

Required Packages and libraries:

```
1. !pip install unidecode
2. !pip install contractions
3. !pip install tensorflow-addons

4. import pandas as pd
5. import numpy as np
6. import matplotlib as plt
7. import re
8. import nltk
9. import sklearn
10. import gensim
11. import keras
12. import tensorflow as tf
13. import matplotlib.pyplot as plt
14. import os
15. import tensorflow_addons as tfa
16. import sklearn
17. import seaborn as sns
18. import math

19. from nltk.tokenize import regexp_tokenize
20. from nltk.stem import WordNetLemmatizer

21. from gensim.models.word2vec import Word2Vec
22. from sklearn.manifold import TSNE

23. from sklearn.model_selection import train_test_split
24. from sklearn.preprocessing import MultiLabelBinarizer
25. from sklearn.metrics import classification_report

26. from keras.preprocessing.text import Tokenizer
27. from sklearn.preprocessing import MultiLabelBinarizer
28. from sklearn.model_selection import train_test_split
29. from keras.preprocessing.text import Tokenizer
30. from keras.preprocessing.sequence import pad_sequences
31. from keras.initializers import Constant
32. from keras.models import Model
33. from keras.layers import *
34. from keras.utils.np_utils import to_categorical
35. from keras import regularizers
36. from tensorflow.python.keras.layers import Input, Activation,
    Conv2D, MaxPooling2D, BatchNormalization, UpSampling2D, Lambda,
    Conv2DTranspose, Permute, GaussianNoise, advanced_activations,
    Add, LeakyReLU, Dropout, ActivityRegularization
37. from keras import regularizers
38. from keras.callbacks import ReduceLROnPlateau, EarlyStopping,
    ModelCheckpoint
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39. from tensorflow import keras
40. from keras.models import Sequential
41. from keras.layers import Dense, Activation, Embedding, Flatten,
    GlobalMaxPool1D, Dropout, Conv1D
42. from keras.callbacks import ReduceLROnPlateau, EarlyStopping,
    ModelCheckpoint
43. from keras.losses import binary_crossentropy
44. from keras.optimizers import Adam
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