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Question: Orchestration API to load data from the external dataset into local in-memory DB, and then provide REST endpoints to fetch the users based upon various user criteria.

Category: Backend API

Tags: Users API, Load In-Memory DB, REST API

DataSet: https://dummyjson.com/users

Spend time to go through the dataset and understand the the 3rd party API's https://dummyjson.com/users response payload that needs to be loaded into the in-memory H2 DB

Go through the below references to understand the in-memory H2 database, which will need to be integrated in the API implementation: https://www.baeldung.com/spring-boot-h2-database and https://initializ.io/blogs/create-crud-rest-api-with-h2-database-and-jpa-with-spring-boot-in-under-15-min/

Go through the below reference to understand free text search implementation, which will be required in the API implementation: https://www.baeldung.com/hibernate-search

Write a RESTful API endpoint to load all the users data from the dataset to in-memory H2 DB.

Expose the following RESTful API endpoints to retrieve data from the in-memory H2 DB:

- *a.* List all users based on free text search on the users *firstName*, *lastName and ssn*
- b. Find a specific user by *id* or *email*

Expectations:

1. The code should follow clean code practices
    - a. Modular
    - b. Application Logging
    - c. Exception Handling
    - d. Environment Layering
    - e. Input Data Validations
    - f. Unit testcases & Code Coverage
    - g. Externalized config parameters, if any
    - h. README.md file to describe the API and steps to build and run it
2. The call to the 3rd party https://dummyjson.com/users should be optimized
3. The call to the 3rd party https://dummyjson.com/users should be resilient
4. The APIs should follow REST standards for fetching the users from in-memory DB
5. The REST APIs should be documented using Swagger/OpenAPI plug-ins

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