

Weekly Exercise #5: Counting Lights Rubric

Category	Mark
1. No Trail Instead of leaving a black trail, small patches of the map of Edmonton are drawn over the old cursor position. Examples of possible deductions: <ul style="list-style-type: none"> • Drawing too large of a patch (larger than the cursor size) or the wrong part of Edmonton. • Drawing over the current cursor position (so the cursor sometimes does not show up completely). 	/25
2. Flicker When the cursor is stationary, it should not flicker (i.e. no redraw is performed if it has not moved). Examples of possible deductions: <ul style="list-style-type: none"> • It flickers sometimes when the cursor is not being moved. 	/25
3. Joystick Velocity The joystick velocity increases as you push it further. Examples of possible deductions: <ul style="list-style-type: none"> • The speed does not vary at all. • Cannot move “diagonally” at different rates (depending on how far the horizontal and vertical axis of the joystick is being pushed). 	/25
4. Boundary Clamping The cursor should stop right at the edge of the boundary. Examples of possible deductions: <ul style="list-style-type: none"> • Some pixels of the cursor protrude outside of the boundary. • The cursor stops a bit before the boundary. • The cursor can move into the black zone, even if just a bit. 	/25

Further Note: Deductions (to the overall grade) may be applied at the grader’s discretion if the submission

- Does not compile due to syntax errors. Significant deductions apply if this happens, possibly resulting in a grade of 0 overall. You must submit code that can be compiled. *Make sure your code compiles on the VM using our Arduino **Makefile** before you submit it!*
- **Significant** deductions will be applied if you do not use the pins specified in the exercise description. We specify these so the grading TA does not have to rewire their Arduino for different submissions.
- Has extremely poor code structure, style, or modularity. Remember, even though C++

does not require proper indentation to be compiled **you must still indent properly for style.**

- Does not follow submission instructions. Remember, you are required to include a **README** file (no **.txt** extension to the filename) and to compress all files in your solution into either a single **.zip** file or a single **.tar.gz** file.
- Does not follow the Code Submission Guidelines in any substantial way. **Good style (proper variable names, indentation, comments, etc.) is essential and should be practiced. Bad style will lead to significant mark deductions.**