




Project Development Phase Model Performance Test

| | |
|---------------|---|
| Date | 10 November 2022 |
| Team ID | PNT2022TMID22136 |
| Project Name | REAL-TIME COMMUNICATION SYSTEM POWERED BY AI FOR SPECIALLY ABLED |
| Maximum Marks | 10 Marks |

Model Performance Testing:

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

| S.No. | Parameter | Values | Screenshot |
|-------|---------------|---|---|
| 1. | Model Summary | The project aims to develop a system that converts the sign language into a human hearing voice in the desired language to convert speech into understandable sign language for the deaf . We are making use of aconvolution neural network to create a model that is trained on different hand gestures. An app is built which uses this model. This app enables deaf people to convey their information using signs which get converted to human-understandable language and speech is given as output. |    |
| 2. | Accuracy | Training Accuracy - 0.9990 Validation Accuracy -0.9773 | <pre> Epoch 1/10 630/630 [=====] - 342s 220ms/step - loss: 0.1915 - accuracy: 0.9860 - val_loss: 0.2807 - val_accuracy: 0.9728 - lr: 0.0010 Epoch 2/10 630/630 [=====] - 342s 220ms/step - loss: 0.0270 - accuracy: 0.9903 - val_loss: 0.4361 - val_accuracy: 0.9728 - lr: 0.0010 Epoch 3/10 630/630 [=====] - 342s 220ms/step - loss: 0.0179 - accuracy: 0.9903 - val_loss: 0.3518 - val_accuracy: 0.9768 - lr: 0.0010 Epoch 4/10 630/630 [=====] - 342s 220ms/step - loss: 0.0146 - accuracy: 0.9908 - val_loss: 0.4361 - val_accuracy: 0.9761 - lr: 0.0010 Epoch 5/10 630/630 [=====] - 342s 220ms/step - loss: 0.0134 - accuracy: 0.9908 - val_loss: 0.2918 - val_accuracy: 0.9844 - lr: 0.0010 Epoch 6/10 630/630 [=====] - 342s 220ms/step - loss: 0.0101 - accuracy: 0.9908 - val_loss: 0.3088 - val_accuracy: 0.9779 - lr: 0.0010 Epoch 7/10 630/630 [=====] - 342s 220ms/step - loss: 0.0080 - accuracy: 0.9977 - val_loss: 0.7018 - val_accuracy: 0.9779 - lr: 0.0010 Epoch 8/10 630/630 [=====] - 342s 220ms/step - loss: 0.0050 - accuracy: 0.9985 - val_loss: 0.6478 - val_accuracy: 0.9689 - lr: 0.0010 Epoch 9/10 630/630 [=====] - 342s 220ms/step - loss: 0.0105 - accuracy: 0.9989 - val_loss: 0.3854 - val_accuracy: 0.9793 - lr: 0.0010 Epoch 10/10 630/630 [=====] - 342s 220ms/step - loss: 0.0029 - accuracy: 0.9999 - val_loss: 0.5111 - val_accuracy: 0.9773 - lr: 0.0010 </pre> |