

Coding Task V3

Use this [Data source](#) to feed data in mongo

A. Question

Design a REST API endpoint that provides the report of a country by a given range in weeks.

Request Description:

GET /vaccine-summary

Query Parameters:

c, country code to get report for

dateFrom, yyyy-Www, eg. 2020-W10 (Including)

dateTo, yyyy-Www, eg, 2020-W20 (Excluding)

rangeSize, number, eg, the period for which to calculate metrics

sort, either by **NumberDosesReceived**[descending] or **weekStart** [ascending]

B. Sample responses

These are just examples to provide guidance (It will just contain total number of doses in given date range)

Example 1: Match

Request

GET /vaccine-summary?c=AT&dateFrom=2020-W10&dateTo=2020-W53&range=5

Response

```
{
  "summary": [
    {
      "weekStart": "2020-W10",
      "weekEnd": "2020-W15",
      "NumberDosesReceived": 1000
    },
    {
      "weekStart": "2020-W15",
      "weekEnd": "2020-W20"
      "NumberDosesReceived": 2000  } ,
    ... till end of range (dateTo)
  ]
}
```

Example 2: No match

Request

GET /vaccine-summary?c=AT&dateFrom=2017-W00&dateTo=2018-W02&range=5

Response

```
{  
  "summary": []  
}
```

C. Tech Requirements

1. Nodejs
2. Typescript
3. MongoDB (use appropriate aggregation, when possible)
4. Docker and docker-compose (optional)
5. Tests: Chai and Mocha (Or Jest)
6. Input validation (Optional)
7. Code linter

D. Submission requirements

1. No Typescript = No Submission (Please don't waste your time)
2. Design and implement your solution as you would do for real production code
3. Clean and well-structured solution
4. Use Mongo mock and add integration test cases
5. Commit early and often. We want to be able to check your progress
6. Please complete your working solution within 7 days of receiving this challenge, and be sure to notify us when it is ready for review.
7. Please submit your code in any way you like: Github or bitbucket with instructions on how to run the code and any assumptions you made.
8. **Bonus (Feel free to add this feature in your code/test to stand out):** Add rate-limit feature in API, eg, for the given IP address, to only allow 5 calls per minute