Logistic Regression, Week3 Assignment.

Total points 25/100

Greetings from Consulting and Analytics Club, IIT Guwahati.

We hope you had a great learning experience until now. Reaching till Week 3 Assignment is no small feat!
This is an ungraded assignment.
Here you will apply the algorithms you have learned in week 3 in Python.

You need to write the code in the jupyter notebook. This quiz will thoroughly check your understanding of the Week 3 concepts.

For The Jupyter Notebook refer to the drive link :

https://drive.google.com/drive/folders/1mu8ZnHTptlQDI8ldDfLfHirJb4J4Q2jY?usp=sharing

Instructions:
1) Go to the Drive link and download 3 files in the same folder(exercise2.ipnyb, ex2data1.txt, and ex2data2.txt)
2) Complete the jupyter notebook
3) You do not have to submit any code.
4) After completion of the notebook, you can answer the quiz questions

Please note that this is an ungraded assignment

Note: Some questions may require studying certain topics from the web, no support material will be provided for the same, it is up to the participants to study it on their own.

Warmup Exercise

5 of 5 points

Implement the sigmoid function and answer the following question.

✓ What is the sigmoid of 0.5? * 5/5

- ○ Between 0.5 and 0.55.
- ◉ Between 0.6 and 0.65. ✓
- ○ Between 0.3 and 0.35.
- ○ Between 0.8 and 0.85.

Compute Cost

20 of 40 points

Implement Compute cost function and answer the following questions.

✓ What is the cost at theta=[0,0,0]? * 20/20

- ○ Between 0.30 to 0.33
- ◉ Between 0.66 to 0.70 ✓
- ○ Between 0.83 to 0.87
- ○ Between 0.20 to 0.25
- ○ Other: _____

✗ What is the cost at theta = ([-24, 0.2, 0.2])? 0/20

- ○ Between 0.30 to 0.33
- ○ Between 0.66 to 0.70
- ◉ Between 0.83 to 0.87 ✗
- ○ Between 0.20 to 0.25
- ○ Other: .....

Correct answer

- ◉ Between 0.20 to 0.25

Predict 0 of 35 points

Fill the predict function and answer the following questions.

✗ Predict the probability of admission for a student with score 45 on exam 1 and score 85 on exam 2. 0/25

- ○ Between 0.75 and 0.80
- ◉ Between 0.55 and 0.60 ✗
- ○ Between 0.88 and 0.90
- ○ Between 0.65 and 0.70
- ○ Other: .....

Correct answer

- ◉ Between 0.75 and 0.80

✗ Find the Training Accuracy with Optimal theta * 0/10

- ○ 85% to 95%
- ◉ 75% to 85% ✗
- ○ 65% to 75%
- ○ 55% to 65%

Correct answer

- ◉ 85% to 95%

Regularized Cost 0 of 20 points

Implement regularized Compute cost function and answer the following questions.

✗ For Lambda=1, find the regularized cost for theta=all ones i.e(construct theta using np.ones function) 0/20

- ○ Between 3 to 3.3
- ◉ Between 2 to 2.3 ✗
- ○ Between 1 to 1.3
- ○ Between 4 to 4.3

Correct answer

- ◉ Between 3 to 3.3

User Details 0 of 0 points

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