## **DOUGLAS COLLEGE – Fall 2020**

## CSIS 3290 - 001 - Lab 03

- Create a folder and rename it according to the folder structure and naming convention stated below
- All the files you are required to submit for the assignment should be placed inside this folder.
- You will lose points if you just cut and paste materials from close exercises (e.g., If I see the same comments, variable names, etc. from class exercises being using in your code).
- If cheating is determined (i.e., you shared your work with another student in the class), your work will a ZERO mark and you will face further consequences.

Create a python notebook named as LabO3\_ABcXXXXX with A signifies the first letter of your first name, Bc signifies the first two letters of your last name and XXXXX denotes the last five digits of your student ID. In this part:

- Use the Employee-Attrition.csv
- Create a pipeline of classifiers with the following options/pipes:
  - Feature selection method (you can select any of the feature selection method in the demo of Lecture 7)
  - o Feature scaling (you can use any feature scaling method)
  - Classifiers: SVM (linear, rbf or poly), KNN and Decision Tree
- You should select the best pipeline that provide the highest accuracy
- Provide the confusion matrix, classification report and analyze the precision/recall for the select pipeline

## File/folder structure and naming convention

You need to create a folder named Lab03\_ABcXXXXX following the same naming convention mentioned above. The lab **must be submitted as a zip file**. Other type of compression (tar.gz, tar, bz2, rar) is not acceptable. Please make sure to check whether your zip file can be unzipped and contains all the required files for the project to work properly.

Copyright © 2020 Bambang A.B. Sarif and others. NOT FOR REDISTRIBUTION.

STUDENTS FOUND REDISTRIBUTING COURSE MATERIAL IS IN VIOLATION OF ACAMEDIC INTEGRITY POLICIES AND MAY FACE DISCIPLINARY ACTION BY THE COLLEGE ADMINISTRATION