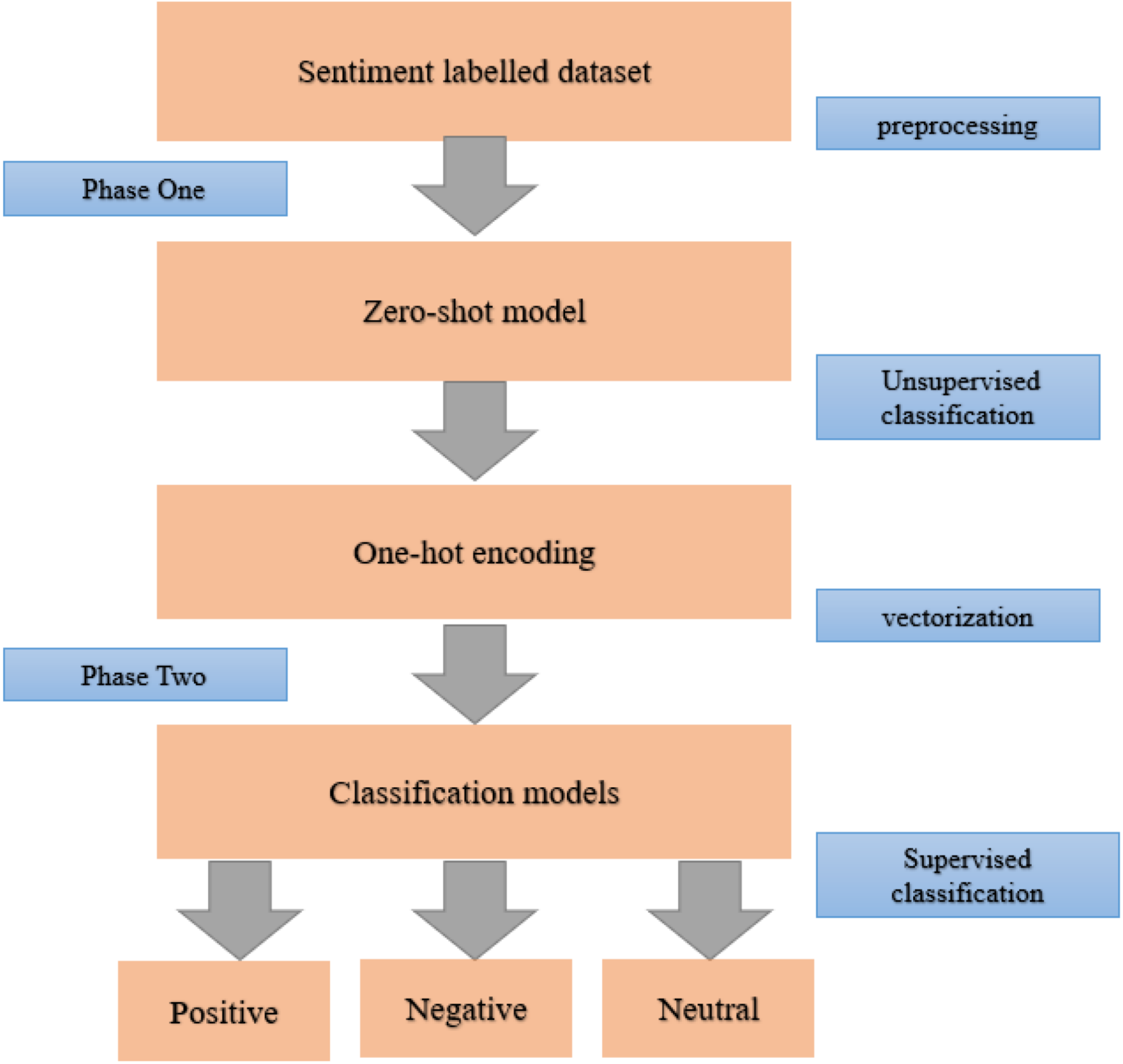
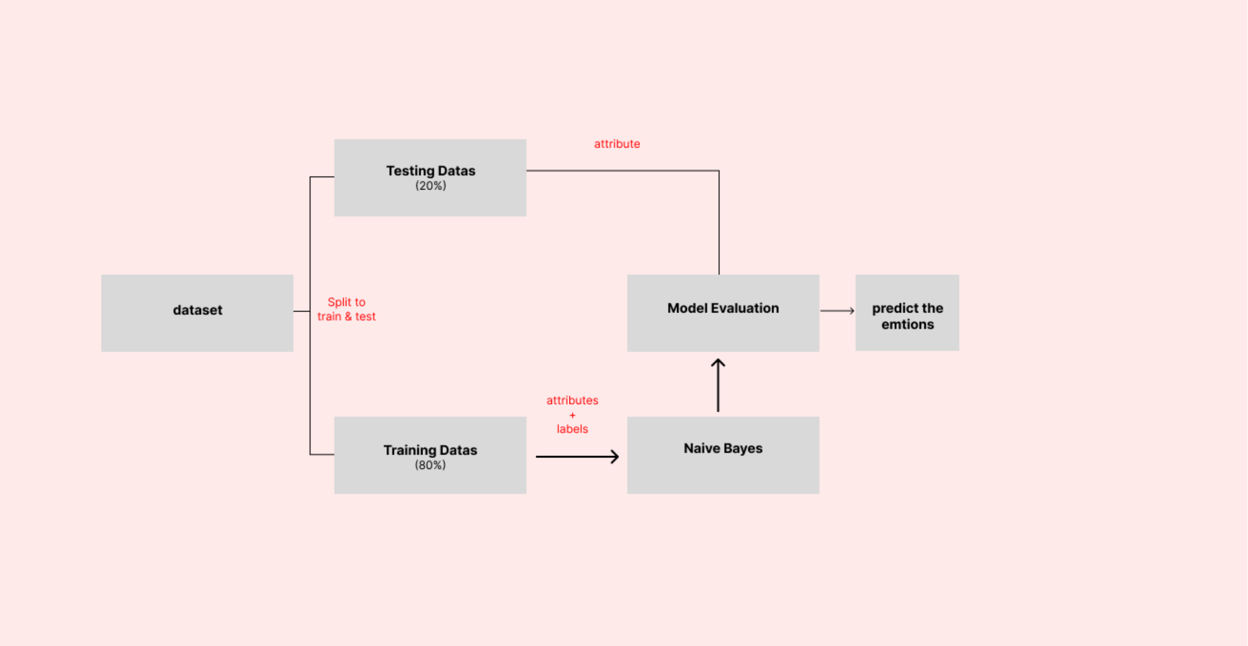
Emotion Detection

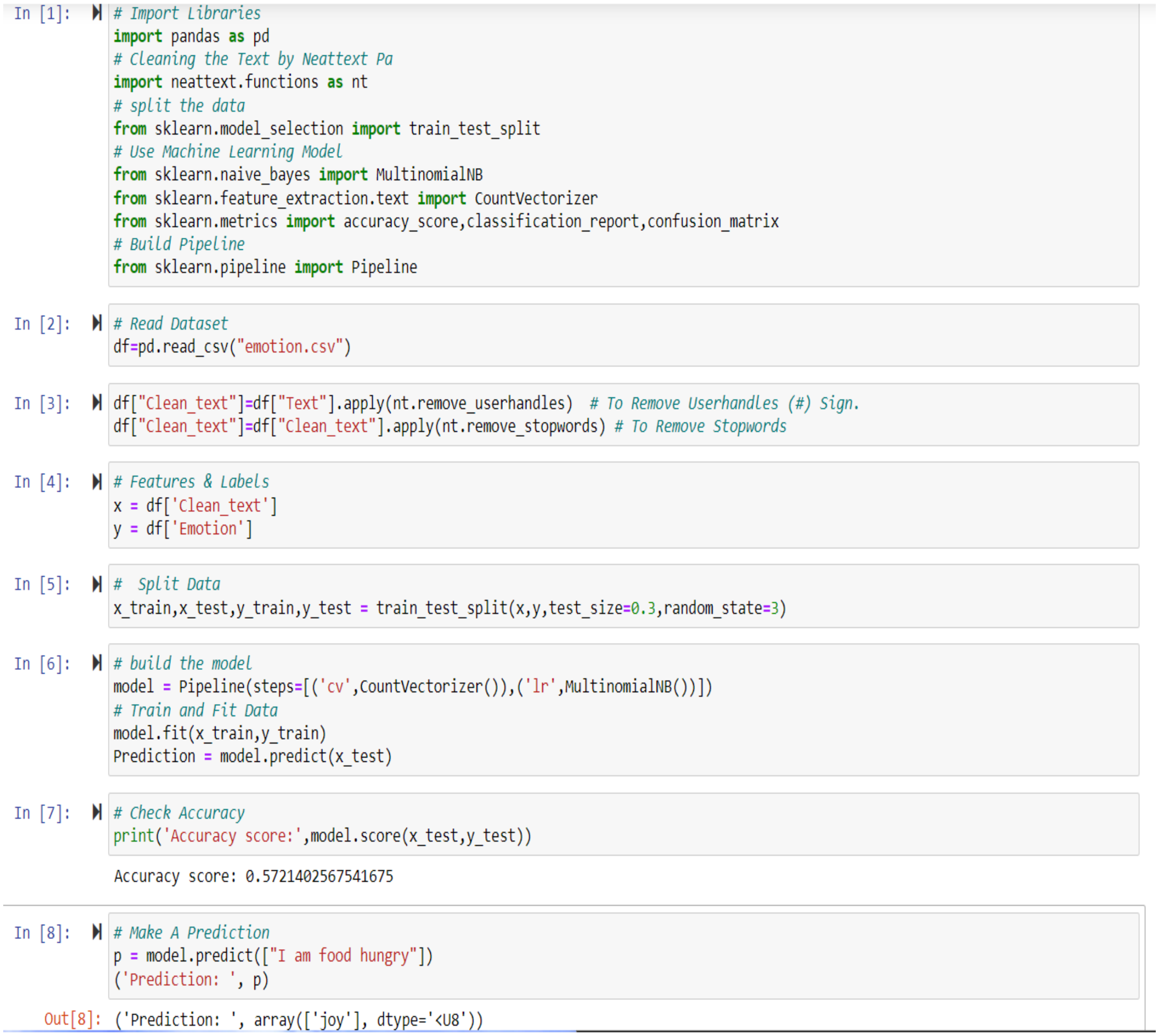
Diagram:



Flow char:


Testing Datas
(20%)
attribute
dataset
Split to
train & test
Model Evaluation
predict the
emtions
attributes
+
labels
Training Datas
(80%)
Naive Bayes

Code:



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In [1]:  # Import Libraries
         import pandas as pd
         # Cleaning the Text by Neattext Pa
         import neattext.functions as nt
         # split the data
         from sklearn.model_selection import train_test_split
         # Use Machine Learning Model
         from sklearn.naive_bayes import MultinomialNB
         from sklearn.feature_extraction.text import CountVectorizer
         from sklearn.metrics import accuracy_score,classification_report,confusion_matrix
         # Build Pipeline
         from sklearn.pipeline import Pipeline

In [2]:  # Read Dataset
         df=pd.read_csv("emotion.csv")

In [3]:  df["Clean_text"]=df["Text"].apply(nt.remove_userhandles)  # To Remove Userhandles (#) Sign.
         df["Clean_text"]=df["Clean_text"].apply(nt.remove_stopwords) # To Remove Stopwords

In [4]:  # Features & Labels
         x = df['Clean_text']
         y = df['Emotion']

In [5]:  #  Split Data
         x_train,x_test,y_train,y_test = train_test_split(x,y,test_size=0.3,random_state=3)

In [6]:  # build the model
         model = Pipeline(steps=[('cv',CountVectorizer()),('lr',MultinomialNB())])
         # Train and Fit Data
         model.fit(x_train,y_train)
         Prediction = model.predict(x_test)

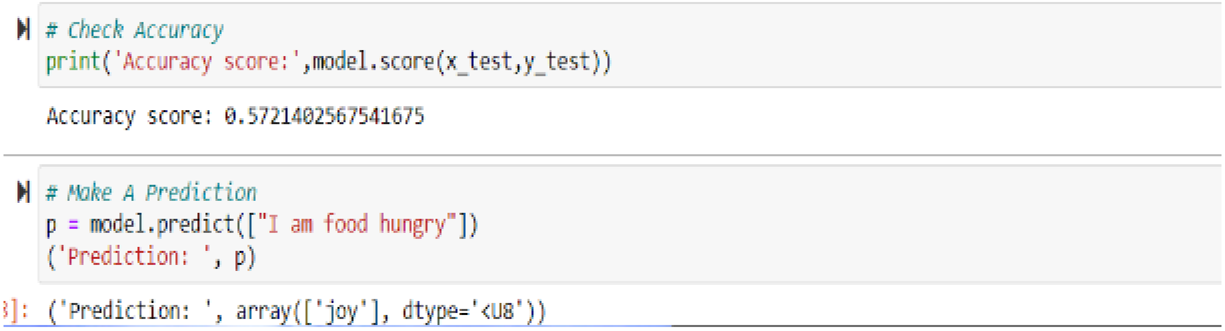
In [7]:  # Check Accuracy
         print('Accuracy score:',model.score(x_test,y_test))

         Accuracy score: 0.5721402567541675

In [8]:  # Make A Prediction
         p = model.predict(["I am food hungry"])
         ('Prediction: ', p)

Out[8]:  ('Prediction: ', array(['joy'], dtype='<U8'))
```

Output:



```
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# Make A Prediction
p = model.predict(["I am food hungry"])
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3]:  ('Prediction: ', array(['joy'], dtype='<U8'))
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