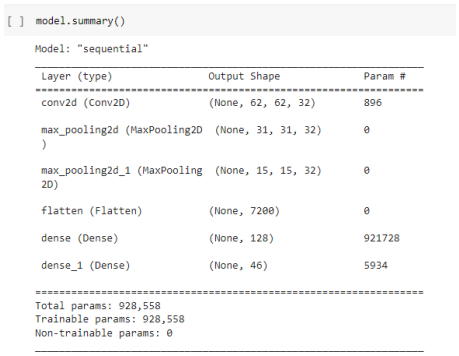
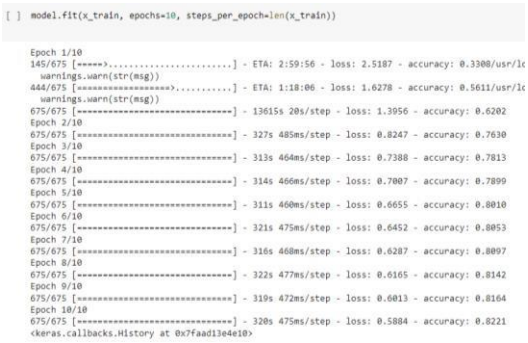
Project Development Phase

Model Performance Test

Date	21 November 2022
TeamID	PNT2022TMID49469
Project Name	AI-Powered Nutrition Analyzer For Fitness Enthusiasts
MaximumMarks	8

Model Performance Testing:

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

S.No.	Parameter	Values	Screenshot
1.	Model Summary	Total params: 928 Trainable params: 928 Non-trainable params: 0	
2.	Accuracy	Training Accuracy – 0.1268 Validation Accuracy – 0.8221	

Model Summary

```
[ ]  model.summary()
```

```
Model: "sequential"
_________________________________________________________________
 Layer (type)                Output Shape              Param #
=================================================================
 conv2d (Conv2D)             (None, 62, 62, 32)        896

 max_pooling2d (MaxPooling2D  (None, 31, 31, 32)       0
 )

 max_pooling2d_1 (MaxPooling  (None, 15, 15, 32)       0
 2D)

 flatten (Flatten)           (None, 7200)              0

 dense (Dense)               (None, 128)               921728

 dense_1 (Dense)             (None, 46)                5934

=================================================================
Total params: 928,558
Trainable params: 928,558
Non-trainable params: 0
_________________________________________________________________
```

Accuracy

```
[ ]  model.fit(x_train, epochs=10, steps_per_epoch=len(x_train))
```

```
Epoch 1/10
145/675 [=====>........................] - ETA: 2:59:56 - loss: 2.5187 - accuracy: 0.3308/usr/lc
  warnings.warn(str(msg))
444/675 [==================>...........] - ETA: 1:18:06 - loss: 1.6278 - accuracy: 0.5611/usr/lc
  warnings.warn(str(msg))
675/675 [==============================] - 13615s 20s/step - loss: 1.3956 - accuracy: 0.6202
Epoch 2/10
675/675 [==============================] - 327s 485ms/step - loss: 0.8247 - accuracy: 0.7630
Epoch 3/10
675/675 [==============================] - 313s 464ms/step - loss: 0.7388 - accuracy: 0.7813
Epoch 4/10
675/675 [==============================] - 314s 466ms/step - loss: 0.7007 - accuracy: 0.7899
Epoch 5/10
675/675 [==============================] - 311s 460ms/step - loss: 0.6655 - accuracy: 0.8010
Epoch 6/10
675/675 [==============================] - 321s 475ms/step - loss: 0.6452 - accuracy: 0.8053
Epoch 7/10
675/675 [==============================] - 316s 468ms/step - loss: 0.6287 - accuracy: 0.8097
Epoch 8/10
675/675 [==============================] - 322s 477ms/step - loss: 0.6165 - accuracy: 0.8142
Epoch 9/10
675/675 [==============================] - 319s 472ms/step - loss: 0.6013 - accuracy: 0.8164
Epoch 10/10
675/675 [==============================] - 320s 475ms/step - loss: 0.5884 - accuracy: 0.8221
<keras.callbacks.History at 0x7faad13e4e10>
```