

Custom-Vectorizer:

```
positive_keywords_list = [ ]          //Vpos
negative_keywords_list = [ ]          //Vneg

for i in range(len(dataset_labeled)):  //Building class-specific vocabularies
    vall = dataset_labeled['stopwordremovedText'][i].split(" ")
    for j in vall:
        if j not in positive_keywords_list and dataset_labeled['Outcome'][i] == "Normal":
            positive_keywords_list.append(j)
        elif j not in negative_keywords_list and dataset_labeled['Outcome'][i] == "Sick":
            negative_keywords_list.append(j)

def custom_vectorizer(text_data): //Feature extraction
    custom_vectors = []           //feature vector
    for text in text_data:
        words = text.split()
        positive_freq = sum(1 for word in words if word in positive_keywords_list)
        negative_freq = sum(1 for word in words if word in negative_keywords_list)
        custom_vector = [1, positive_freq, negative_freq]
        custom_vectors.append(custom_vector)
    return np.array(custom_vectors)

train_vectors = custom_vectorizer(train_text)
test_vectors = custom_vectorizer(test_text)
```