app.py

```python
import streamlit as st
import pickle
import string
import nltk
from nltk.corpus import stopwords
from nltk.stem.porter import PorterStemmer
ps = PorterStemmer()

def transform_text(message):
    message = message.lower()
    message = nltk.word_tokenize(message)
    y = []
    for i in message:
        if i.isalnum():
            y.append(i)
    message = y[:]
    y.clear()
    for i in message:
        if i not in stopwords.words('english') and i not in string.punctuation:
            y.append(i)
    message = y[:]
    y.clear()
    for i in message:
        y.append(ps.stem(i))


    return " ".join(y)

tfidf = pickle.load(open('vectorizer.pkl','rb'))
model = pickle.load(open('model.pkl','rb'))

st.title("Email/SMS Spam Classifier")
input_sms = st.text_input("Enter the message")
if st.button('Predict'):
    #1.preprocess
    transform_sms = transform_text(input_sms)
    #2.vectorize
    vector_input = tfidf.transform([transform_sms])
    #3.predict
    result = model.predict(vector_input)[0]
#Display
    if result == 1:
        st.header("Spam")
    else:
        st.header("Not spam")


```