

### Technical test

The objective of this test is to create a service that exposes a REST API to execute CRUD operations. The general use case is to replicate the behavior of an email server.

Endpoints should be under the route /emails and the information corresponding to the email contents should be stored in a database.

### Main Requirements

1. An email could have only the following states:
  - a. DRAFT
  - b. SENT
  - c. DELETED
  - d. SPAM
2. Apart from the basic email information, such as from, to, etc., update dates should be also stored in the database.
3. For inserting, query and delete the option for bulk operation should be available in the API
4. Only DRAFT emails could be updated (the content of the message, for instance)
5. Every day at 10:00, all the messages containing the address [carl@gbtec.com](mailto:carl@gbtec.com) should be marked as SPAM

### Technologies

The technology should be Java 11 or newer.

Usage of high-level frameworks like Spring are highly recommended.

### Other

Code should be created in English (variables, comments, documentation, installation instructions, etc.).

Code shall be delivered on a repository on GitHub or a similar service.

Depending on the database technology, usage of Flyway/Liquibase or equivalent is an option.

Documentation shall outline relevant design and technology decisions.

## Email Example

A JSON representing an email could be as indicated below:

```
{
  "emails": [
    {
      "emailId": 1435,
      "emailFrom": "marcus@gbtec.es",
      "emailTo": [
        {
          "email": "andrew@gbtec.es"
        },
        {
          "email": "peter@gbtec.es"
        }
      ],
      "emailCC": [
        {
          "email": "carl@gbtec.es"
        }
      ],
      "emailBody": "Body text",
      "state": 1
    },
    {
      "emailId": 1436,
      "emailFrom": "marcus@gbtec.es",
      "emailTo": [
        {
          "email": "roger@gbtec.es"
        },
        {
          "email": "sam@gbtec.es"
        }
      ],
      "emailCC": [
        {
          "email": "carl@gbtec.es"
        },
        {
          "email": "michael@gbtec.es"
        }
      ],
      "emailBody": "Body text",
      "state": 1
    }
  ]
}
```