UNIVERSITY OF CALGARY

Garbage Classification Model - Programming Assignment

The goal of this assignment is for you/your team to develop a classification model **that uses PyTorch** to solve the problem from assignment 01 (i.e., garbage classification). The data will be shared with you and will already be split into train, validation and test sets.

The deliverables for this assignment are:

- A jupyter-notebook containing your:
  - Classification model.
  - Training and testing code
  - Metrics: accuracy, accuracy per class, and confusion matrix
  - **All the code should be inside a single-jupyter-notebook file.**
- Attachments as appropriate (e.g., figures, etc.)

The assignment should be delivered at the deadline established in class using the appropriate D2L dropbox folder. The tutorial will be given a score between 0 and 100 and will be weighted accordingly to obtain the final grade.

Rubric

Category	Exceeds Expectations (85-100)	Meets Expectations (75-84)	Needs Improvement (65-74)	Below Expectations (0-64)
Code Execution (25%)	The program works as expected with no error messages and no warnings. The processing time is appropriate for the problem complexity.	The program works as expected with no error messages, but a few warnings. The processing times is a little high for the problem complexity;	The program has a few errors and maybe a few warnings, but the errors are easy to fix. The processing times are very high for the problem complexity.	The program has multiple error messages, which are not easy to fix. The processing times are extremely high for the problem complexity.
Clarity of the code (25%)	The code is clear and has pertinent comments	The code is somewhat clear and has some comments	Most of the code is not clear and has very few comments	The code is unclear and has no comments.

Proper usage of the techniques seen in class (50%)	- Uses appropriate methods for the problem at hand - Uses a sound experimental setup	- Uses methods that could be appropriate for the problem at hand -Uses an experimental setup that seems correct	Uses methods that do not seem to be appropriate for the problem at hand -Uses an experimental setup that is not the most appropriate to assess the methods	- Uses methods that are not appropriate for the problem at hand -Uses an experimental setup that is inconsistent