallfollowing mode	Yes	Yes

Approach:

Morillo approach achieves all tasks.

Implementation:

Morillo's implementation does not fail in test scenarios.

Bug Brain

Completeness:

Task	Ali	Morillo
Avoids simple obstacles	Yes	Yes
Avoids advanced obstacles	Yes	No
Detects if goal is unreachable	Yes	No
Checks on which side of the wall the obstacle is	Yes	Yes

Approach:

Morillo's and Ali's approach achieves all tasks.

Implementation:

Ali's implementation does not fail in any test scenarios and has a simpler implementation.