

JUNIOR SOFTWARE DEVELOPER

Assessment

SCENARIO

EEnviro365, a leading environmental consulting firm, aims to develop a RESTful API to facilitate file data processing for their clients. The API will enable clients to upload text files containing environmental data for analysis and retrieve processed results through simple API requests and save the data in the database. As a software developer tasked with building this API, you need to design and implement a solution that meets the requirements outlined by Enviro365.

TASK

Build a Spring Boot application that exposes a REST API for clients:

- Design the REST API endpoints, specifying the request and response formats for each endpoint.
- Implement the API endpoints using a Java framework such as Spring Boot
- Test the API endpoints thoroughly to ensure functionality, reliability, and performance.
- Document the API endpoints, input parameters, response formats, and error handling procedures.

The following validations must be applied on submission of file via the API:

- Implement robust error handling mechanisms to handle invalid requests, file processing errors, and other exceptional conditions.
- Log API requests, responses, and errors for monitoring and troubleshooting purposes.

DEADLINE

You have 5 days to complete the Assessment from the date you receive it.

SUBMISSION

Please submit your github link of the assessment on www.etalente.co.za

THINGS TO NOTE

1. All code should be written in a package
2. `com.enviro.assessment.grad001.yournameandsurname`
3. From a technical perspective, as per commonly accepted best practice, each record has a primary key called "id" that identifies it – this is a technical id, and
4. Please model and implement the interface in the way you consider to be the best way from an Object Oriented perspective.
5. As we will be accessing a real database as part of this exercise, please implement an in memory database (H2).
6. Your submission must be a Springboot application with a rest endpoints



YOU MAY UNDERGO A SUBSEQUENT INTERVIEW REGARDING YOUR SOLUTION, SO PLEASE BE PREPARED TO DISCUSS ANY DESIGN DECISIONS YOU MAY TAKEN / ASSUMED. PERHAPS MAKE RELEVANT COMMENTS IN YOUR CODE THAT WILL GUIDE YOUR DISCUSSIONS LATER.