# SOEN 6611 Deliverable 1

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| GROUP C contribution table |            |           |           |
|----------------------------|------------|-----------|-----------|
| Group member               | Student ID | PROBLEM 1 | PROBLEM 2 |
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|                            |            |           |           |
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|                            |            |           |           |

# 1 PROBLEM 1

# 1.1 Goal of the METRICSTICS system

Improve the accuracy and reliability of METRICSTICS in providing descriptive statistics for a wide range of data sets.

# 1.1.1 Specific

Our goal is specific...

#### 1.1.2 Measurable

Our goal is measurable...

#### 1.1.3 Attainable

Our goal is attainable...

#### 1.1.4 Realistic

Our goal is realistic...

#### 1.1.5 Timely

Our goal is timely...

# 1.2 Questions with applied metrics

#### 1.2.1 Question 1

How can we enhance the accuracy of METRICSTICS in calculating the minimum (m) and maximum (M) values for various data sets?

- Metric 1: Mean Absolute Error (MAE) between METRICSTICS' calculated minimum (m) and actual minimum.
- Metric 2: Mean Absolute Error (MAE) between METRICSTICS' calculated maximum (M) and actual maximum.

### 1.2.2 Question 2

How can we improve the efficiency of METRICSTICS in identifying the mode (o) for data sets with large sample sizes?

### 1.2.3 Question 3

What strategies can be implemented to handle both odd and even sample sizes effectively in calculating the median (d)?

#### 1.2.4 Question 4

How can we enhance the accuracy of METRICSTICS in calculating the arithmetic mean  $(\mu)$  for data sets with outliers?

#### 1.2.5 Question 5

How can we reduce the mean absolute deviation (MAD) in METRICSTICS' descriptive statistics?

#### 1.2.6 Question 6

How can we enhance the accuracy of METRICSTICS in calculating the standard deviation ( $\sigma$ ) for data sets with different distributions?

#### 1.2.7 Question 7

What is the overall user satisfaction level with METRICSTICS in terms of providing accurate descriptive statistics?

### 1.2.8 Question 8

How can we ensure METRICSTICS remains adaptable to different data types and formats?

### 1.2.9 Question 9

What is the team's capacity for maintaining and improving METRICSTICS over time?

### 1.2.10 Question 10

How can we ensure METRICSTICS remains compliant with data privacy and security regulations?

### 1.3 Metrics

### 1.3.1 Metric 1

Mean Absolute Error (MAE) between METRICSTICS' calculated minimum (m) and actual minimum.

#### 1.3.2 Metric 2

Mean Absolute Error (MAE) between METRICSTICS' calculated maximum (M) and actual maximum.

# 2 PROBLEM 2

# 3 How to add Citations and a References List

You can then cite entries from it, like this: [1]. Just remember to specify a bibliography style, as well as the filename of the .bib. You can find a video tutorial here to learn more about BibTeX.

# References

[1] G. D. Greenwade, "The Comprehensive Tex Archive Network (CTAN)," *TUGBoat*, vol. 14, no. 3, pp. 342–351, 1993.