

Report

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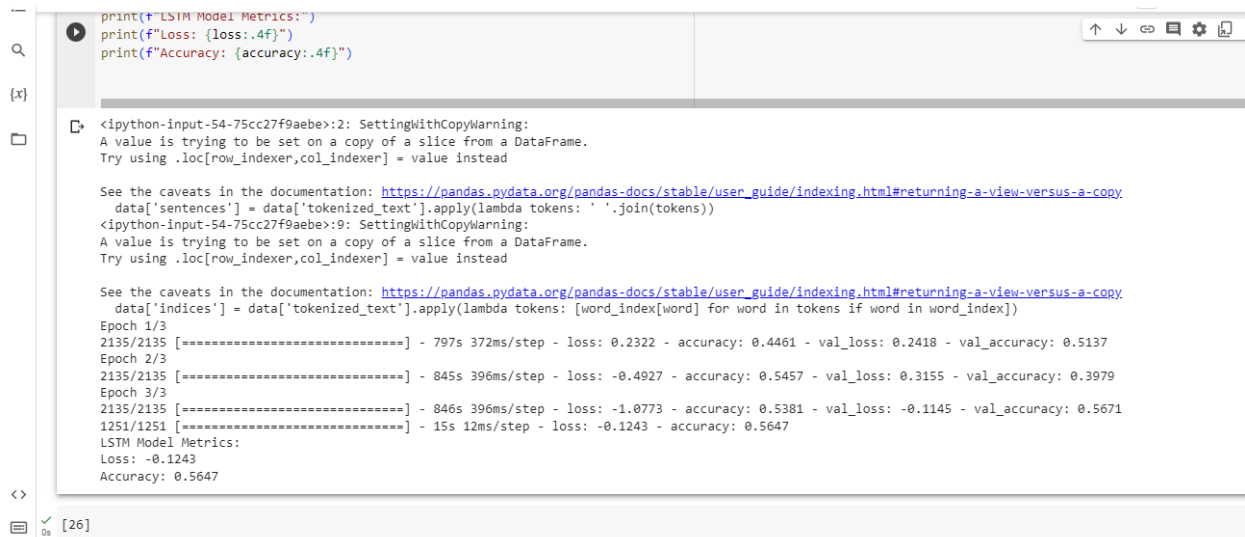
Week_05 Day_04

Model Training and Model Evaluation

I'm using LSTM neural network with three layers:

- Embedded layer
- LSTM layer
- Dense layer

And by using these the results are:



The screenshot shows a Jupyter Notebook interface with a code cell and its output. The code cell contains three lines of Python code to print LSTM model metrics. The output displays training progress over three epochs, including loss, accuracy, and validation metrics, followed by the final LSTM Model Metrics.

```
print(f"LSTM Model Metrics:")
print(f"Loss: {loss:.4f}")
print(f"Accuracy: {accuracy:.4f}")
```

<ipython-input-54-75cc27f9aeb>2: SettingWithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: https://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy
data['sentences'] = data['tokenized_text'].apply(lambda tokens: ' '.join(tokens))

<ipython-input-54-75cc27f9aeb>9: SettingWithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: https://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy
data['indices'] = data['tokenized_text'].apply(lambda tokens: [word_index[word] for word in tokens if word in word_index])

Epoch 1/3
2135/2135 [=====] - 797s 372ms/step - loss: 0.2322 - accuracy: 0.4461 - val_loss: 0.2418 - val_accuracy: 0.5137
Epoch 2/3
2135/2135 [=====] - 845s 396ms/step - loss: -0.4927 - accuracy: 0.5457 - val_loss: 0.3155 - val_accuracy: 0.3979
Epoch 3/3
2135/2135 [=====] - 846s 396ms/step - loss: -1.0773 - accuracy: 0.5381 - val_loss: -0.1145 - val_accuracy: 0.5671
1251/1251 [=====] - 15s 12ms/step - loss: -0.1243 - accuracy: 0.5647

LSTM Model Metrics:
Loss: -0.1243
Accuracy: 0.5647

LSTM Model Metrics:

- Loss : -0.1243
- Accuracy : 0.5647