Implement service (backend only) responsible for managing users. Service is intended to be used by Administration Panel (Web application).

**Please upload the project into GitHub and send us the repository location.**

**Requirements:**

* User’s attributes as described in **User’s attributes** section
* CRUD operations on User
* Endpoint for Listing/Searching users. Endpoint is going to be used from Administration Panel to display table of users. The table is going to have a functionality to filter users by any combination of fields [username, name, email]

**Technical details:**

* Client of the service: web application
* Functionalities exposed by REST API
* Expected data volume: 100000 users
* Deployment has to be quick and easy
* At least one integration test for one of the endpoints
* API and model prepared for future versioning

**Technologies:**

* Java
* Spring
* Database (PostgreSQL or any Embedded db)
* Any libraries of your choice with restriction of being safe and free for commercial use

**User’s attributes**

|  |  |  |
| --- | --- | --- |
| **Name** | **Type** | **Mandatory** |
| username | Text, unique, alphanumeric, max length 16 | + |
| password | Text, max length 1024 | + |
| name | Text, max length 64 |  |
| roles | Text, single/multiple values from set: [ADMIN, USER]. | + |
| email | Text, RFC5322 format |  |
| state | Text, single value from set: [ACTIVE, INACTIVE] | + |
| comment | Text |  |