Project Development Phase

Model Performance Test

Date	14 November 2022
Team ID	PNT2022TMID29664
Project Name	Real time communication powered by AI for specially abled
Maximum Marks	10 Marks

PERFORMANCE METRICS:

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

S.No.	Parameter	Values
1.	Model Summary	-Model: "sequential" _____ Layer (type) Output Shape Param # ========== conv2d (Conv2D) (None, 62, 62, 32) 896 max_pooling2d (MaxPooling2D) (None, 31, 31, 32) 0 flatten (Flatten) (None, 30752) 0 dense (Dense) (None, 200) 6150600 dense_1 (Dense) (None, 200) 40200 dense_2 (Dense) (None, 9) 1809 ========== Total params: 6,193,505 Trainable params: 6,193,505 Non-trainable params: 0 _____

2.	Accuracy	Training Accuracy - 0.9942 Validation Accuracy - 0.9778

MODEL SUMMARY:

➤ Each layer has an output and its shape is shown in the “Output Shape” column. Each layer’s output becomes the input for the subsequent layer.

➤ The “Param #” column shows you the number of parameters that are trained for each layer.

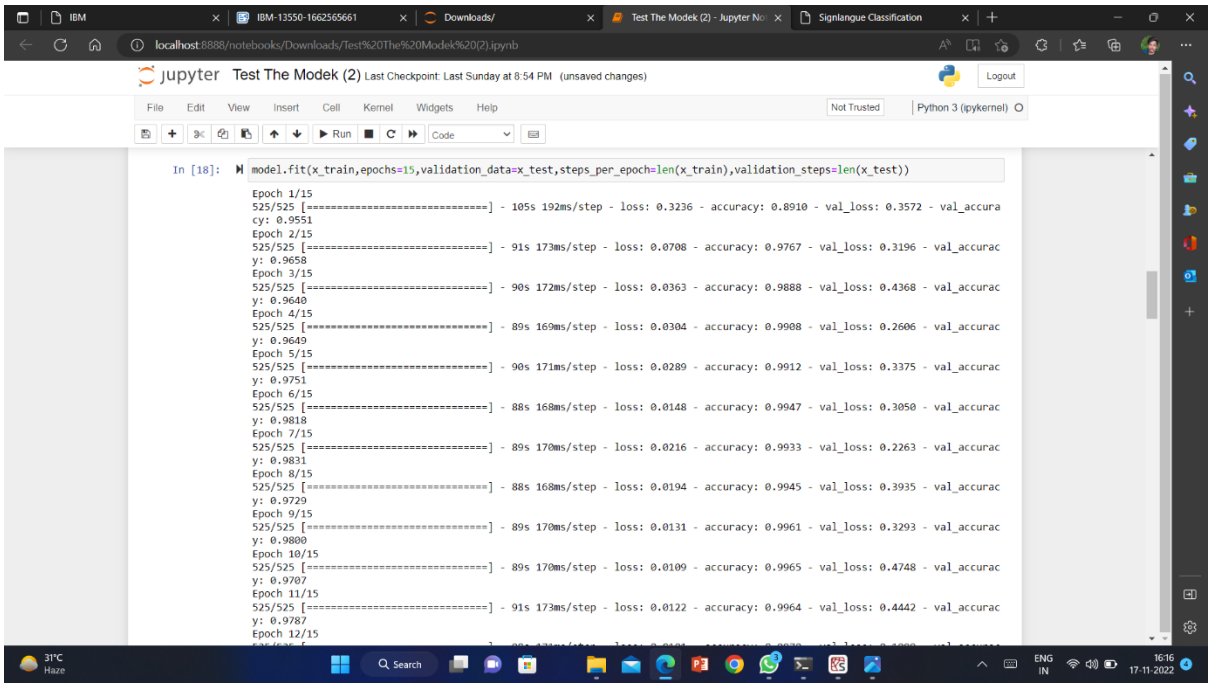
➤ The total number of parameters is shown at the end, which is equal to the number of trainable and non-trainable parameters. In this model, all the layers are trainable.

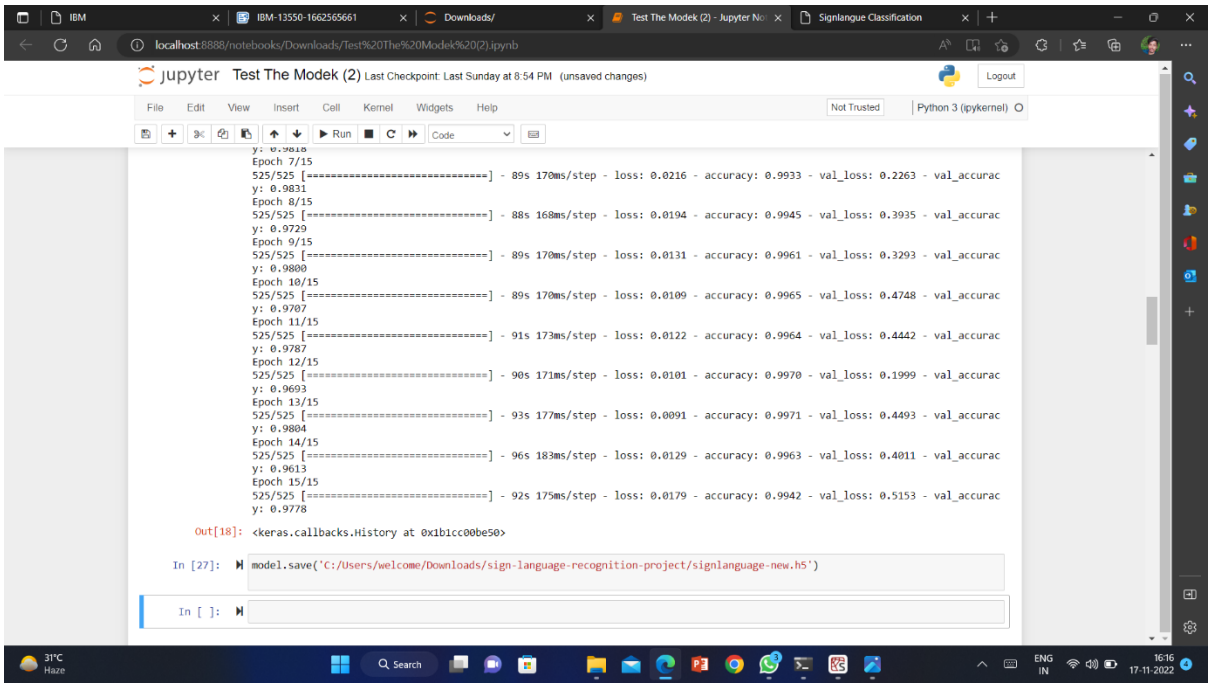
Accuracy:

➤ "loss" refers to the loss value over the training data after each epoch. This is what the optimization process is trying to minimize with the training so, the lower, the better.

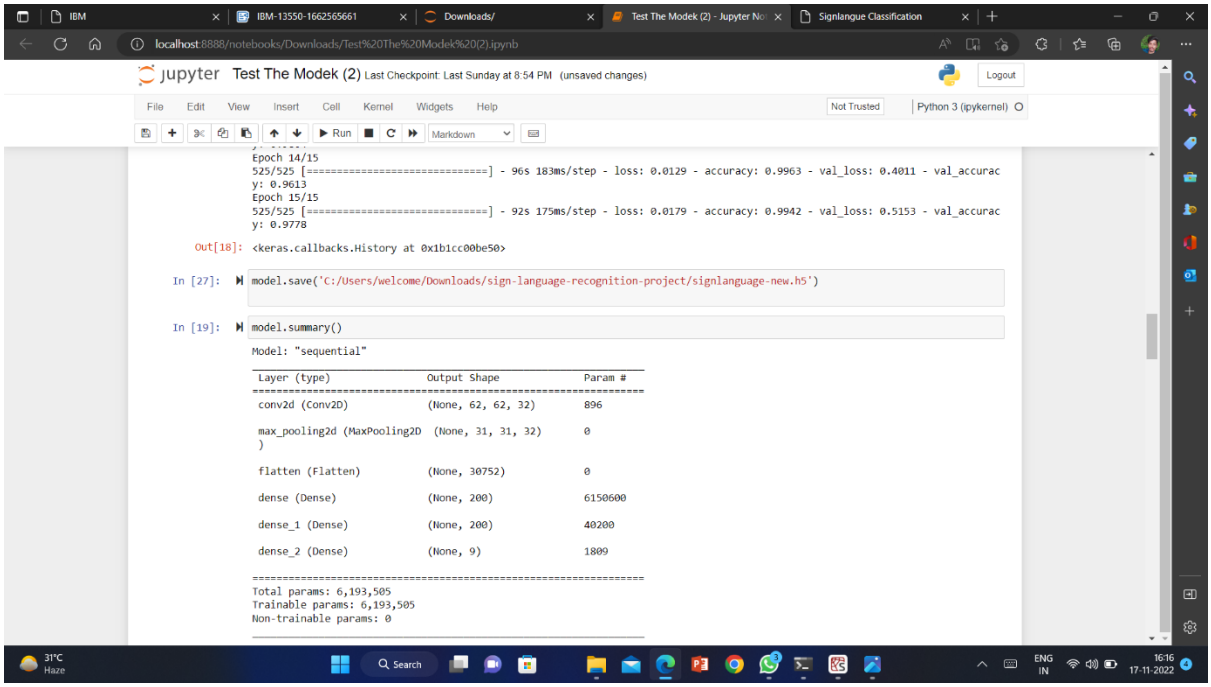
"accuracy" refers to the ratio between correct predictions and the total number of predictions in the training data. The higher, the better. This is normally inversely correlated with the loss.

accuracy image:

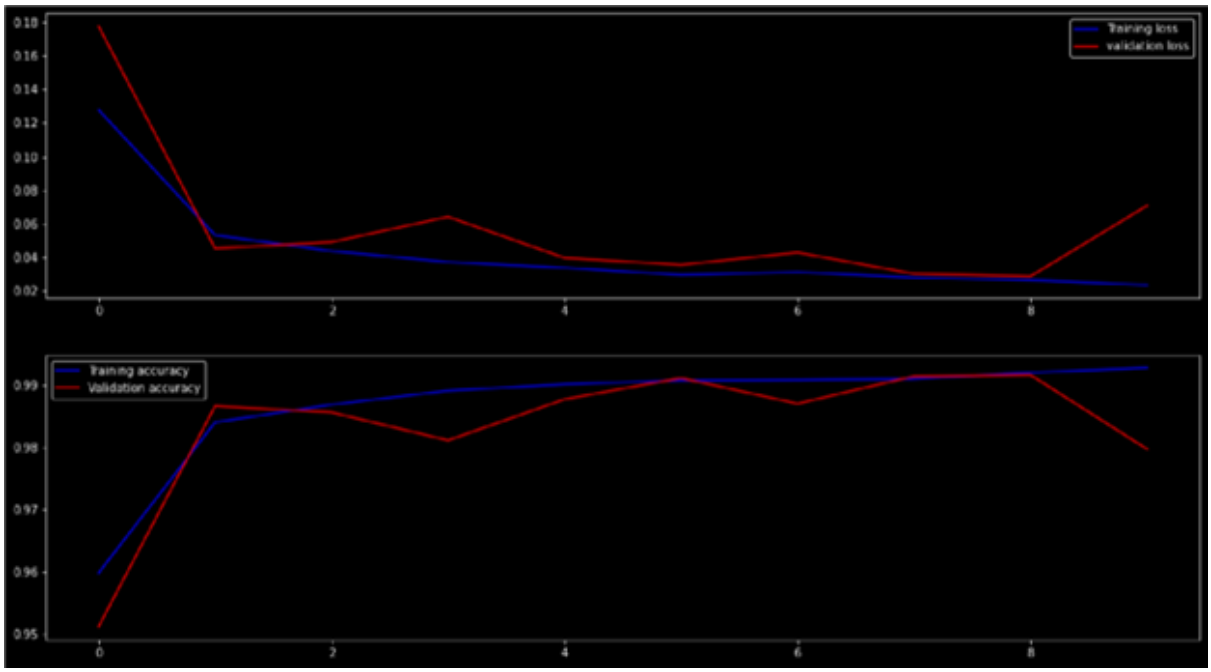




Model summary image:



ACCURACY TESTING:



PERFORMANCE TESTING USING LOCUST TEST :

Locust Test Report

During: 11/12/2022, 7:05:40 AM - 11/12/2022, 7:14:47 AM

Target Host: http://127.0.0.1:5000/

Script: locust.py

Request Statistics

Method	Name	# Requests	# Fails	Average (ms)	Min (ms)	Max (ms)	Average size (bytes)	RPS	Failures/s
GET	/	1043	0	13	4	290	1079	1.9	0.0
GET	/predict	1005	0	39648	385	59814	2670	1.8	0.0
	Aggregated	**2048**	**0**	**19462**	**4**	**59814**	**1859**	**3.7**	**0.0**

Response Time Statistics

Method	Name	50%ile (ms)	60%ile (ms)	70%ile (ms)	80%ile (ms)	90%ile (ms)	95%ile (ms)	99%ile (ms)	100%ile (ms)
GET	/	10	11	13	15	19	22	62	290
GET	/predict	44000	46000	47000	48000	50000	52000	55000	60000
	Aggregated	**36**	**36000**	**43000**	**45000**	**48000**	**50000**	**54000**	**60000**

Charts


Total Requests per Second
RPS
Failures/s
6
5
4
3
2
1
0
7:05:43 AM
7:06:38 AM
7:07:33 AM
7:08:28 AM
7:09:23 AM
7:10:18 AM
7:11:13 AM
7:12:08 AM
7:13:03 AM
7:13:58 AM
Response Times (ms)
Median Response Time
95% percentile
60,000
50,000
40,000
30,000
20,000
10,000
0
7:05:43 AM
7:06:38 AM
7:07:33 AM
7:08:28 AM
7:09:23 AM
7:10:18 AM
7:11:13 AM
7:12:08 AM
7:13:03 AM
7:13:58 AM
Number of Users
Users
120
100
80
60
40
20
0
7:05:43 AM
7:06:38 AM
7:07:33 AM
7:08:28 AM
7:09:23 AM
7:10:18 AM
7:11:13 AM
7:12:08 AM
7:13:03 AM
7:13:58 AM