

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.