**CARNEGIE MELLON UNIVERSITY**

**COURSE: PROGRAMMING FOR DATA ANALYTICS**

**COURSE CODE: 04-638-A**

**INSTRUCTOR: PROFESSOR GEORGE OKEYO**

**ASSIGNMENT: FINAL PROJECT: CUSTOMER SEGMENTATION AND CLASSIFICATION USING MACHINE LEARNING**

**REPORT TITLE:**

**PREPARED BY**

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# ABSTRACT

Maximum of 150 words. Includes context/background (1 pt), problem statement(1 pt), main purpose(1 pt), summary of approach(3 pts), results(2 pts) and conclusion(1 pt).

# BACKGROUND

# APPROACH

## Data Preparation

The dataset required for this analysis was contained in a CSV file named ‘CC General.csv’. This file was loaded into a pandas dataframe for preparation and analysis

## Exploratory Data Analysis

To explore the data, the information about all the columns in the dataframe was described. The dataset was checked for NaNvalues which would cause our model training to fail,

## Performance Metrics

## Unsupervised Model Building

## Supervised Model Building

## Model Debugging

## Model Deployment

# RESULTS AND DISCUSSION

(Results include EDA results (5 pts), evaluation results for unsupervised model (5 pts), evaluation results for all supervised models (12 pts), results of model debugging (5 pts), screenshots of the web application’s input and result pages (6 pts)). The discussion (12 pts) should be brief but highlight important observations from the analysis of results.

# CONCLUSION

# REFERENCES