

Challenge description

You are required to write a web API with 2 endpoints:

1. A "Set timer" endpoint.
 - Receives a JSON containing hours, minutes, seconds and web url
 - This endpoint should return a JSON with a single field - "id"
 - This endpoint should define an internal timer, which shoots a webhook to the defined URL after the time ends (a POST HTTP call with an empty body)
 - For example:

```
POST /timers {hours: 4, minutes: 0, seconds: 1, url: "https://someserver.com"}
```


should return

```
{id: 1}
```


After 4 hours and 1 second, server should call

```
POST https://someserver.com/1
```
 - The counter id should be appended to the URL, i.e.:

```
https://someserver.com/:counter_id
```
2. A "Get timer status" endpoint
 - Receives timer id in the URL, as the resource id
 - Returns a JSON with the amount of seconds left until the timer expires. If timer already expired, returns "0"
 - For example:

```
GET /timers/1
```


Should return

```
{id: 1, time_left: 645}
```

Additional requirements:

- The timers should persist.
- If we shut down the process and restart it, timers should be saved.
- If a timer should have fired when the server was down, the server should fire the web hook after initializing.

Notes:

- Please use Python/ Javascript / Typescript / Java or C#.
- Please add a readme with clear execution instructions (solution will be tested in macos environment).
- If you're using another language, please package accordingly so we could install and run it with minimum friction (ie packed in docker).

- Solutions will be measured by code structure and by their ability to handle large scale (large number of timers).
- Feel free to add any extra functionality you wish.
- You're welcome to approach me for any questions you may have.