

DevOps Engineer Test

1. Design and code a simple "Hello World" application that exposes the following HTTP-based APIs:

```
Description: Saves/updates the given user's name and date of birth in the database.

Request: PUT /hello/<username> { "dateOfBirth": "YYYY-MM-DD" }
```

Response: 204 No Content

Note:

<username> must contain only letters.

YYYY-MM-DD must be a date before the today date.

Description: Returns hello birthday message for the given user

Request: Get /hello/<username>

Response: 200 OK

Response Examples:

A. If username's birthday is in N days:

```
{ "message": "Hello, <username>! Your birthday is in N day(s)" }
```

B. If username's birthday is today:

```
{ "message": "Hello, <username>! Happy birthday!" }
```

Note: Use storage/database of your choice.

- 2. Produce a system diagram of your solution deployed to either AWS or GCP (it's not required to support both cloud platforms).
- 3. Write configuration scripts for building and no-downtime production deployment of this application, keeping in mind aspects that an SRE would have to consider.

Implicit requirements:

- 1. The code produced by you is expected to be of high quality.
- 2. The solution must have tests, runnable locally, and deployable to the cloud.
- 3. Use common sense.

Please put your work on github or bitbucket.