

SPRINT – 3

TEAM ID	PNT2022TMID27588
PROJECT NAME	Real-Time Communication System Powered by AI for Specially Abled
DATE OF THE MEETING	7-11-2022

MINUTES OF THE MEETING:

- The model trained in the earlier sprint was saved and loaded using the `model.load()` function.
- The loaded model was tested using the sample images provided in the testset of the dataset packages.
- The errors in the testing the model was rectified and the correctness of the model was improved.

Training and testing:

The screenshot shows a Google Meet window with a Jupyter Notebook open. The notebook is titled "Projects / image_classification / Train" and contains the following code:

```
model.compile(loss = 'categorical_crossentropy', optimizer = 'adam', metrics = ['accuracy'])

In [19]: # Fitting the model
model.fit_generator(K_train, steps_per_epoch = 24, epochs = 30, validation_data = K_test, validation_steps = 40)

Out[18]: <keras.callbacks.History at 0x7f174421730d>

In [19]: # Saving the model
model.save('xajimg1.h5')
```

The output of the training process is displayed in the notebook, showing the progress of the model over 30 epochs. The output includes the following information:

- Epoch 1/30: loss: 1.6695 - accuracy: 0.5052 - val_loss: 0.6871 - val_accuracy: 0.5180
- Epoch 2/30: loss: 0.5943 - accuracy: 0.8021 - val_loss: 0.6764 - val_accuracy: 0.7977
- Epoch 3/30: loss: 0.3094 - accuracy: 0.9062 - val_loss: 0.4268 - val_accuracy: 0.8828
- Epoch 4/30: loss: 0.2478 - accuracy: 0.9180 - val_loss: 0.3523 - val_accuracy: 0.9094
- Epoch 5/30: loss: 0.2010 - accuracy: 0.9466 - val_loss: 0.3436 - val_accuracy: 0.9344
- Epoch 6/30: loss: 0.1731 - accuracy: 0.9531 - val_loss: 0.2346 - val_accuracy: 0.9493
- Epoch 7/30: loss: 0.1074 - accuracy: 0.9727 - val_loss: 0.2018 - val_accuracy: 0.9489
- Epoch 8/30: loss: 0.0984 - accuracy: 0.9727 - val_loss: 0.1873 - val_accuracy: 0.9489
- Epoch 9/30: loss: 0.0930 - accuracy: 0.9701 - val_loss: 0.1716 - val_accuracy: 0.9727
- Epoch 10/30: loss: 0.0816 - accuracy: 0.9753 - val_loss: 0.1633 - val_accuracy: 0.9680

The notebook is running on a Google Cloud Platform instance, and the output is displayed in the Jupyter Notebook interface. The Google Meet window shows the Jupyter Notebook interface with the code and output, and the Google Meet controls at the bottom.