Neurocess

Interview Questions 2022

In this interview, there are 2 questions. You need to complete these questions with Python language and send us your answers via github repository before deadline.

Before the questions, there are several points which you need to be careful:

- These tasks must be done based on Python language
- There is no library limitation on these task, you are free to use libraries as you like
- You need to submit your answers by creating a new single public github repository and sending its link via email. Your answers should be separated with folder in created github repository such as “Task1” and “Task2”

Task 1:

In this part, you need to change some values according to the given hierarchy. You need to read a pickle file (“data.pkl”) which is provided. This pickle file contains a 3 column dataframe in which these columns are “c1” , “c2” and “task”.The last column, whose name is “task” contains 0 and 1 values. These 0 and 1 values are placed as a group which is shown in the table. (You just need to work on last column whose name is “task”)

task
0
0
0
1
1
1
0
0
1
1
0
1
1

task
0
0
0
split squat
split squat
split squat
0
0
SL squat
SL squat
0
SL BW Decel
SL BW Decel

```
{
   "1": "split squat" ,
   "2": "SL squat" ,
   "3": "SL BW Decel" ,
   "4": "SL prone curls",
   "5": "SL glute bridge",
   "6": "SL elevated glue bridge",
   "7": "45deg adductor squeeze",
   "8": "0deg adductor squeeze",
   "9": "copenhagen",
   "10": "SL straight knee calf raise"
}
```

We expect you to edit these values on a given data frame according to given figures. After editing these values, you need to count word repetition. Lastly, you need to show these counted values on a bar graph. The x-axis must be counted names and the y-axis must be the count values of these names.

Submission:

- You need to submit your work in a github repository with a given explanation at the beginning.
- You need to save your bar graph as an image file and send it with your scripts.
- You need to add a simple README file for explaining your solution.
- You can also submit your works even if it is not totally completed.

Task 2:

In this part, you need to build a simple API and scrape amazon page.

Page Link:
https://www.amazon.com.tr/s?k=apple&rh=n%3A12466496031%2Cn%3A26232650031&dc&ds=v1%3A24QIKEr1whZX7fY03aG1Rzroi24YQzoigI1WMNytis0&__mk_tr_TR=%C3%85M%C3%85%C5%BD%C3%95%C3%91&crid=9UPC9JZMBEZY&qid=1658327018&rnid=13818411031&sprefix=appl%2Caps%2C122&ref=sr_nr_n_4

Before scraping the web page, we expect you to build a basic API with a single “GET” route, which is called getData(). After building your API, you need to trigger your web scraping function.

In the web scraping part, we expect you to take name and price data of listed products. (It is enough to scrape just 1 page, you don't need to scrape all pages).

Finally, your API system will take these scraped name and prices data and show them on a local webpage. (Visualization of the web page is not important, just showing the data is enough for the task.)

Submission:

- You need to submit your work in a github repository with a given explanation at the beginning.
- You need to add a simple README file for explaining your solution.
- You can also submit your works even if it is not totally completed.

If you have a question, you can ask via info@neurocess.co email.
If you need more time for the tasks, please inform us via email.
Good Luck!