

As part of your interview for the software developer position; please review the following requirements. This is part of your technical interview and the output will be reviewed by our team.

This task should take no longer than 2-3h; once finished, please email the hiring manager a link to the github repository.

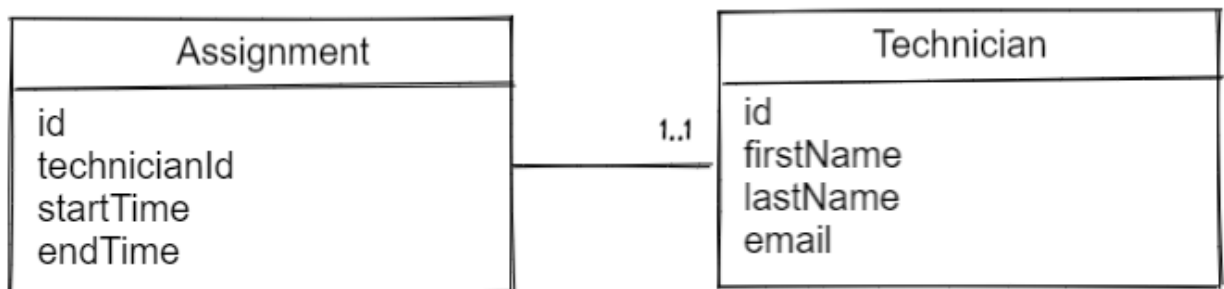
### API Requirements

Java 8+

Springboot

DB - your choice

We would like you to implement a **RESTful API** for the following objects.



An **assignment** must have exactly one **technician**

### Delivery Requirements:

- Write a Dockerfile for your application with the following requirements
  - Build the application
  - Read configuration file from local storage
  - Expose service on port 8080
  - Set Spring Active profile from Environment variable
- Please produce documentation for your API (swagger, openAPI etc)
- You may wish to describe the payloads and response, and other API parameters or behaviors
- You may be asked to walk us through your document and answer some questions about it, and you may be asked to demonstrate this API on your local machine
- You may wish to document any assumptions you have made

The API would need to allow for the following operations...

- Create a new **technician**
- Delete an existing **technician**
- Update an existing **technician**
- Retrieve an **assignment**
- Update an **assignment**

## API Considerations

- **Message Queue Broker** - every update or creation of the Assignment object will be sent to a Kafka Broker, returned to the same service and updated in the DB. Please write the interface for the broker (do not implement it); stub the code out. You may wish to choose RabbitMQ, AMQ, etc.
- Every **PUT/POST** operation on the Assignment object has 20-30 downstream systems that must also be updated as well; how would you go about notifying these 20-30 downstream systems. Provide a high level description or an interface to handle this process (do **not** implement the interface; stub the code out).