

# SOFTWARE STANDARD OPERATING PROCEDURE

**PROJECT: LIBERTY**  
**TASK: SOFTWARE DESIGN**

**Document Version Number: 1.1**

**Date: 31/10/2017**

**Author: Andi-Camille Bakti**

**Edit History: [https://github.com/Gabetn/DPM\\_01\\_Project\\_Documentation](https://github.com/Gabetn/DPM_01_Project_Documentation)**



# McGill

# TABLE OF CONTENTS

<b>TABLE OF CONTENTS</b>	<b>2</b>
<b>1. CONSTRUCTOR SOP</b>	<b>3</b>
<b>2. SENSOR INSTANCE SOP</b>	<b>3</b>
<b>3. SENSOR DATA SOP</b>	<b>3</b>
<b>4. MULTI-THREADING SOP</b>	<b>3</b>
<b>5. WIFI DATA SOP</b>	<b>3</b>
<b>6. MOTOR INSTANCE SOP</b>	<b>4</b>
<b>7. COMMENTATION SOP</b>	<b>4</b>
<b>8. CONSTANT SOP</b>	<b>4</b>

## **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. Navigation, Capturing and OdometryCorrection shall be the only classes that extend thread.
2. The way to create thread is to extend the thread in that class

## **5. WIFI DATA SOP**

1. All wifi data are 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