Layer (type)	Output Shape	Param #	Connected to
input (InputLayer)	(None, 63, 279)	0	
bidirectional_1 (Bidirectional)	(None, 63, 256)	417792	input[0][0]
bidirectional_2 (Bidirectional)	(None, 63, 256)	394240	bidirectional_1[0][0]
attention_score_vec (Dense)	(None, 63, 61)	15677	bidirectional_2[0][0]
attention_weight (Activation)	(None, 63, 61)	0	attention_score_vec[0][0]
dot_1 (Dot)	(None, 61, 256)	0	attention_weight[0][0] bidirectional_2[0][0]
flatten_1 (Flatten)	(None, 15616)	0	dot_1[0][0]
dense_1 (Dense)	(None, 3)	46851	flatten_1[0][0]

Total params: 874,560
Trainable params: 874,560
Non-trainable params: 0

```
Train on 432 samples, validate on 108 samples
Epoch 1/20
432/432 [==============================] - 15s 34ms/step - loss: 0.6145 - accuracy: 0.6898 - val_loss: 0.3200 - val_accuracy: 0.8796
Epoch 2/20
432/432 [==============================] - 8s 18ms/step - loss: 0.2036 - accuracy: 0.9236 - val_loss: 0.0566 - val_accuracy: 0.9907
Epoch 3/20
432/432 [==============================] - 8s 18ms/step - loss: 0.0648 - accuracy: 0.9838 - val_loss: 0.0294 - val_accuracy: 0.9907
Epoch 4/20
432/432 [==============================] - 7s 16ms/step - loss: 0.0750 - accuracy: 0.9699 - val_loss: 0.0234 - val_accuracy: 0.9907
Epoch 5/20
432/432 [==============================] - 7s 16ms/step - loss: 0.0436 - accuracy: 0.9861 - val_loss: 0.0206 - val_accuracy: 0.9907
Epoch 6/20
432/432 [==============================] - 7s 17ms/step - loss: 0.0680 - accuracy: 0.9861 - val_loss: 0.0198 - val_accuracy: 0.9907
Epoch 7/20
432/432 [==============================] - 7s 16ms/step - loss: 0.0301 - accuracy: 0.9907 - val_loss: 0.0541 - val_accuracy: 0.9907
Epoch 8/20
432/432 [==============================] - 7s 16ms/step - loss: 0.0153 - accuracy: 0.9977 - val_loss: 0.0847 - val_accuracy: 0.9722
Epoch 9/20
432/432 [==============================] - 7s 16ms/step - loss: 0.0343 - accuracy: 0.9884 - val_loss: 0.1231 - val_accuracy: 0.9722
Epoch 10/20
432/432 [==============================] - 7s 16ms/step - loss: 0.0300 - accuracy: 0.9861 - val_loss: 0.0483 - val_accuracy: 0.9630
```

```
-------------------------Results--------------------
Acuracy = 0.9833333333333333
-----------------Sample test text documents-----------
በወንዶኝ -58ክሎ ግሪም ሄርዋን ስለዋን ከአዳስ አበባ ወርቅ፦
 measgo እቶም ተጓዓዘ̣ አመርኳወያን እዮም።
እና ለሰኝ ሪሪዎን ላይ ለተሰሙሩ ባለጦያዎን ጥቅም ላይ የማስ ናቸወ።
adabamuun isaa ni yaadatama.
ሰ እስም ከሰዳኑ ከለብ እል ሙሪከ ጋር የሙመወጎ ይሆናል።
measfeatures ባክተሪያ ወይም ኻይረስን ከወሙ ሆነ
ብ28 ሙያዚያ 2020 ወደብ ቃበሪት ሃገሪት እብ ዘወጽአ ጻብጻብ፦
atileetin kuni onkololeessa bara
 bbc waliin turtii taasisaniiru.
ሩብ ኖማወን ተቆማገረዋል። በዘንደረወ የእናሪካ ኻምፒዮንስ ለግ
------------------True lables--------------------
Amharic
Tigrigna
Amharic
Afan_oromo
Amharic
Amharic
Tigrigna
Afan_oromo
Afan_oromo
Amharic
-----------------Predictions--------------------
Amharic
Tigrigna
Amharic
Afan_oromo
Amharic
Amharic
Amharic
Afan_oromo
Afan_oromo
Amharic
```