

Assignment:

Part 1. (Coding)

Create a microservice that will scrape this page

<https://pastebin.com/UFJQRcun>

and will collect information about the profiles there.

A. Provide a REST endpoint that will fetch all profiles (with all details) using the following filters:

- age
- sex

An example query would be 'Fetch all male profiles that are 32 years old or older'

B. Provide a REST endpoint that given a set of names and a date, it will return

1. A list of locations (coordinates), indicating the places those people were at that given date

```
(  
  example input: { names: ['Robert', 'John'], date: '11/11/2020' }  
  example output: { locations: [[33.1234, 34.1234], [33.4321, 33.5432]] }  
)
```

2. The locations are both coordinates and names of the locations (BONUS)

```
(  
  example input: { names: ['Robert', 'John'], date: '11/11/2020' }  
  example output: { locations: [[33.1234, 34.1234], [33.4321, 33.5432]], places: [ 'Agia  
Fylaxi', 'Kaimakli' ] }  
)
```

2. A bounding box of those locations (BONUS)

```
(  
  example input: { names: ['Robert', 'John'], date: '11/11/2020' }  
  example output: { locations: [[33.1234, 34.1234], [33.4321, 33.5432]], bbox: [ A,B,C,D ]  
}  
)
```

C. Provide a REST endpoint which given a proximity parameter M in meters, and a date range it will return the people who were closer than M meters among those dates

example input:

m = 20

dateRange = {from: '01.12.2019', to: '01.02.2020'}

example output:

```
[  
  "Person A and Person B were close to each other on XX/XX/XXXX",
```

"Person B and Person C were close to each other on YY/YY/YYYY"

]

Part 2.

1. Which of the people above are most likely good friends?
2. Where is Jim likely to be in the evening of 15.02.2020?
3. Where possibly was John in the evening of 15.01.2020?
4. Where possibly was Robert in the morning of 18.01.2020?
5. What do you believe is the marital status of Robert? (BONUS)
6. What other intel could you infer about John and Robert? (BONUS)
7. Which band could those 3 people have formed? (BONUS)