

## Deliverable III

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Ref:

- <https://blog.clairvoyantsoft.com/music-genre-classification-using-cnn-ef9461553726>
  - <https://www.analyticsvidhya.com/blog/2021/06/music-genres-classification-using-deep-learning-techniques/>

1. I have not changed the code related to my model. I have simply saved the weights and am still receiving the following results for accuracy.

2. Results:

- a. Results show that data of 3-sec clips produced much higher accuracy in CNN model even with almost half number of epochs (600 vs 1000)
- b. 91.9% vs 75.15%

```
✓[28] test_loss, test_acc= model.evaluate(X_test,y_test,batch_size=128)
ls print("The test Loss is :", test_loss)
   print("\nThe best test accuracy is: ", test_acc*100)

3/3 [=====] - 0s 5ms/step - loss: 2.7657 - accuracy: 0.7515
The test Loss is : 2.7656843662261963

The best test accuracy is: 75.15151500701904
```

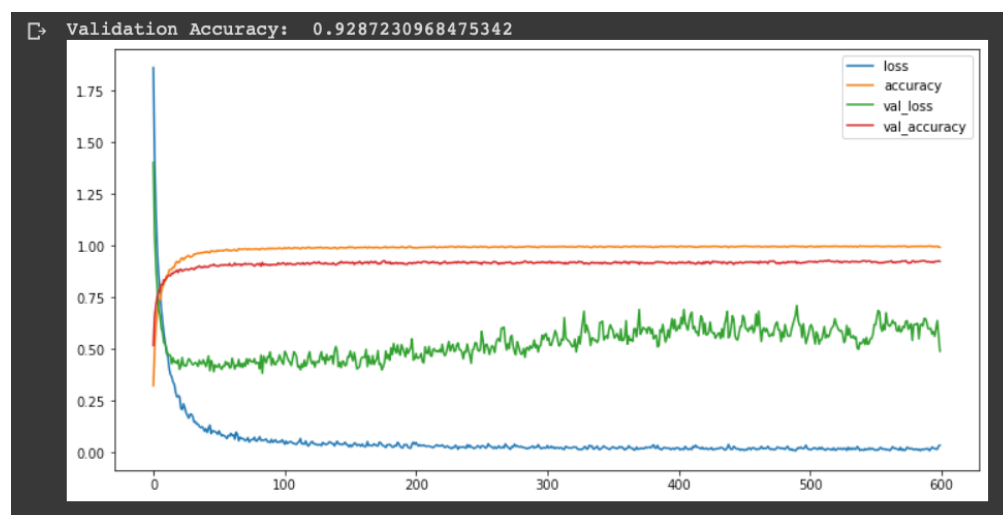
```
▶ test_loss, test_acc= model.evaluate(X_test,y_test,batch_size=128)
   print("The test Loss is :", test_loss)
   print("\nThe best test accuracy is: ", test_acc*100)

26/26 [=====] - 0s 3ms/step - loss: 0.7018 - accuracy: 0.9193
The test Loss is : 0.7017708420753479

The best test accuracy is: 91.93205833435059
```

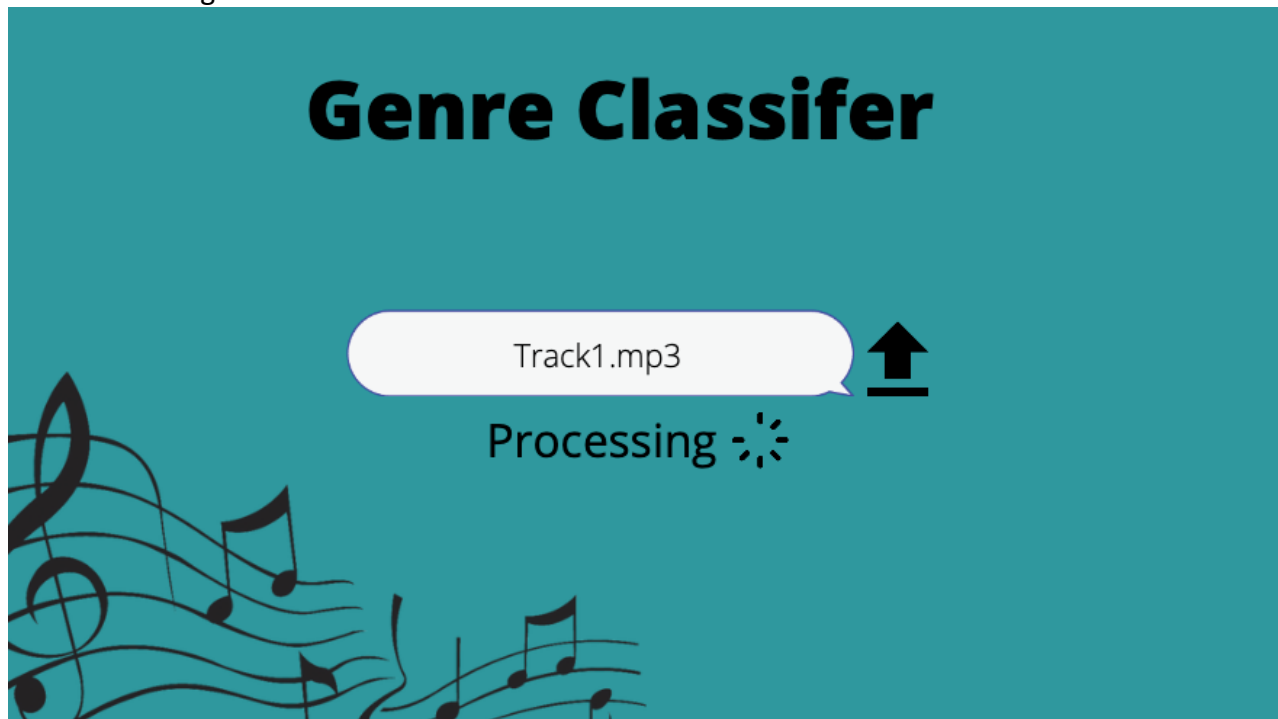
c. Results are good for the 3\_sec dataset

3. Accuracy Plot for the model history (3\_sec dataset):



## Landing Page Concept Art:

- Main Page:



- Result Page

