**CCT College Dublin**

**Assessment Cover Page**

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| **Module Title:** | Machine Learning for Business |
| **Assessment Title:** | CA1 Project |
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| **Date of Submission:** | 21/04/2024 |

**Declaration**

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| By submitting this assessment, I confirm that I have read the CCT policy on Academic Misconduct and understand the implications of submitting work that is not my own or does not appropriately reference material taken from a third party or other source. I declare it to be my own work and that all material from third parties has been appropriately referenced. I further confirm that this work has not previously been submitted for assessment by myself or someone else in CCT College Dublin or any other higher education institution. |

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# **Introduction**

## Motivation

## Problem Domain

## Objectives

## Why this dataset?

## Word count

# **Clustering Algorithms**

Which clustering algorithms would you consider for segmentation, and why? Explain the differences between silhouette score and Davies-Bouldin index in the context of clustering. Compare the results obtained from any two clustering algorithms from the chosen dataset.

## Ttttt1

## Tyyy2

# **ARIMA model – Time Series Data**

What insights can you derive from the initial exploration of the time series data based on the provided topics? Describe any trends, seasonality, or anomalies observed. How did you determine the appropriate parameters (p, d, q) for the ARIMA model. Evaluate the performance of the ARIMA model in forecasting future values, highlighting any strengths and limitations based on your chosen dataset.

# **Assessment**

# **Conclusion**

# **References**