Team Sava_Java Backend Developer - Home assignment

Hi!

Thank you for applying for the Java Backend developer position at Team Sava. Our partner, PlayStudios, located in Tel Aviv and Bay Area, is a consumer gaming company focused on the ever-expanding market for social and mobile gaming.

In this exercise you are asked to build a REST API server for basic user management, where each user has a first name, a surname, year of birthday and an id. The server should also save the creation date of each user added.

The app should handle 3 HTTP requests, in accordance with REST standards:

1. Getting user's details by its id.
2. Getting all users' details (possibly sorted by their birth year).
3. Adding a new user to the system.

Notes

1. As you can probably see, this assignment doesn't include almost any complicated logic. Instead, it's mostly dedicated to the architecture, design and coding of the project, specifically aiming for a microservices approach, using Spring & Springboot framework and practices.
2. In your implementation, you should eventually have 2 running apps, written in separate code bases, that are running independently and communicate via any protocol of your choice.
   a. The first app - the user service - will fetch and manage the data.
      Its code should expose a contract (SDK) that allows any other Java app to depend on it.
   b. The second app - the API gateway - should receive HTTP requests from a client and return their requested data accordingly, by supporting the 3 types of requests mentioned above.
      This app should use the user service app, by autowiring the implemented SDK.
3. For your implementation, please use Spring, SpringBoot, Maven and MongoDB.
4. Please give extra attention to the modules and structure of your code, error handling, and tests.
5. Other than documentation of your code, we'd like to know about the design and architecture. Specifically:
   a. Did you encounter any dilemmas while writing your code? Why did you make the decisions you made?
   b. Would you build the project differently?
6. Please make sure to provide full details on how to run and test the code.

Good luck!