SOFTWARE STANDARD OPERATING PROCEDURE

PROJECT: LIBERTY
TASK: SOFTWARE DESIGN

Document Version Number: 2.0
Date: 11/20/2017
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Edit History: https://github.com/Gabetn/DPM_01_Project_Documentation

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1. CONSTRUCTOR SOP

1. public LightLocalizer(Odometer odometer, int SC)
2. public UltrasonicLocalizer(Odometer odometer)
3. public Navigation(Odometer odometer)
4. public Capturing(Odometer odometer)
5. public OdometryCorrection(Odometer odometer)

2. SENSOR INSTANCE SOP

1. All sensor instances shall be created in the robotControl class

3. SENSOR DATA SOP

1. All sensor data should be collected in the sensorPoller class and passed to other classes in sensorPoller

4. MULTI-THREADING SOP

1. Capturing, sensorPoller, and OdometryCorrection shall be the only classes that extend thread.
2. Capturing and OdometryCorrection extends thread via implementing the interface sensorPoller

3. The way to create thread is to extend the thread in that class
4. Navigation uses thread by creating new thread in robotControl

5. WIFI DATA SOP

1. All wifi data is collected in robotControl and passed to other classes

6. MOTOR INSTANCE SOP

1. All motor instances shall be created in robotControl class as public object, other class shall access them in the robotControl

7. COMMENTATION SOP

1. All comments across the project shall be in agreement with Javadoc

8. CONSTANT SOP

1. All general constants like radius and width are defined in robotControl
2. All class-specific constants like color code are defined in the classes

9. FUNCTIONAL CLASS SOP

1. All classes require any sensor data are defined as functional classes and implement the functionProvider interface
2. All functional classes are by default a thread since the interface extends thread
3. There are ultrasonic data and light data and their respective methods. Only write the method that the class uses its type of data