

### **Part A - HTML/CSS:**

Create two a file called “calculator.html” and “calculator.css” to recreate (as close as possible) to the following picture:

Name	Short Name	Grade	Percentage
Activity 1	A1	<input type="text"/> / <input type="text"/>	
Activity 2	A2	<input type="text"/> / <input type="text"/>	
Activity 3	A3	<input type="text"/> / <input type="text"/>	
Activity 4	A4	<input type="text"/> / <input type="text"/>	
TOTAL			

AVERAGE MEAN

You may make any reasonable guesses on fonts, colors and measurements.

### **Part B – Javascript**

Create a file called “calculate.js” that will calculate the grade percentages for each Activity. The Percentage for each activity should be displayed under the “Percentage” column. For example:

A1 70/100, A2 20/80, A3 10/10:

The corresponding columns should be

70%, 20%, 100%

In addition, the system should also allow users to choose to produce a calculated “Mean of grade” or “Average grades”. The result should be displayed in the “Percentage” column in the row labeled “TOTAL” in the above picture. Here are the calculations:

#### **Mean of grades**

The sum of all grades divided by the total number of grades

A1 70/100, A2 20/80, A3 10/10:

$$(0.7 + 0.25 + 1.0)/3 = 0.65 \rightarrow 65/100$$

#### **Average grades**

The sum of all grade values divided by the sum of maximums from all aggregated items.

A1 70/100, A2 20/80, A3 10/10:

$$(70 + 20 + 10)/(100+80+10) = 100/190 = 0.526 \rightarrow 52.6/100$$

## Assignment 1 (Due: June 24) - version 0.0

Hint: You may want to consider Javascript functions

```
onClick()  
getElementsByTagName()  
getElementsByName()
```

\*Note: These are minimal requirements; you are to add more of your own requirements for “creativity” marks. Consider what a user of this system may also be interested in. If in doubt, please feel free to ask any either the TA or myself 😊

### **Marking Scheme:**

Part A –

5 marks: The colors, fonts, and spacing should follow the picture as much as possible.

Part B –

10 marks: The correct values should be calculated.

7 marks: Creativity, Usability, and added features.