Assignment 1:

Rubric Measures with worked example

NOTE WHEN FILLING IT IN YOURSELF, CHANGE X to the mark you are awarding yourself. YOUR REFLECTION SHOULD FOLLOW THIS RUBRIC TO MAXIMIZE MARKS.

# Grades

|  |  |
| --- | --- |
| Excellent | 70+% |
| Very Good | 60-69% |
| Good | 50-59% |
| Pass | 40-49% |
| Fail | <40% |

Part A: (X/5)

Comments, indentation, naming, structure of code, Citations/References - inclusion of Readme and Reflection.

**NB** To avoid inadvertent plagiarism please use specific references to any materials used (excluding notes provided). Do not use generic web pages.

e.g. processing.org is not acceptable. The url to a specific example is.

e.g 2. size() \ Language (API) \ Processing 3+. 2019. size() \ Language (API) \ Processing 3+. [ONLINE] Available at: https://processing.org/reference/size\_.html. [Accessed 17 February 2019].

e.g. 3. Processing 2.0 Forum. 2019. making the ball move both vertically but horizontally while it's changing to random colors - Processing 2.x and 3.x Forum. [ONLINE] Available at: https://forum.processing.org/two/discussion/22511/making- the-ball-move-both-vertically-but-horizontally-while-it-s-changing-to-random-colors. [Accessed 17 February 2019].

|  |  |  |
| --- | --- | --- |
| Comments | Examples of **both** line comments // and multiline /\* \*/ | 1 |
| Indentation/formatting | Either manually indented correctly or **autoformatted** | 1 |
| Naming | (meaningful **names** of variables and methods, camelCase, action  words for methods, etc). | 1 |
| Readme | Completed properly and included in submission   * Tells what to expect and how to use it. * Highlights any issues. * **Includes link to the Adobe Color pallet, highlighting the 5 colours used and white.** | **1** |
| Reflection | Completed properly and included in submission  **Note** we will only look to assign marks where you suggest in your reflection | 1 |

e.g. Having reviewed my work according to the detailed rubric above, in relation to naming, commenting, indentation, and submitting my readme and reflection I have complete 3 of these fully. I am recording 3/5

PART A: (3/5)

# Part B: (X/2)

I have sized the display window correctly so 1/2.

Or I have sized the display window incorrectly so 0/2. Or I have not sized the display window so 0/2.

I have positioned the display window correctly so 1/2.

Or I have positioned the display window incorrectly so 0/2. Or I have not positioned the display window so 0/2.

PART B: (2/2)

# Part C: (X/5)

setup() and draw()

|  |  |
| --- | --- |
| excellent | Setup and draw both used. Line numbers shown |
| good | Both included but one is empty. Line numbers shown |
| pass | Both included but empty. Line numbers shown |
| fail | Not included or not working. |

Setup and draw are fully working for me, so I score myself excellent 100%. 5/5 PART C: (5/5)

# Part D: (X/10)

If statements

|  |  |
| --- | --- |
| excellent | Multiple If statements with branches, Nested ifs. Line numbers shown |
| very good | Multiple If statements included. Line numbers shown |
| good | A number of simple single branch if statements included but empty. Line  numbers shown |
| pass | A single if statement included. Line numbers shown |
| fail | Not included or not working. |

I have multiple if statements, with multiple branches. On lines … I didn’t use a nested if but I have many branches show on lines … and I used if statements inside loops on lines …, so my score is very good. 68%

This falls inside the very good range so I am scoring 6/10 PART D: (6/10)

# Part E: (X/20)

Loops

|  |  |
| --- | --- |
| excellent | Multiple examples of loops used, (at least 2 of {for, while, do} )  **Nested** loops. Line numbers shown |
| very good | Multiple examples of each loop used, no Nested loops. Line numbers  shown |
| good | An example of one of each loop type covered in class (at least 2 of {for,  while, do} ) used. Line numbers shown |
| pass | A single loop statement included. Line numbers shown |
| fail | Not included or not working. |

I have **for** loops in my code at lines 23 and 37.

I have **while** loops in my code at line 93 and 106

**Nesting** is demonstrated

on line 60 where I have a for inside a for on line 86 for inside a while loop

I have multiple examples of loops and multiple examples of nested loops

I’m recording an excellent mark for this. 100% PART E: (20/20)

# Part F: (X/20)

Bespoke Method \* show line numbers for the method definitions, AND the method calls

|  |  |
| --- | --- |
| excellent | 3+ bespoke methods used, showing examples of different types of bespoke methods (**no parameters**, takes **parameters, return value**)  Line numbers shown |
| very good | 3+ bespoke methods included and called. But none use a return value |
| good | 3 bespoke methods included and called. Line numbers shown |
| pass | 1 bespoke method included and called. Line numbers shown |
| fail | Not included or not working. |

**I have 4 bespoke methods at lines 46, 57, 68 and 73. They are called in lines 22,25,29,94**

Line 46 shows a method with **no parameters** and **no return value**. Line 57 shows a method with **2 parameters** and a **return value**.

Line 68 shows an **overloaded method** with 5 parameters and a return value. Line 73 shows an **overloaded method** with 3 parameters and a return value.

I’m recording an excellent mark for this. 80%

*(maybe I should have added 2 more to get to a 100%)*

80% of 20, is 16/20 PART F: (16/20)

# Part G: (X/10)

Processing Method calls – (nothing for setup() and draw(), nothing for mouse methods, or string methods)

|  |  |
| --- | --- |
| excellent | >4 different Processing methods used. Line numbers shown |
| very good | 4 different Processing methods used. Line numbers shown |
| good | 2 different Processing methods called. Line numbers shown |
| pass | 1 Processing method called. Line numbers shown |
| fail | Not included or not working. |

I have called 3 Processing methods (eg1, and eg2. And eg.3 \* specify what they are) at lines 54 and 33 and 104

I’m recording a good mark for this. 55%

That’s a mark of 5.5/10 but rounding would bring me to the next grade so I truncated instead giving 5/10

PART G: (5/10)

# Part H: (X/10)

Mouse Methods – NOTE not mouse system variables

|  |  |
| --- | --- |
| excellent | >2 Mouse methods used that integrate meaningfully into the project being  built. Line numbers shown |
| v.good | 2 Mouse methods implemented. Line numbers shown |
| pass | 1 Mouse method implemented. Line numbers shown |
| fail | Not included or not working. |

I have used 2 Mouse methods (eg1 and eg2.) at lines 84, 85.

I’m recording a v.good mark for this. 65%

Rounded to the nearest whole number would bring me to the next grade so I truncate instead that’s 6/10.

PART H: (6/10)

# Part I: (X/10)

String Methods (i.e. methods called from the Java String class)

|  |  |
| --- | --- |
| excellent | >3 String methods used that integrate meaningfully into the project being  built. Line numbers shown |
| very good | 3 String methods used that integrate meaningfully into the project being  built. Line numbers shown |
| good | 2 String methods called. Line numbers shown |
| pass | 1 String method called. Line numbers shown |
| fail | Not included or not working. |

I have used 3 String methods (eg1 and eg2. And e.g.3) at lines 84, 85,86.

I’m recording a very good mark for this. 65%

That’s a mark of 6.5/10 but rounding would bring me to the next grade so I truncate instead

giving 6/10 PART I: (6/10)

# Part J: (X/3)

My program saves the display in a PNG file on a right mouse click 3/3 OR My program saves the display in a PNG file 2/3

OR My program saves the display in an image file 1/3

OR My program does not save the display in a PNG file 0/3 PART J: (3/3)

# Part K: (X/5)

I have a really nice-looking final image based on the theme of an irregular grid, some cells are combined, some are split. The cell contents uses colours, transparency , randomness, text, shapes overlayed on each other. It’s also interactive – if you move the mouse around the cells change. I will be displaying it in an art gallery!. 5/5.

OR

I have a final image based on the theme of a grid, Each cell uses a colour. 1/5

PART K: (5/5)

# Overall mark

\*\* DON’T FORGET TO TOTAL UP OR WE WILL FORGET TOO \*\* 3+2+5+6+20+16+5+6+6+3+5 = 77

This will be multiplied by a mark out of 10 for complexity of the problem you tackled. E.g. 10/10 = \*1

This will be multiplied by a mark out of 10 for interview. 10/10 \* 1

# \*\*\* Constraints \*\*\*

**Ignoring the constraints results in the equivalent of scoring 3/10 = .3 for interview**