Java Backend Engineering challenge

## Pokémon api

This part of the assessment process will give you an opportunity to display your skills. A session will be scheduled where you can take us through your solution and your code.

This session is not only a technical assessment but also a way for us to interact with you and see whether you would fit into our team.

**As a Backend Engineer, we are looking for backend coding skills. From a DevOps perspective, we are looking at the delivery pipeline to a Cloud Provider.**

Please send a link to the code repository before the session to [Card\_Interviews@standardbank.co.za](mailto:Card_Interviews@standardbank.co.za).

# **Requirements (Read the requirements as a whole and not individual points)**

1. **Build a rest API that will do the following:**
   * Get a list of pokemon
   * Get details of a pokemon
   * Search pokemon/s by name
2. **Use the following technologies for the above API:**
   * Your API must consume the below 3rd party API as a source of pokemons: [**https://pokeapi.co/api/v2**](https://pokeapi.co/api/v2)
   * Use a microservice approach.
   * Use Springboot or Java EE framework
   * Build tools, Maven or Gradle
3. **Documentation:**
   * The API should be documented according to the OpenApi Specification (Swagger).
4. **Testing:**
   * This API should be testable via Swagger UI, Postman app or the browser
   * Unit testing should be included
5. **Deployment:**

* Containerize the solution.
* Deploy the solution to a cloud provider (free tier) of choice via a CI/CD pipeline.

1. **Demonstrate a good understanding of the following:**
   * API design best practices
   * SOLID Principles
   * API Security
   * Unit testing
   * Exception handling and logging
   * Design Patterns

# **Notes**

Keep the solution simple and robust.

Maintainable code is better than over complicated code.

Hardcoding is frowned upon.

If you are running short of time or fail to implement some of the requirements, please use comments in the code to indicate where you would have liked to do it differently. Submit something so that we can discuss your thoughts on the subject.

Good luck and Happy Coding...