AME 3623: Project 7 Group Grading Rubric

April 3, 2020

Group number:

Team member names:

Team member(s) claiming software component:

**Implementation: 35 points**

**PD-control: 12 points**
- (12) Fully meets the given specification.
- (6) Fails to meet one aspect of the specification.
- (0) Does not meet the given specification.

**LED state display: 10 points**
- (10) Fully meets the given specification, including: displaying rotation rate and heading error.
- (5) Fails to meet one aspect of the specification.
- (0) Fails to meet two or more aspects of the specification.

**camera_step(): 13 points**
- (13) Fully meets the given specification, including: computing the lateral position and velocity.
- (7) Fails to meet one aspect of the specification.
- (0) Fails to meet two or more aspects of the specification.

**Demonstration: 30 points**

**Orientation error and rotation rate display: 10 points**
- (10) The orientation error and rotation rate are reflected by the LEDs.
- (7) There is one problem with the display.
- (4) There are two problems with the display.
- (0) There are more than two problems with the display.

**PD controller: 10 points**
- (10) The PD controller pushes the craft toward the goal and is well-tuned.
- (7) There is a small problem with the PD controller (e.g., it works but it is not well tuned).
- (4) The PD controller is recognizable, but there are serious problems (e.g., selected parameters are poorly tuned or the heading error computation does not handle wrap-around correctly).
- (0) The PD controller does not work.

**Lateral state printing: 10 points**
- (10) Both the lateral position and velocity are printed, and are well calibrated.
- (5) There is a problem with the reported positions and velocities.
- (0) There are substantial problems with the printed positions and velocities.
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: 15 points
(15) 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).
(10) One function is not documented properly.
(5) Multiple functions are not documented properly.
(0) Function header documentation is not given.

In-line documentation: 15 points
(15) All functions include appropriate in-line documentation (“appropriate” means that you capture the logic of a line of code or group of lines).
(10) One function is missing in-line documentation.
(5) Multiple functions are missing in-line documentation.
(0) No in-line documentation is given.