(https://profile.intra.42.fr)

Remember that the quality of the defenses, hence the quality of the of the school on the labor market depends on you. The remote defences during the Covid crisis allows more flexibility so you can progress into your curriculum, but also brings more risks of cheat, injustice, laziness, that will harm everyone's skills development. We do count on your maturity and wisdom during these remote defenses for the benefits of the entire community.

SCALE FOR PROJECT FT_LINEAR_REGRESSION (/PROJECTS/42CURSUS-FT_LINEAR_REGRESSION)

You should evaluate 1 student in this team

Git repository

?

Introduction

Please follow the following rules :

- Remain polite, courteous, respectful and constructive
throughout the evaluation process. The well-being of the community
depends on it.

- Identify with the person (or the group) evaluated the eventual
dysfunctions of the work. Take the time to discuss
and debate the problems you have identified.

- You must consider that there might be some difference in how your
peers might have understood the project's instructions and the
scope of its functionalities. Always keep an open mind and grade
him/her as honestly as possible. The pedagogy is valid only and
only if peer-evaluation is conducted seriously.

Guidelines

- Only grade the work that is in the student or group's
GiT repository.

-       Double-check that the GiT repository belongs to the
student or the group. Ensure that the work is for the relevant

project and also check that "git clone" is used in an empty
folder.

-        Check carefully that no malicious aliases was used to
fool you and make you evaluate something other than the
content of the official repository.

-        To avoid any surprises, carefully check that both the
evaluating and the evaluated students have reviewed the
possible scripts used to facilitate the grading.

-        If the evaluating student has not completed that
particular project yet, it is mandatory for this student to read
the entire subject prior to starting the defence.

-        Use the flags available on this scale to signal an empty
repository, non-functioning program, a norm error, cheating
etc. In these cases, the grading is over and the final grade is 0
(or -42 in case of cheating). However, with the exception of
cheating, you are encouraged to continue to discuss your work
(even if you have not finished it) in order to identify any issues
that may have caused this failure and avoid repeating the same
mistake in the future.

-        Remember that for the duration of the defence, no
segfault, no other unexpected, premature, uncontrolled or
unexpected termination of the program, else the final grade is
0. Use the appropriate flag.
You should never have to edit any file except the configuration file if it
exists. If you want to edit a file, take the time to explicit the reasons with
the evaluated student and make sure both of you are okay with this.

-        You must also verify the absence of memory leaks. Any
memory allocated on the heap must be properly freed before
the end of execution.
You are allowed to use any of the different tools available on the computer, such
as leaks, valgrind, or e_fence. In case of memory leaks, tick the appropriate flag.

Attachments

subject.pdf (https://cdn.intra.42.fr/pdf/pdf/13331/en.subject.pdf)

data.csv (/uploads/document/document/2108/data.csv)

Preliminaries

Preliminaries

Please first check the following element:
- Check again that you are checking what is on the git repository - No
  cheat, check if the student knows his subject and his code.
- There should be 2 programs, one to predict the price and the other to
  train the model

Please check that if a librairy has been used by the student it is not already
implemented in it. If it s the case, stop everything, push the cheat flag and
stop the evaluation.

Yes   No

First section

Mandatory part

Prediction before training

Launch the prediction programme. It should ask you for a
mileage: Enter a value that is not null

The programme should display the result of its prediction and should
print the value 0 because the training hasnt started.

Please verify that the equation is : theta0 +
(theta1 * x).

Yes   No

Training phase

Ask the student to show you its implementation of the linear regression
algorithm. Check that the function in the subject is well implemented and
that the program save theta0 and theta1 at the end.

N'oubliez pas que si vous ne voyez pas l'équation mais qu'à
la place une fonction comme numpy.polyfit a été utilisée,
c'est un cas de triche et donc un flag Cheat.

Don't forget that if you dont see the equation and you see numpy.polyfit or something that look like it.
It s that the student is cheating.

Yes   No

Read the csv

The training program should read the csv file and use it for training itself.

Yes   No

Simultaneous assignation

It s a bit complex : You should check that theta0 and theta1 are set simultaneously during the training phase.

For this verify that the result of the 2 equations during the training phase are saved in temporaries variable before setting theta0 and theta1 at the end of each loop.

Yes   No

Prediction after training

Relaunch the prediction program. Reenter the same mileage as before. This time it should give you a price. Enter a value from the csv file.

The program should give you a price for each mileage. Is it following the csv prices? The difference between the csv and the prediction is normal. If the price is exactly the same all the time, we are maybe in a case of over-fitting. (a bonus point if the student can explain what it is).

Yes   No

Bonus
Partie Bonus

Bonus

You can count 5 bonus max:

- A graphique that show the data
- A graphique that show the result of the program in the same graphic as above

- A program to get the precision of the algorithm

- ...

Rate it from 0 (failed) through 5 (excellent)

Ratings

Don't forget to check the flag corresponding to the defense

☑ Ok   ☑ Outstanding project

☑ Empty work   ☑ No author file   W Invalid compilation   ☑ Norme   ☑ Cheat   ◨ Crash

▮ Forbidden function

Conclusion

Leave a comment on this evaluation

Finish evaluation