

## Seven Bridges Homework

Hi,

Your assignment is to write a small REST, production-ready service that mimics some of the functionalities of Twitter. Your service should have 3 implemented endpoints:

- Create a new tweet
- Delete a tweet
- Query for a page of tweets

Detailed api specification can be found in the OpenApi specification file, provided with this textual assignment. If you have some valid reasons, you can deviate from the specified API, but it is best to keep in line with it.

We hope that the api is in general self explanatory. One strange thing is that there is no real authentication expected to be implemented. Each request should have a valid username in header *X-Username*, and service should believe that header value to be correct username of authenticated user, and use that username when it needs to authorize request - for example user can delete a tweet only if the username in the request header matches the username of the person that created a tweet.

One more unexpected caveat of the API specification is the fact that the hashtags of a tweet are not embedded inside the tweet body, but have a dedicated field for them in request and response objects.

Querying should be done in a performant way. We do not expect that you do any real performance and load tests, but let's say that we expect the page of results to be returned almost instantaneously even when we have a few millions of tweets stored in some database.

As a storage backend for your service, use whatever you are most familiar with. We expect something in the range of postgres, mysql, sqlite, or even some noSql database. If you are using a non embeddable database (i.e. postgres), provide some information about where you expect that database to be, and what version and configuration.

(for example you could give us a docker compose file, or just a small description like - *"Expects to have postgres 11 on localhost 5432, no authorization needed and created Database tweets"*). Whatever database you use, we expect you to provide a set of commands to initialize the empty database if there is a need for it, or some form of automated database migrations for schema changes.

For the REST service implementation feel free to use any of the frameworks you are familiar with. That is also true for database access, testing frameworks, and other stuff you might need.

**Attachment:**

File: OpenAPI-spec.yml

You can pick any framework / library that you like, there are no preferences whatsoever on our side.

**Important information:**

- Please open account on <https://gitlab.com/>, if you do not have one already
- Let us know your username
- You will be added to the repository where you can commit your code.

Thank you so much for taking the time to complete the task! Our team will evaluate it and we will hear soon with the team feedback. Please feel free to reach out to us for additional questions.

Have fun!  
Seven Bridges team