

## Project Development Phase Model Performance Test

Date	20 November 2023
Team ID	592871
Project Name	Deep Learning Model for Eye Disease Detection
Maximum Marks	10 Marks

### Model Performance Testing:

S.No.	Parameter	Values	Screenshot																																																																																																			
1.	Model Summary	<div><table><tr><td>rescaling_input</td><td>input:</td><td>[(None, 180, 180, 3)]</td></tr><tr><td>InputLayer</td><td>output:</td><td>[(None, 180, 180, 3)]</td></tr></table><div>↓</div><table><tr><td>rescaling</td><td>input:</td><td>(None, 180, 180, 3)</td></tr><tr><td>Rescaling</td><td>output:</td><td>(None, 180, 180, 3)</td></tr></table><div>↓</div><table><tr><td>conv2d</td><td>input:</td><td>(None, 180, 180, 3)</td></tr><tr><td>Conv2D</td><td>output:</td><td>(None, 180, 180, 16)</td></tr></table><div>↓</div><table><tr><td>max_pooling2d</td><td>input:</td><td>(None, 180, 180, 16)</td></tr><tr><td>MaxPooling2D</td><td>output:</td><td>(None, 90, 90, 16)</td></tr></table><div>↓</div><table><tr><td>conv2d_1</td><td>input:</td><td>(None, 90, 90, 16)</td></tr><tr><td>Conv2D</td><td>output:</td><td>(None, 90, 90, 32)</td></tr></table><div>↓</div><table><tr><td>max_pooling2d_1</td><td>input:</td><td>(None, 90, 90, 32)</td></tr><tr><td>MaxPooling2D</td><td>output:</td><td>(None, 45, 45, 32)</td></tr></table><div>↓</div><table><tr><td>conv2d_2</td><td>input:</td><td>(None, 45, 45, 32)</td></tr><tr><td>Conv2D</td><td>output:</td><td>(None, 45, 45, 64)</td></tr></table><div>↓</div><table><tr><td>max_pooling2d_2</td><td>input:</td><td>(None, 45, 45, 64)</td></tr><tr><td>MaxPooling2D</td><td>output:</td><td>(None, 22, 22, 64)</td></tr></table><div>↓</div><table><tr><td>flatten</td><td>input:</td><td>(None, 22, 22, 64)</td></tr><tr><td>Flatten</td><td>output:</td><td>(None, 30976)</td></tr></table><div>↓</div><table><tr><td>dense</td><td>input:</td><td>(None, 30976)</td></tr><tr><td>Dense</td><td>output:</td><td>(None, 128)</td></tr></table><div>↓</div><table><tr><td>dense_1</td><td>input:</td><td>(None, 128)</td></tr><tr><td>Dense</td><td>output:</td><td>(None, 6)</td></tr></table></div>	rescaling_input	input:	[(None, 180, 180, 3)]	InputLayer	output:	[(None, 180, 180, 3)]	rescaling	input:	(None, 180, 180, 3)	Rescaling	output:	(None, 180, 180, 3)	conv2d	input:	(None, 180, 180, 3)	Conv2D	output:	(None, 180, 180, 16)	max_pooling2d	input:	(None, 180, 180, 16)	MaxPooling2D	output:	(None, 90, 90, 16)	conv2d_1	input:	(None, 90, 90, 16)	Conv2D	output:	(None, 90, 90, 32)	max_pooling2d_1	input:	(None, 90, 90, 32)	MaxPooling2D	output:	(None, 45, 45, 32)	conv2d_2	input:	(None, 45, 45, 32)	Conv2D	output:	(None, 45, 45, 64)	max_pooling2d_2	input:	(None, 45, 45, 64)	MaxPooling2D	output:	(None, 22, 22, 64)	flatten	input:	(None, 22, 22, 64)	Flatten	output:	(None, 30976)	dense	input:	(None, 30976)	Dense	output:	(None, 128)	dense_1	input:	(None, 128)	Dense	output:	(None, 6)	<div><pre>model.summary()</pre></div> <div>Model: "sequential"</div> <table><tr><th>Layer (type)</th><th>Output Shape</th><th>Param #</th></tr><tr><td>rescaling (Rescaling)</td><td>(None, 180, 180, 3)</td><td>0</td></tr><tr><td>conv2d (Conv2D)</td><td>(None, 180, 180, 16)</td><td>448</td></tr><tr><td>max_pooling2d (MaxPooling2D)</td><td>(None, 90, 90, 16)</td><td>0</td></tr><tr><td>conv2d_1 (Conv2D)</td><td>(None, 90, 90, 32)</td><td>4640</td></tr><tr><td>max_pooling2d_1 (MaxPooling2D)</td><td>(None, 45, 45, 32)</td><td>0</td></tr><tr><td>conv2d_2 (Conv2D)</td><td>(None, 45, 45, 64)</td><td>18496</td></tr><tr><td>max_pooling2d_2 (MaxPooling2D)</td><td>(None, 22, 22, 64)</td><td>0</td></tr><tr><td>flatten (Flatten)</td><td>(None, 30976)</td><td>0</td></tr><tr><td>dense (Dense)</td><td>(None, 128)</td><td>3965056</td></tr><tr><td>dense_1 (Dense)</td><td>(None, 6)</td><td>774</td></tr></table> <div>Total params: 3989414 (15.22 MB) Trainable params: 3989414 (15.22 MB) Non-trainable params: 0 (0.00 Byte)</div>	Layer (type)	Output Shape	Param #	rescaling (Rescaling)	(None, 180, 180, 3)	0	conv2d (Conv2D)	(None, 180, 180, 16)	448	max_pooling2d (MaxPooling2D)	(None, 90, 90, 16)	0	conv2d_1 (Conv2D)	(None, 90, 90, 32)	4640	max_pooling2d_1 (MaxPooling2D)	(None, 45, 45, 32)	0	conv2d_2 (Conv2D)	(None, 45, 45, 64)	18496	max_pooling2d_2 (MaxPooling2D)	(None, 22, 22, 64)	0	flatten (Flatten)	(None, 30976)	0	dense (Dense)	(None, 128)	3965056	dense_1 (Dense)	(None, 6)	774
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2.	Accuracy	<div>Training Accuracy – 99.18%</div> <div>Validation Accuracy – 91.30%</div>	<div><div>lossaccuracyval_lossval_accuracy</div><div>250.0436940.9858330.3572520.8830</div><div>260.0828230.9718330.3080560.9065</div><div>270.0502130.9850000.3472220.8985</div><div>280.0518180.9855000.3427030.8965</div><div>290.0316410.9918330.2975830.9130</div></div>
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