AME 3623: Project 10 Group Grading Rubric

April 16, 2020

Group number:

Team member names:

Team member claiming software component:

Implementation: 25 points

Low-level sensing and control: 5 points
(5) Sensing and control functions are accessible to the `fsm.task` through global variables, including the distance and IMU sensors, and control of the goal orientation and lateral position (through goal setting).
(3) Fails to meet one aspect of the specification.
(0) Does not meet the given specification.

Finite State Machine: Starting Location A: 10 points
(10) Starting location A meets the given specification.
(5) Fails to meet one aspect of the specification.
(0) Fails to meet two or more aspects of the specification.

Finite State Machine: Starting Location B: 10 points
(10) Starting location B fully meets the given specification.
(5) Fails to meet one aspect of the specification.
(0) Fails to meet two or more aspects of the specification.

NOTE: groups may decide on the specifics of the task, as long as there is an A/B type decision that cannot be resolved in the initial state.
Demonstration: 40 points

Low Level Control: 10 points

(10) The orientation and lateral controllers are well tuned.
(5) Only one of the orientation and lateral controllers is well tuned.
(0) Neither of the orientation and lateral controllers are well tuned.

Start A: 10 points

(10) The hovercraft consistently completes the “A” task.
(5) There is one problem with the execution.
(0) The hovercraft cannot complete this part of the task.

Start B: 10 points

(10) The hovercraft consistently completes the “B” task.
(5) There is one problem with the execution.
(0) The hovercraft cannot complete this part of the task.

Switch: 10 points

(10) The FSM initiates program with the press of the switch.
(0) The FSM does not use the switch properly.

Documentation: 35 points

Project documentation: 5 points

(5) All required project-level information is given at the top of the C and H file(s), including: project number, date, group number, group members, and the group member responsible for the code.
(3) One required piece of information is missing.
(0) Two or more required pieces of information are missing.

Function header documentation: 10 points

(10) All functions are documented with a high-level description, a description of each of the parameters, and a description of the return value (where appropriate).
(7) One function is not documented properly.
(4) Multiple functions are not documented properly.
(0) Function header documentation is not given.

In-line documentation: 10 points

(10) All functions include appropriate in-line documentation. (“appropriate” means that you capture the logic of a line of code or group of lines)
(7) One function is missing in-line documentation.
(4) Multiple functions are missing in-line documentation.
(0) No in-line documentation is given.

FSM Diagram: 10 points

(10) The FSM diagram is complete and is consistent with the code implementation.
(5) The FSM diagram is not complete or it is not consistent with the code implementation.
(0) The FSM diagram is incomplete and it is not consistent with the code implementation.