## 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 <b>both</b> line comments // and multiline /* */	1
Indentation/formatting	Either manually indented correctly or autoformatted	1
Naming	(meaningful <b>names</b> 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.	1
Reflection	Completed properly and included in submission	1
	<b>Note</b> we will only look to assign marks where you suggest in your reflection	

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 2/2. Or I have sized the display window incorrectly so 1/2. Or I have not sized 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

excellent	3+ bespoke methods used, showing examples of different types of bespoke methods (return value, take params, overloading) 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 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