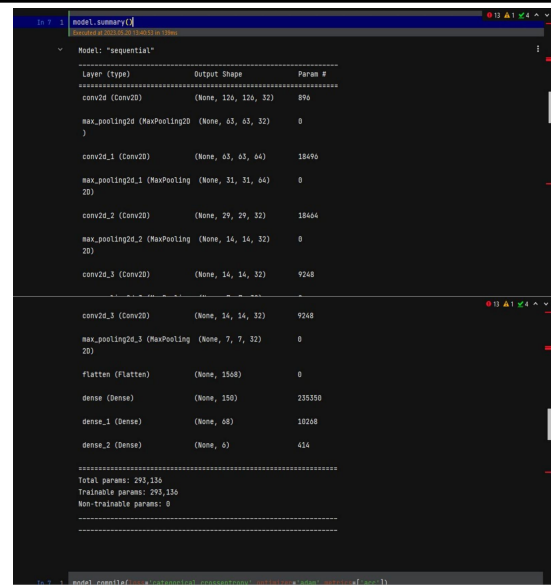
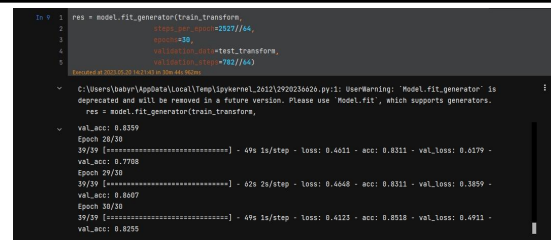


## Project Development Phase Model Performance Test

Date	19 May 2023
Team ID	NM2023TMID17565
Project Name	Project - Intelligent Garbage Classification Using Deep Learning

### Model Performance Testing:

Project team shall fill the following information in the model performance testing template.

S.No.	Parameter	Values	Screenshot
1.	Model Summary	-	 <pre> model.summary() Model: "sequential" Layer (type) Output Shape Param # ----- conv2d (Conv2D) (None, 128, 128, 32) 896 max_pooling2d (MaxPooling2D) (None, 63, 63, 32) 0 conv2d_1 (Conv2D) (None, 63, 63, 64) 18496 max_pooling2d_1 (MaxPooling2D) (None, 31, 31, 64) 0 conv2d_2 (Conv2D) (None, 29, 29, 32) 18464 max_pooling2d_2 (MaxPooling2D) (None, 14, 14, 32) 0 conv2d_3 (Conv2D) (None, 14, 14, 32) 9248 conv2d_4 (Conv2D) (None, 14, 14, 32) 9248 max_pooling2d_3 (MaxPooling2D) (None, 7, 7, 32) 0 flatten (Flatten) (None, 1568) 0 dense (Dense) (None, 150) 235350 dense_1 (Dense) (None, 64) 10240 dense_2 (Dense) (None, 6) 414 Total params: 293,136 Trainable params: 293,136 Non-trainable params: 0 </pre>
2.	Accuracy	Training Accuracy - 0.8518  Validation Accuracy - 0.8255	 <pre> res = model.fit_generator(train_transform,                           steps_per_epoch=2027//64,                           epochs=30,                           validation_data=(test_transform,   validation_steps=782//64))  C:\Users\ladyr\AppData\Local\Temp\ipykernel_26121\20230519\26121.py:1: UserWarning: "Model.fit_generator" is deprecated and will be removed in a future version. Please use "Model.fit", which supports generators.   res = model.fit_generator(train_transform,  val_acc: 0.8359 Epoch 26/30 29/29 [=====] - 49s 1s/step - loss: 0.4611 - acc: 0.8311 - val_loss: 0.6279 - val_acc: 0.7708 Epoch 29/30 29/29 [=====] - 42s 2s/step - loss: 0.4648 - acc: 0.8311 - val_loss: 0.3859 - val_acc: 0.8607 Epoch 30/30 29/29 [=====] - 49s 1s/step - loss: 0.4223 - acc: 0.8318 - val_loss: 0.4911 - val_acc: 0.8255 </pre>