Task: Scraping Atira

Language to use: Python 3

You should work in a virtual environment and install the required libraries in it. You can also lookup venv docs on web. Also need to provide the requirements.txt file. Understanding the following question is also part of the task.

After completing graduation, some of your friends want to go abroad and pursue further studies. However, they're concerned about the accommodation process and prices. You volunteered to take the responsibility of showing them the average price of rooms in different cities.

Your Task is divided into 2 sub-tasks:

1. Data Collection
2. Data Analysis

Section 1: Data Collection

For this task, you need to crawl the site "https://atira.com/" and collect the rooms data that will be used later on for analysis. You have to collect these following fields and save them in **JSON** or **CSV** format file:

- Starting Price
- Capacity for Persons
- Room Features
- Room Name
- Building's Name
- Location

Example Output Sample: The output shown below is in JSON format, you may come up with a better structured JSON that will help in analysing.


```
[
  {
    "price": 185,
    "capacity_of_persons": 2,
    "features": [
      "All inclusive rent including utilities and unlimited internet",
      "Personal study desk with chair and desk lamp",
      "Swipe card access with individual locking rooms"
    ],
    "room_name": "Twin Mix",
    "building_name": "Merivale St",
    "location": "118 Merivale St South Brisbane QLD 4101, Australia"
  },
  ....
  ...
]
```


Section 2: Data Analysis

Now you have done *section 1* successfully, your job is to do some meaningful analysis on the gathered data. By reading your output file saved in section 1, display the average price per room-capacity in a particular city. That means each city will have its separate average price according to the room capacity i.e. dummy output shown below

New York: $20 for 1 person Room
New York: $30 for 2 person Room

Los Angeles: $50 for 1 person Room
Los Angeles: $70 for 3 person Room
Los Angeles: $100 for 4 person Room

Bonus Task: Display the statistics in a more appealing graphical form.

Deliverables

1. Source Code
2. JSON/CSV output file
3. Readme: How to run your code
4. Requirements.txt
5. A Document that will contain the following:
    a. Screen-Shots of the outputs
    b. The technology stack and why you chose it
    c. Hours it took to complete the task
    d. Any other improvements you would make if you had more time

NOTE:
You are advised to use around 3 seconds of download delay between consecutive requests to the server to avoid getting blocked. You can also search the web for methods to avoid blocking.