Project Development Phase
Model Performance Test

Date	15 November 2022
Team ID	**PNT2022TMID36299**
Project Name	Project - AI-powered Nutrition Analyzer for Fitness Enthusiasts
Maximum Marks	10 Marks

Model Performance Testing:

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

S.No.	Parameter	Values	Screenshot

1.	Model Summary	`classifier = Sequential()`
		`classifier.add(Conv2D(32, (3, 3), input_shape=(64, 64, 3), activation='relu'))`
		`classifier.add(MaxPooling2D(pool_size=(2, 2)))`
		`classifier.add(Conv2D(32, (3, 3), activation='relu'))`
		`classifier.add(MaxPooling2D(pool_size=(2, 2)))`
		`classifier.add(Flatten())`
		`classifier.add(Dense (units=128, activation='relu'))`
		`classifier.add(Dense (units=5, activation='softmax'))`
			`classifier.summary()`
			
			`Model: "sequential_1"`
			`_____`
			`Layer (type) Output Shape Param #`
			`=====`
			`conv2d (Conv2D) (None, 62, 62, 32) 896`
			`max_pooling2d (MaxPooling2D (None, 31, 31, 32) 0`
			`)`
			`conv2d_1 (Conv2D) (None, 29, 29, 32) 9248`
			`max_pooling2d_1 (MaxPooling (None, 14, 14, 32) 0`
			`2D)`
			`flatten (Flatten) (None, 6272) 0`
			`dense (Dense) (None, 128) 802944`
			`dense_1 (Dense) (None, 5) 645`
			`=====`
			`Total params: 813,733`
			`Trainable params: 813,733`
			`Non-trainable params: 0`

2.	Accuracy	Training Accuracy – 1.0000 Validation Accuracy - 0.9801	/usr/local/lib/python3.7/dist-packages/ipykernel_launcher.py:1: UserWarning: `Model.fit_generator` is deprecated and will be removed in a future version. """Entry point for launching an IPython kernel. 526/526 [==============================] - 15s 14ms/step - loss: 0.1821 - accuracy: 0.9360 - val_loss: 0.0239 - val_accuracy: 1.0000 Epoch 2/20 526/526 [==============================] - 7s 14ms/step - loss: 0.0011 - accuracy: 1.0000 - val_loss: 0.0445 - val_accuracy: 0.9782 Epoch 3/20 526/526 [==============================] - 8s 15ms/step - loss: 0.0567 - accuracy: 0.9848 - val_loss: 0.0134 - val_accuracy: 0.9924 Epoch 4/20 526/526 [==============================] - 8s 15ms/step - loss: 3.1465e-04 - accuracy: 1.0000 - val_loss: 0.0102 - val_accuracy: 0.9981 Epoch 5/20 526/526 [==============================] - 7s 13ms/step - loss: 1.1439e-04 - accuracy: 1.0000 - val_loss: 0.0106 - val_accuracy: 0.9943 Epoch 6/20 526/526 [==============================] - 7s 14ms/step - loss: 7.3579e-05 - accuracy: 1.0000 - val_loss: 0.0095 - val_accuracy: 0.9943 Epoch 7/20 526/526 [==============================] - 7s 14ms/step - loss: 4.1322e-05 - accuracy: 1.0000 - val_loss: 0.0113 - val_accuracy: 0.9924 Epoch 8/20 526/526 [==============================] - 7s 13ms/step - loss: 2.7354e-05 - accuracy: 1.0000 - val_loss: 0.0182 - val_accuracy: 0.9915 Epoch 9/20 526/526 [==============================] - 7s 13ms/step - loss: 2.4434e-05 - accuracy: 1.0000 - val_loss: 0.0106 - val_accuracy: 0.9924 Epoch 10/20 526/526 [==============================] - 7s 14ms/step - loss: 3.6141e-05 - accuracy: 1.0000 - val_loss: 0.0481 - val_accuracy: 0.9763 Epoch 11/20 526/526 [==============================] - 7s 14ms/step - loss: 1.0413e-05 - accuracy: 1.0000 - val_loss: 0.0256 - val_accuracy: 0.9877 Epoch 12/20 526/526 [==============================] - 7s 14ms/step - loss: 7.0992e-06 - accuracy: 1.0000 - val_loss: 0.0167 - val_accuracy: 0.9915 Epoch 13/20 526/526 [==============================] - 7s 13ms/step - loss: 4.4195e-06 - accuracy: 1.0000 - val_loss: 0.0143 - val_accuracy: 0.9915 Epoch 14/20 526/526 [==============================] - 7s 14ms/step - loss: 7.4918e-06 - accuracy: 1.0000 - val_loss: 0.0251 - val_accuracy: 0.9877 Epoch 15/20 526/526 [==============================] - 7s 14ms/step - loss: 2.5972e-06 - accuracy: 1.0000 - val_loss: 0.0189 - val_accuracy: 0.9915 Epoch 16/20 526/526 [==============================] - 7s 14ms/step - loss: 1.5219e-06 - accuracy: 1.0000 - val_loss: 0.0251 - val_accuracy: 0.9886 Epoch 17/20 526/526 [==============================] - 7s 14ms/step - loss: 5.9915e-06 - accuracy: 1.0000 - val_loss: 0.1436 - val_accuracy: 0.9725 Epoch 18/20 526/526 [==============================] - 7s 14ms/step - loss: 1.1050e-06 - accuracy: 1.0000 - val_loss: 0.0635 - val_accuracy: 0.9763 Epoch 19/20 526/526 [==============================] - 7s 14ms/step - loss: 2.1558e-06 - accuracy: 1.0000 - val_loss: 0.0413 - val_accuracy: 0.9810 Epoch 20/20 526/526 [==============================] - 7s 14ms/step - loss: 7.1139e-07 - accuracy: 1.0000 - val_loss: 0.0497 - val_accuracy: 0.9801 <keras.callbacks.History at 0x7efbd0810f10>