

MT08 - Markose Jacob, Pooja Kbra Acme Ackermann Steering Controller Product Backlog

| Unique ID | Task | Sprint | Estimated time (minutes) | Time after Iteration 1 | Time after Iteration 2 |
|-----------|--|--------|--------------------------|------------------------|------------------------|
| 1 | Plan and Design | | 405 | 416 | 25 |
| 1.01 | Link github repo with travis CI | 1 | 10 | 20 | |
| 1.02 | Link github repo with Coveralls | 1 | 20 | 22 | |
| 1.03 | Create skeleton code for Sensor class | 1 | 10 | 11 | |
| 1.04 | Write constructors and destructors for Sensor class | 1 | 10 | 16 | |
| 1.05 | Create unit tests for Sensor class | 1 | 20 | 20 | |
| 1.06 | Write getters for Sensor class | 1 | 10 | 10 | |
| 1.07 | Write setters for Sensor class | 1 | 10 | 10 | |
| 1.08 | Create skeleton code for RobotKinematics class | 1 | 10 | 20 | |
| 1.09 | Write constructors and destructors for RobotKinematics class | 1 | 10 | 10 | |
| 1.1 | Create unit tests for RobotKinematics Class | 1 | 20 | 17 | |
| 1.11 | Write getters for RobotKinematics class | 1 | 10 | 14 | |
| 1.12 | Write setters for RobotKinematics class | 1 | 10 | 8 | |
| 1.13 | Inspect source code | 1 | 20 | 15 | |
| 1.14 | Create skeleton code for Controller class | 2 | 20 | 8 | |
| 1.15 | Write constructors and destructors for Controller class | 2 | 10 | 8 | |
| 1.16 | Create unit tests for Controller class | 2 | 20 | 12 | 10 |
| 1.17 | Write getters for Controller class | 2 | 10 | 11 | |
| 1.18 | Write setters for Controller class | 2 | 10 | 8 | |
| 1.19 | Create skeleton code for ForwardKinematics class | 2 | 10 | 4 | |
| 1.2 | Write constructors and destructors for ForwardKinematics class | 2 | 10 | 6 | |
| 1.21 | Declare methods in ForwardKinematics class | 2 | 5 | 5 | |
| 1.22 | Create unit test for ForwardKinematics class | 2 | 10 | 12 | |
| 1.23 | Write getters for ForwardKinematics class | 2 | 5 | 4 | |
| 1.24 | Write setters for ForwardKinematics class | 2 | 5 | 3 | |
| 1.25 | Create skeleton code for InverseKinematics class | 2 | 10 | 18 | 15 |
| 1.26 | Inspect source code | 2 | 20 | 26 | |
| 1.27 | Inspect unit test | 2 | 25 | 23 | |
| 1.28 | Added doxygen comments | 2 | 45 | 60 | |
| 1.29 | Update readme | 2 | 20 | 15 | |
| | | | | | |
| 2 | Implementation | | 500 | 441 | 0 |
| 2.01 | Implement calculateHeadingError method | 3 | 20 | 25 | |
| 2.02 | Create unit test for calculateHeadingError | 3 | 20 | 15 | |
| 2.03 | Implement calculateSpeedError method | 3 | 25 | 23 | |
| 2.04 | Create unit test for calculateSpeedError | 3 | 15 | 18 | |
| 2.05 | Inspect source code | 3 | 20 | 15 | |
| 2.06 | Implement solve method | 4 | 40 | 50 | |
| 2.07 | Create unit test for solve | 4 | 30 | 20 | |
| 2.08 | Inspect source code | 4 | 15 | 12 | |
| 2.09 | Implement calculateWheelSpeed method | 4 | 15 | 13 | |
| 2.10 | Create unit test for calculateWheelSpeed | 4 | 15 | 10 | |
| 2.11 | Implement calculateWheelAngles method | 4 | 15 | 15 | |
| 2.12 | Create unit test for calculateWheelAngles | 4 | 15 | 10 | |
| 2.13 | Inspect source code | 4 | 15 | 10 | |
| 2.14 | Implement Main function | 4 | 20 | 10 | |
| 2.15 | Create visualization | 5 | 60 | 50 | |
| 2.16 | Tune parameters | 5 | 40 | 30 | |
| 2.17 | Update readme | 5 | 20 | 25 | |
| 2.18 | Run and fix cpplint | 5 | 20 | 25 | |
| 2.19 | Run and fix Cppcheck | 5 | 20 | 20 | |
| 2.2 | Run and fix Valgrind | 5 | 20 | 5 | |
| 2.21 | Generate documentation | 5 | 40 | 40 | |
| | | | | | |
| | | | | | |
| | Remaining effort | | 875 | | |
| | Total effort time | | 30 | | |

Use index colors to show revisions on task time

| Index | Information |
|-------|---------------------|
| | Target Time |
| | Revised Target Time |
| | Actual Time Taken |
| | New Task Added |