Congratulations! You passed!
TO PASS 80% or higher
Keep Learning
GRADE
100%

Test Your Project Understanding

LATEST SUBMISSION GRADE

100%

1.Question 1

The logistic sigmoid is given by:

1 / 1 point

$$\frac{e^x - e^{-x}}{e^x + e^{-x}}$$

$$\frac{1}{1 + e^{-x}}$$

$$e^x$$

Correct

Correct!

2.Question 2

The range of the logistic sigmoid function is [-1, 1].

1 / 1 point

False

True

Correct

Correct!

3.Question 3

The output of a logistic model can be interpreted as a probability.

1 / 1 point

False

True

Correct

Correct!

4.Question 4

A matrix is said to be sparse if it contains:

1 / 1 point

Very few nonzero elements

Mostly nonzero elements

Complex numbers

Correct

Correct!

5.Question 5

Select all options that apply. Logistic Regression is a:

1 / 1 point

Supervised learning algorithm

Correct

Correct!

Regularized regression model

Linear classification model

Correct

Correct!

6.Question 6

When analyzing text data, one often encounter words that occur across multiple documents from both classes (in the case of binary classes). Those frequently occurring words typically don't contain useful or discriminatory information. What is the technique used to downweight those frequently occurring words in the feature vectors?

1 / 1 point

Cosine similarity

Term Frequency — Inverse Document Frequency (TF-IDF)

Tokenization

Correct

Correct!

7.Question 7

Of the two functions provided in this code block, which one performs stemming and which output corresponds to it?

```
1
2
3
4
5
6
7
8
9
10
```

```
11
12
from nltk.stem.porter import PorterStemmer
porter = PorterStemmer()
def tokenizer(text):
    return text.split()

def tokenizer_porter(text):
    return [porter.stem(word) for word in text.split()]

print(tokenizer('runners like running and thus they run'))
print(tokenizer_porter('runners like running and thus they run'))
```

1 / 1 point

tokenizer performs stemming and returns

```
1
['runners', 'like', 'running', 'and', 'thus', 'they', 'run']
```

tokenizer_porter performs stemming and returns

```
1
['runner', 'like', 'run', 'and', 'thu', 'they', 'run']
```

Correct

Correct!

8.Question 8

Select all that apply. Cross validation can be used to

1 / 1 point

Tune model hyperparameters

Correct

Correct!

Assess model performance out of sample

Correct

Correct!