Spam_Email_Predict

February 3, 2025

[6]:
```
import re
import joblib  # Or use pickle if you saved the model using pickle
from sklearn.feature_extraction.text import TfidfVectorizer
```

[7]:
```
model = joblib.load('spam_model.pkl')  # Load the pre-trained model (replace␣
 ↪with your model path)
vectorizer = joblib.load('vectorizer.pkl')  # Load the vectorizer used during␣
 ↪training
```

[8]:
```
def clean_text(text):
    text = text.lower()  # Convert text to lowercase
    text = re.sub(r'[^a-zA-Z\s]', '', text)  # Remove non-alphabetic characters
    return text
```

[14]:
```
# Function to take user input, preprocess it, and predict spam or ham
def predict_spam():
    # Take email input from the user
    email_text = input("Please enter the email text to check for spam:\n")

    # Preprocess the email (cleaning the text)
    cleaned_email = clean_text(email_text)

    # Convert the cleaned text into features using the same vectorizer as used␣
 ↪during training
    email_vectorized = vectorizer.transform([cleaned_email])

    # Make the prediction
    prediction = model.predict(email_vectorized)
     # Output the result
    if prediction == 1:
        print("This email is classified as Spam.")
    else:
        print("This email is classified as Ham (Not Spam).")
```

[15]:
```
predict_spam()
```

```
Please enter the email text to check for spam:
 Congratulations..!You have recieved a lottery prize..
```

```
This email is classified as Spam.
```

[16]:
```
predict_spam()
```

```
Please enter the email text to check for spam:
 My name is Yash Manikshetty
This email is classified as Ham (Not Spam).
```

[ ]:
```

```