

# CSCI 1010 Computer Science Orientation

## Line Following Problem Solving Report

**Date:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**Part of Team:** \_\_\_\_\_

### 1 Problem Description

This section should contain the problem statement and the expected behavior of the robot.

### 2 High level Strategy

Write a plain English statement describing the strategy your robot is going to use to solve this problem.

### 3 Detailed Strategy

In this section you will go in a bit more dept on how to actually solve and implement the problem.

#### 3.1 Robot Capabilities

Describe the desired robot capabilities to solve this problem at a fine grain (e.g.: move forward, move backward, rotate, detect distance, etc.)

#### 3.2 Robot Components

Describe the EV3 robot components that you need to use to solve this problem (e.g.: medium motor, IR sensor, etc.) and specify the ports they are connected on your robot.

#### 3.3 Strategy Pseudocode

Write the pseudocode for your strategy

#### 3.4 LeJOS implementation details

For each of the actions in your pseudocode list the reference classes or functions that you think can be used to implement the strategy presented above.

## Assignment instructions

**Format** Follow the exact format was provided above.

**Submission** Submit your analysis via Blackboard before the beginning of lab on Oct 13, 2017 in a .PDF format. Please bring a hard copy of your report with you to class.

**Individual Assignment** Each student in the class should solve this assignment independently. You are allowed to use any resources linked to the class web page, but you should not talk with your class mates or consult outside resources to solve it.