GRADUATE SOFTWARE DEVELOPER

Assessment

SCENARIO

Background:

Enviro365, a leading environmental solutions company, is developing a waste sorting mobile application aimed at promoting sustainable waste management practices. The application will serve as an educational tool for individuals and communities, providing guidance on proper waste disposal techniques and encouraging recycling habits. As a recent graduate developer at Enviro365, you've been tasked with implementing REST endpoints to enable communication between the frontend and backend systems of the application.

Scenario:

You are part of a dedicated team working on the development of the waste sorting mobile application at Enviro365. Your team is passionate about environmental sustainability and is committed to creating a user-friendly and informative application that empowers users to make environmentally conscious decisions. The application will feature various functionalities, including waste category lookup, disposal guidelines retrieval, and recycling tips display. Your role is to design and implement REST endpoints using Spring Boot that facilitate data exchange between the frontend mobile application and the backend server.

TASK

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

- Design RESTful APIs using Spring Boot to expose the required functionalities for data retrieval and manipulation.
- Define resource URIs, request methods, request/response payloads, and error handling mechanisms for each endpoint.
- Implement endpoints to save/update/delete/retrieve data such as waste categories, disposal guidelines, and recycling tips.
- Ensure that the endpoints return JSON-formatted responses containing relevant data in a structured format.
- Implement input validation using Spring Boot validation annotations to ensure the integrity and validity of incoming requests and data payloads.

DEADLINE
You have 7 working 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.