Project Development Phase Model Performance Test

Date	October 2023
Team ID	Team-592617
Project Name	Jungle Detectives: AI-Powered Image Classification of Wild Big Cats
Maximum Marks	10 Marks

Model Performance Testing:

S.No.	Parameter	Values	Screenshot		
1.	Model Summary	-	Model: "sequential_5"		
			Layer (type)	Output Shape	Param #
			resnet50v2 (Functional)	(None, 7, 7, 2048)	23564800
			global_average_pooling2d_5 (GlobalAveragePooling2D)	(None, 2048)	0
			flatten (Flatten)	(None, 2048)	0
			dense_5 (Dense)	(None, 256)	524544
			dropout_5 (Dropout)	(None, 256)	0
			dense_6 (Dense)	(None, 10)	2570
			Total params: 24091914 (91.90 Trainable params: 527114 (2.0 Non-trainable params: 2356480	01 MB)	

2.	Accuracy	Training Accuracy – 91%	Epoch 17/20		
		Validation Accuracy – 95%	146/146 [====================================		
3.	Confusion Matrix	-	Confusion Matrix		
			AFRICAN LEOPARD -		
			CARACAL -		
			CHEETAH -		
			CLOUDED LEOPARD -		
			JAGUAR -		
			LIONS -		
			OCELOT -		
			PUMA -		
			SNOW LEOPARD -		
			TIGER -		
			KERLEAN LEDAR LEDE LEDE LEDAR		
			Predicted label		
4.	Test Accuracy Scores	-	Test loss: 0.02155800350010395		
	255145		Test accuracy: 1.0		

5.	Classification Report		precision	recall	f1-score	support
		AFRICAN LEOPARD	1.00	1.00	1.00	5
		CARACAL	1.00	1.00	1.00	5
		CHEETAH	1.00	1.00	1.00	5
		CLOUDED LEOPARD	1.00	1.00	1.00	5
		JAGUAR	1.00	1.00	1.00	5
		LIONS	1.00	1.00	1.00	5
		OCELOT	1.00	1.00	1.00	5
		PUMA	1.00	1.00	1.00	5
		SNOW LEOPARD	1.00	1.00	1.00	5
		TIGER	1.00	1.00	1.00	5
		accuracy			1.00	50
		macro avg	1.00	1.00	1.00	50
		weighted avg	1.00	1.00	1.00	50