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Github Repository: https://github.com/justgnoh/Task-F-CS3219.git

Instructions

1. Enter the working directory
2. Run `**npm install**`
3. Note: Database is not required for this task. Existing routes connecting to database will be ignored during the demonstration. The API was taken from Task B.
4. Install Redis
    a. MAC: brew install redis
    b. Windows:

```
wget https://download.redis.io/releases/redis-6.0.9.tar.gz
tar xzf redis-6.0.9.tar.gz
cd redis-6.0.9
make
make install
```

To make sure that the Redis server runs without an issue, send a ping to the server using the `**redis-cli**`.

```
redis-cli ping
```

If you receive `**pong**` as the response, the Redis server is running successfully.

    i. If something goes wrong, visit the official quick start guide
    ii. https://redis.io/topics/quickstart
5. Run Redis

a. Enter `**redis-server**`

```
→  Task-B-CS3219 git:(master) ✗ redis-server
37992:C 12 Nov 2021 15:24:55.579 # oO0OoO0OoO0Oo Redis is starting oO0OoO0OoO0Oo
37992:C 12 Nov 2021 15:24:55.579 # Redis version=6.0.10, bits=64, commit=00000000
0, modified=0, pid=37992, just started
37992:C 12 Nov 2021 15:24:55.579 # Warning: no config file specified, using the
default config. In order to specify a config file use redis-server /path/to/redi
s.conf
37992:M 12 Nov 2021 15:24:55.581 * Increased maximum number of open files to 100
32 (it was originally set to 256).
                _.-``__ ''-._
           _.-``    `.  `_.  ''-._           Redis 6.0.10 (00000000/0) 64 bit
       .-`` .-```.  ```\/    _.,_ ''-._
      (    '      ,       .-`  | `,    )     Running in standalone mode
      |`-._`-...-` __...-.``-._|'` _.-'|     Port: 6379
      |    `-._   `._    /     _.-'    |     PID: 37992
       `-._    `-._  `-./  _.-'    _.-'
      |`-._`-._    `-.__.-'    _.-'_.-'|
      |    `-._`-._        _.-'_.-'    |           http://redis.io
       `-._    `-._`-.__.-'_.-'    _.-'
      |`-._`-._    `-.__.-'    _.-'_.-'|
      |    `-._`-._        _.-'_.-'    |
       `-._    `-._`-.__.-'_.-'    _.-'
           `-._    `-.__.-'    _.-'
               `-._        _.-'
                   `-.__.-'

37992:M 12 Nov 2021 15:24:55.583 # Server initialized
37992:M 12 Nov 2021 15:24:55.583 * Ready to accept connections
37992:M 12 Nov 2021 16:13:45.620 * DB saved on disk
```

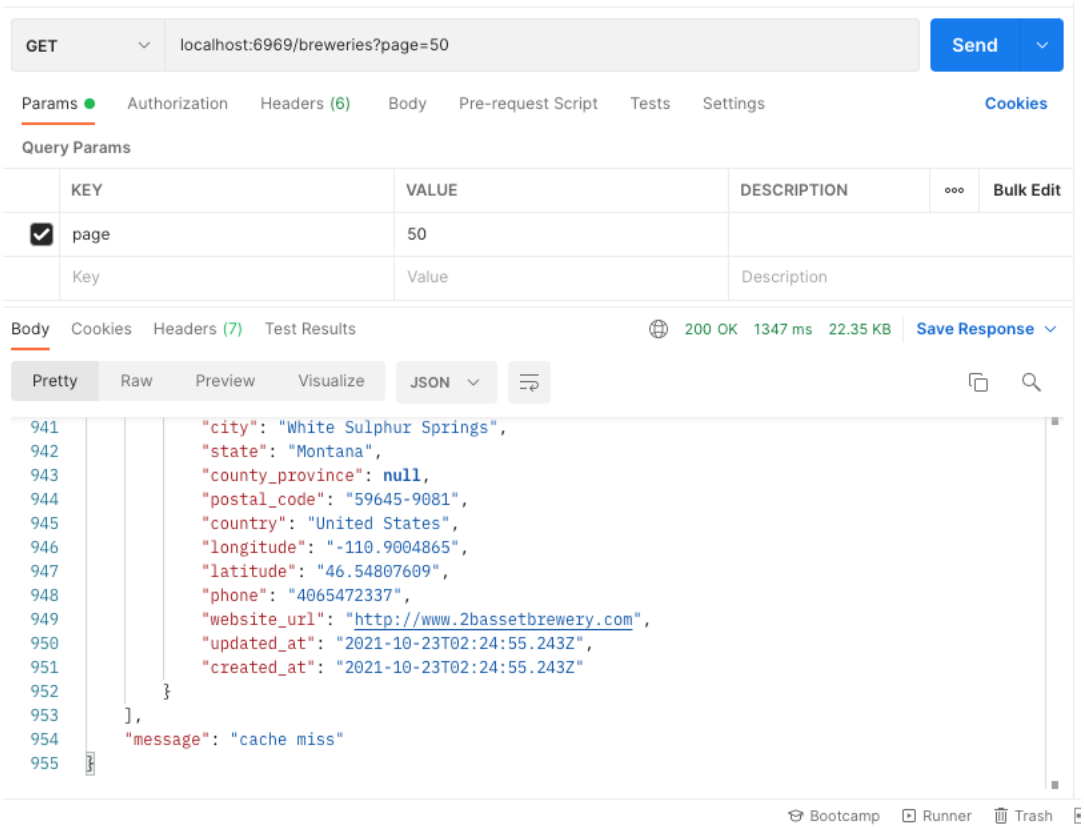
Observe that redis is running

6. If you already have Redis or have used Redis for other projects
   a. Run `**redis-cli FLUSHALL**`
   b. Run `**redis-cli FLUSHDB**`
   c. Observe both commands return `**OK**`

```
→  Task-F-CS3219 git:(master) redis-cli FLUSHALL
OK
→  Task-F-CS3219 git:(master) ✗ redis-cli FLUSHDB
OK
```

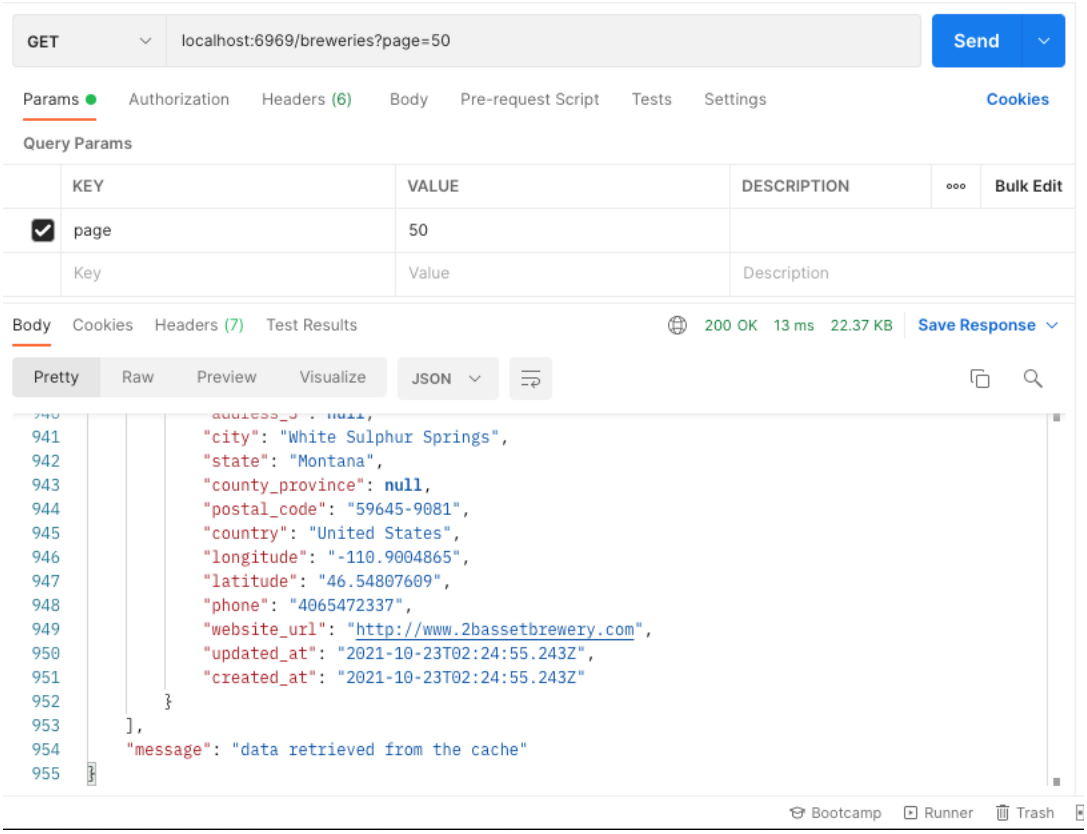
7. Make a GET request to the `/breweries` route with a query parameter of `page` of value 50

8. Observe that without Redis caching: it takes 1347ms



Observe that a message “cache miss” is returned with the response. This shows that Redis does not have the existing data that is retrieved, and will proceed to cache it.

9. To show that it Redis has indeed cached the response, send a GET request to the same endpoint.



10. Observe that the time take for the request is 13ms, and a message “data retreived from the cache” is observed. This shows that Redis did indeed cache the response and is returning the data from Redis.

Other Learning

- Redis listens to port 6379 on default