



Frontend Recruiting Exercise

Assignment: as a frontend consultant, you've been approached by the awesome new startup Spotaroom® to build their new room search functionality. They will provide you a wireframe that you need to implement. The design shows a list of properties, within a scrollable area, and a form to filter and search rooms.

Javascript challenge:

[BASIC] Step 1: Show the list of properties

In order to retrieve the list of properties, two API calls must be used:

- Retrieve the list of property ids for a given city using the following endpoint:
 - <https://www.spotahome.com/api/public/listings/search/markers/madrid>
- Using the data returned from the previous endpoint, collect the list of ids and use the following endpoint to retrieve the detailed information for each of the properties, by providing each of the ids as part of the query param of the request:
 - [https://www.spotahome.com/api/public/listings/search/homecards_ids?ids\[\]=145154&ids\[\]=145144](https://www.spotahome.com/api/public/listings/search/homecards_ids?ids[]=145154&ids[]=145144)
- The interface will show only the first 30 elements of the list

Note: You may find CORS issues interacting with these APIs from the browser, try to find a solution to solve this issue or ask us if you get blocked.

```
GET https://www.spotahome.com/api/public/listings/search/markers/madrid
```

```
{
  "data": [
    {
      "id": 145154,
      ...
    },
    {
      "id": 145144,
      ...
    }
  ]
}
```

```
GET
```

```
https://www.spotahome.com/api/public/listings/search/homecards_ids?ids[]=145154&ids[]=145144
```

[BASIC] Step 2: Sort the list of properties

The filters will allow the user to sort by price (ascending or descending), by default the list should be sorted by price ascending

[ADVANCED] Step 3: Filter the list of properties

The filters will allow the user to search by property type (apartments, rooms, studios and residences)

- In order to get the filtered list of properties a new call must be done. The filters option can be provided as a query param when calling the markers API:
 - [https://www.spotahome.com/api/public/listings/search/markers/madrid?type\[\]=apartments](https://www.spotahome.com/api/public/listings/search/markers/madrid?type[]=apartments)
- **Note:** You will have to retrieve the details of this new list of ids, using the homecards API call.

[EXTRA]: The city included in the last part of the first call url

([https://www.spotahome.com/api/public/listings/search/markers/\\${city}](https://www.spotahome.com/api/public/listings/search/markers/${city})) can be customized based on the address provided in the browser [http://BROWSER_URL/\\${city}](http://BROWSER_URL/${city}), if no city is provided in the browser address, use "madrid" by default. (Valid cities: madrid, barcelona, london...)

[EXTRA]: Allow the user to download a JSON object with the contents based on the filters and sorting type selected.

[EXTRA]: Test your code with some unit tests.

[EXTRA]: Optimize your code for a production environment using any existing build system (webpack, grunt, gulp...)

HTML and CSS challenge:

- **[BASIC]:** Develop the HTML and CSS needed to implement the wireframe. Please follow Spotaroom style tiles approach (attached).
- **[ADVANCED]:** Make the design responsive
- **[EXTRA]:** Implement the layout using flexbox and/or CSS grid

As you can see, there are two different challenges: one more client-side Javascript based and another theming/HTML+CSS oriented. Please try to accomplish at least a bit of each challenge, so we can see where your skills sit within the UI spectrum.

The assignment can be executed using whatever you are comfortable with, from simple and flat html/js/css to any JS framework like Angular/React/nodejs with or without templates, CSS pre/post-processors or task/dependency managers. If needed, you can attach a text file with any context or information you need to provide, explaining any important decision you have taken. Take as many assumptions as you need to progress with the exercise.

We are looking for:

- The ability to create production quality code, attention to detail.
- Code structure and organisation, simplicity and ease of understanding the code.
- Understanding of HTML, CSS and JavaScript.

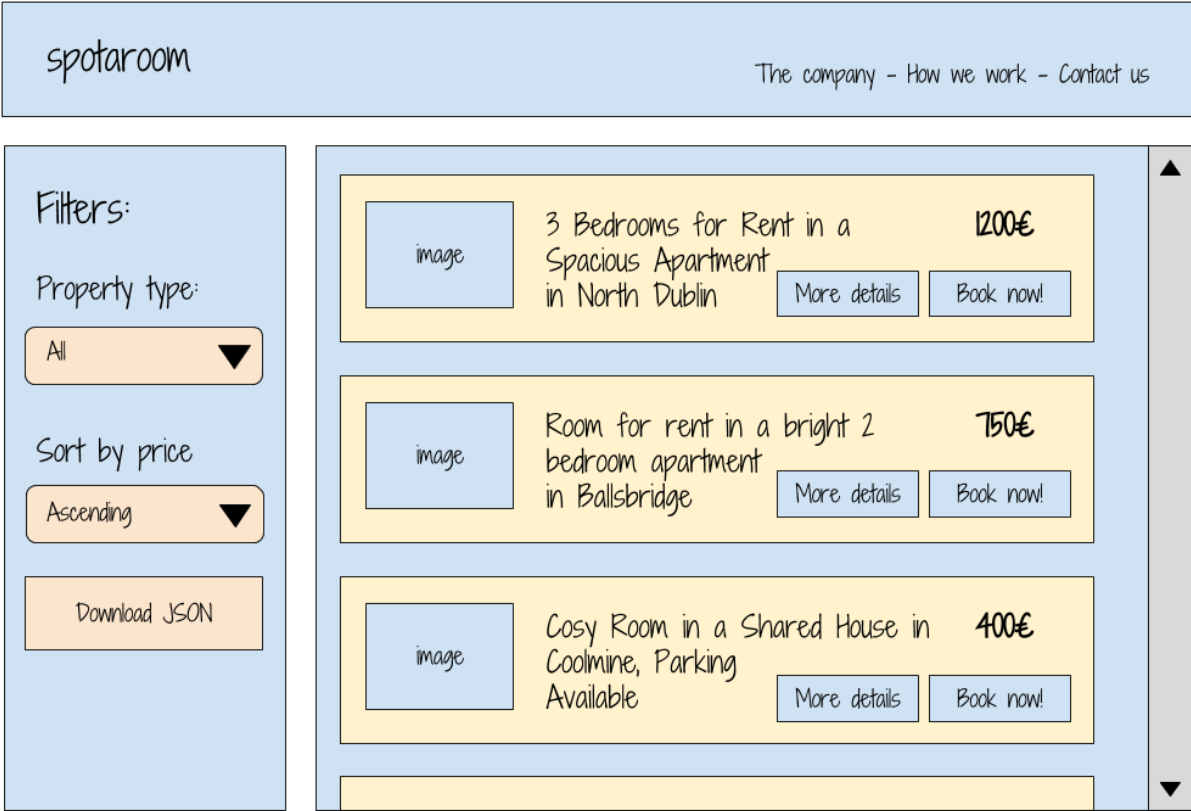
We prefer an easy to read, clean and well structured code that implements half of the exercise, rather than a hard to read fully implemented exercise with messy code. Focus on quality and try to accomplish as much as you can.

Please send your submission to: **product@spotahome.com**
with the subject: **Front dev exercise + [Your name]**

Please provide the following information as part of the exercise:

- Description of the technologies used
- Steps to build, deploy and test the app
- Any important decision you have taken

Spotaroom wireframe:



Spotaroom Style tiles:

