# Import necessary libraries

Import pandas as pd

From sklearn.model\_selection import train\_test\_split

From sklearn.feature\_extraction.text import TfidfVectorizer

From sklearn.linear\_model import LogisticRegression

From sklearn.metrics import accuracy\_score, classification\_report

# Load your dataset (Assuming you have a CSV file with ‘text’ and ‘label’ columns)

Data = pd.read\_csv(‘fake\_news\_dataset.csv’)

# Data preprocessing

# You might want to preprocess the ‘text’ column by removing stop words, punctuation, etc.

# Split the data into training and testing sets

X = data[‘text’]

Y = data[‘label’]

X\_train, X\_test, y\_train, y\_test = train\_test\_split(X, y, test\_size=0.2, random\_state=42)

# Feature extraction using TF-IDF

Tfidf\_vectorizer = TfidfVectorizer(max\_features=5000)

X\_train\_tfidf = tfidf\_vectorizer.fit\_transform(X\_train)

X\_test\_tfidf = tfidf\_vectorizer.transform(X\_test)

# Create and train a classifier (Logistic Regression in this case)

Classifier = LogisticRegression()

Classifier.fit(X\_train\_tfidf, y\_train)

# Make predictions

Y\_pred = classifier.predict(X\_test\_tfidf)

# Evaluate the model

Accuracy = accuracy\_score(y\_test, y\_pred)

Print(f’Accuracy: {accuracy:.2f}’)

Print(classification\_report(y\_test, y\_pred))

# Now you can deploy this model and create a user interface for testing fake news detection.