THE UNIVERSITY OF **WINNIPEG** | Professional, Applied and Continuing Education

Exercise 2 – Linear Classification

Assignment Overview:

In this lab exercise, you will build and compare two linear classification models using the dataset provided. Details about the dataset can be found at the following link.

Data URL:

Be sure to follow all the steps outlined in the workflow discussed in the class. You can use either the Jupyter notebook or an IDE of your choice.

You are tasked to do the following in this exercise:

1. Train and evaluate a logistic regression classifier
2. Train and evaluate a support vector machine classifier
3. Compare the two models in terms of accuracy, precision, recall & F1-score
4. Which of the two models would you recommend for this application
5. What would you do next to improve the model performance

Please submit your reports in PDF format.

Tips:

Ensure you are referring back to your course or other academic/reliable literature and resources to back-up your points and ideas.

The use of generative artificial intelligence is NOT allowed in this assignment.

Remember your Effective Communications courses; use the 7 C's of communication.