

Project Development Phase Model Performance Test

Date	18 November 2022
Team ID	PNT2022TMID46445
Project Name	Project - AI-powered Nutrition Analyzer for Fitness Enthusiasts
Maximum Marks	

Model Performance Testing:

S. N o.	Parameter	Values	Screenshot																																							
	Model Summary	Total params: 9,767,489 Trainable params: 9,767,489 Non-trainable params: 0	<pre>classifier.summary()</pre> <p>Model: "sequential_2"</p> <table><thead><tr><th>Layer (type)</th><th>Output Shape</th><th>Param #</th></tr></thead><tbody><tr><td>conv2d_4 (Conv2D)</td><td>(None, 61, 61, 32)</td><td>1568</td></tr><tr><td>max_pooling2d_4 (MaxPooling 2D)</td><td>(None, 30, 30, 32)</td><td>0</td></tr><tr><td>conv2d_5 (Conv2D)</td><td>(None, 27, 27, 32)</td><td>16416</td></tr><tr><td>max_pooling2d_5 (MaxPooling 2D)</td><td>(None, 13, 13, 32)</td><td>0</td></tr><tr><td>flatten_2 (Flatten)</td><td>(None, 5408)</td><td>0</td></tr><tr><td>dense_14 (Dense)</td><td>(None, 200)</td><td>1081800</td></tr><tr><td>dense_15 (Dense)</td><td>(None, 500)</td><td>100500</td></tr><tr><td>dense_16 (Dense)</td><td>(None, 1000)</td><td>501000</td></tr><tr><td>dense_17 (Dense)</td><td>(None, 5000)</td><td>5005000</td></tr><tr><td>dense_18 (Dense)</td><td>(None, 600)</td><td>3000600</td></tr><tr><td>dense_19 (Dense)</td><td>(None, 100)</td><td>60100</td></tr><tr><td>dense_20 (Dense)</td><td>(None, 5)</td><td>505</td></tr></tbody></table> <p>Total params: 9,767,489 Trainable params: 9,767,489 Non-trainable params: 0</p>	Layer (type)	Output Shape	Param #	conv2d_4 (Conv2D)	(None, 61, 61, 32)	1568	max_pooling2d_4 (MaxPooling 2D)	(None, 30, 30, 32)	0	conv2d_5 (Conv2D)	(None, 27, 27, 32)	16416	max_pooling2d_5 (MaxPooling 2D)	(None, 13, 13, 32)	0	flatten_2 (Flatten)	(None, 5408)	0	dense_14 (Dense)	(None, 200)	1081800	dense_15 (Dense)	(None, 500)	100500	dense_16 (Dense)	(None, 1000)	501000	dense_17 (Dense)	(None, 5000)	5005000	dense_18 (Dense)	(None, 600)	3000600	dense_19 (Dense)	(None, 100)	60100	dense_20 (Dense)	(None, 5)	505
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	Accuracy	Training Accuracy - 98.18 Validation Accuracy - 92.38	<pre>Epoch 93/100 138/138 [=====] - 16s 110ms/step - loss: 0.0898 - accuracy: 0.9689 - val_loss: 0.5588 - val_accuracy: 0.9205 Epoch 94/100 138/138 [=====] - 16s 118ms/step - loss: 0.0781 - accuracy: 0.9772 - val_loss: 0.3574 - val_accuracy: 0.9254 Epoch 95/100 138/138 [=====] - 16s 119ms/step - loss: 0.0499 - accuracy: 0.9842 - val_loss: 0.4568 - val_accuracy: 0.9205 Epoch 96/100 138/138 [=====] - 16s 118ms/step - loss: 0.0678 - accuracy: 0.9796 - val_loss: 0.3870 - val_accuracy: 0.9278 Epoch 97/100 138/138 [=====] - 17s 120ms/step - loss: 0.0638 - accuracy: 0.9818 - val_loss: 0.3156 - val_accuracy: 0.9270 Epoch 98/100 138/138 [=====] - 16s 119ms/step - loss: 0.0475 - accuracy: 0.9854 - val_loss: 0.4149 - val_accuracy: 0.9278 Epoch 99/100 138/138 [=====] - 16s 118ms/step - loss: 0.0431 - accuracy: 0.9852 - val_loss: 0.3842 - val_accuracy: 0.9221 Epoch 100/100 138/138 [=====] - 16s 118ms/step - loss: 0.0566 - accuracy: 0.9838 - val_loss: 0.4653 - val_accuracy: 0.9238</pre>																																							