## **Junior Data Scientist Task**

Thank you for your interest in the Junior Data Scientist role at Kilid. As part of the recruitment process, we would like you to complete a technical test task. Once you have finished the task, please add the Github ID "gha7all" to your private repository. If you have questions about the task, please feel free to contact us at <a href="mailto:gha7alkh3yr0ddin@gmail.com">gha7alkh3yr0ddin@gmail.com</a>. We look forward to reviewing your submission.

This task helps us to understand your knowledge of Python coding and relational databases.

Please go through the steps below and send us all the codes and materials you created.

- Create a PostgreSQL database on your local machine.
- Then go to <u>kilid.com</u> and search for District 5 of Tehran, then using a python script crawl data of 10 pages and store them in the database you just created.
- After that, write another python script which reads the data from the database and plots:
  - 1. The number of listings per each neighbourhood(such as Poonak, Sazman barnameh, etc)
  - 2. The average price of each neighbourhood
- The attributes you choose to store in the database are important and show us your general knowledge about the databases.
- At the end, publish all the codes and materials you created on a private git repository, so we can read them in detail(including table creation SQLs). Also make sure all the process is reproducible so we can run your codes and check the results.

## **NOTE**

Please note that all the Python codes MUST be written on \*.py files, Notebooks are not acceptable.

## **Bonus**

It would be a great bonus if you can write the whole procedure, DB creation, table creation, insert, read and plot data in object-oriented programming (OOP), as a class and its methods and functions.

## **Deadline**

48 hours after the last email.