Project: Logistic Regression

Brief and requirement

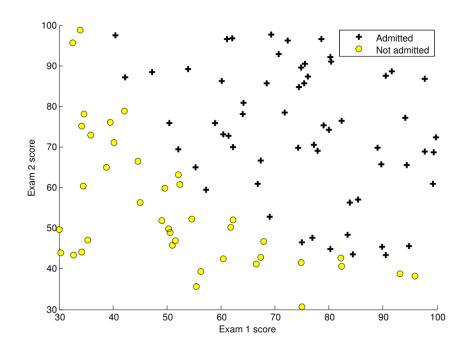
- Project materials including writeup template homework2.zip.
- Required files: README(project-template), code, data
- The report is written in Chinese.

Details about the Code

In this exercise, you will implement logistic regression and apply it to two different datasets:

- 1. ex2.m Matlab script that will help step you through the exercise(第一个任务)
- 2. ex2_reg.m Matlab script for the later parts of the exercise (第二个任务)
- 3. plotData.m Function to display the dataset

You will now complete the code in plotData so that it displays a figure like Figure 1, where the axes are the two exam scores, and the positive and negative examples are shown with different markers.



- 4. mapFeature.m Function to generate polynomial features
- 5. plotDecisionBounday.m Function to plot classifier's decision boundary
- 6. sigmoid.m Sigmoid Function
- 7. costFunction.m Logistic Regression Cost Function
- 8. predict.m Logistic Regression Prediction Function
- 9. costFunctionReg.m Regularized Logistic Regression Cost

Throughout the exercise, you will be using the scripts ex2.m and ex2_reg.m. These scripts set up the dataset for the problems and make calls to functions that you will write. You do not need to modify either of them. You are only required to modify functions in other files, by following the instructions in this assignment.

Data

ex2data1.txt - Training set for the first half of the exercise

ex2data2.txt - Training set for the second half of the exercise

template:

题目:

姓名 学号

- 1. 实现功能简介
- 2. 具体编写代码及结果展示以及代码功能描述

注意:对于第二个任务,要写出不同的 lambda 取值,产生的结果的分析。

3. 小结(包括通过本内容的认识以及其他)