

Frontend Test - Part 1

Purpose

This is a simple front-end code challenge created to serve two purposes:

- Show off your skills,
- Give us a better understanding of your skills.

The Task

The programming challenge exists in 2 parts:

- Part 1: Basic Requirements
- [Part 2: Extra Challenges](https://hackmd.io/u_sfOmt1S5uXieCqf-mFow)

API

You will have a fake API created by `miragejs` package, according to the following specifications:

- Method: `GET`
- URL: `/api/properties`
- Description:

To get all properties in the website.

- Response
- Data: all properties
- Each property will include following fields
- id: unique id of the property
- state: State of the property in USA
- city: City of the property in USA
- type: The type of the property which including `Apartment`, `Single-family`, `Townhomes`, `Condo`.
- price: The monthly price for renting the house. the unit is USD.

Example of response:

```
```json
{
 "data": [
 {
 "id": 1,
 "city": "Attleboro",
 "state": "Georgia",
 "type": "Apartment",
 "price": 218
 },
 {
 "id": 2,
 "city": "Enterprise",
 "state": "Wyoming",
 "type": "Condo",
 "price": 696
 },
 {
 "id": 3,
 "city": "South Hill",
 "state": "Montana",
 "type": "Condo",
 "price": 1190
 }
]
 // ...
}
...
```
```

PART 1: Basic Requirements

Technical Requirements

- Using `React.js`
- Libraries are not limited, but you will need to use at least one frontend library for style. For example.
- TypeScript `(recommended)`
- antd `(recommended)`
- tailwindcss
- styled-component
- material
- bootstrap

Feature Requirements

- Because the API may take seconds to finish, so when calling the API, please show the loading page to enhance the UX.
- You will need to make a report page
- filter all properties in `Georgia` state
- group by all `state` and `city`
- each row includes
 - state
 - city
 - total count of the properties in this group
 - average price of the properties in this group

Example

| State | City | Houses | Avg. Price |
|---------|----------|--------|------------|
| Georgia | Atlanta | 13 | 630 |
| Georgia | Columbus | 5 | 800 |