

Kristijan Matic, a01547764

MS1 -User Authentication and Authorization Service

Semester Project Deadline

1.Development

As previously stated, technology of choice was and still is Spring Tools. Considering that 1st time I was creating spring MVC project what was not needed what so ever. Considering that I noticed that I had wrong idea of what and how MS1 should look like I decided to remake it from scratch. Given that it was way to late to upload new code in time for first Milstein I decided to leave everything as it was, explaining everything to team members.

As team we decided to use REST architecture to provide data to our services and for connection between us. Newly made microservice now has client and server instances which handle requests/responds (JSON files over Http), while all of CRUD operations get handled via Http methods (post/put/get/delete).

2.Service description & deployment (functionality)

Service is reachable to teammates under 10.102.107.13:8080

List of tested, workable service options (with given URI's):

Home: basic starting page– 8080/

User list: list of all registered users (containing for and last name, user name, passwords and id's of all ToDo lists that given user has access to)- 8080/users // method=GET

Specific user: chosen from list of all users over it's username(email)- 8080/users/{id} //method=GET

Registration (used by MS3): registration (adding) of new users to current pool. Required is request in JSON format containing for and last name, user name and password. Upon successful registration or upon failing to register, corresponding Http message will be sent as response. (200-OK, 204-FAIL)- 8080/register //method=POST

Update user: option to edit given user (any of it's fields) over it's id(email)- 8080/users/{id} //method=PUT

Update ToDoId: option to add, remove or edit ID's from all ToDo lists specific to given user (upon adding new list to user, service warns locally about new addition)- 8080/todo/{id} //method=PUT

Check ToDoId (used by MS4): upon receiving request from MS4 with given ToDo list's ID, goes through all users. First saves then sends all Emails of all users that have access to given list (data is sent as ArrayList)- 8080/uemails/{todoId} //method=POST

Delete ToDoId (needed for MS2 & MS4): for MS2 to delete given ToDoId from specific user or to delete whole id from all users.- 8080/todo/{id} //method=DELETE

Delete user (option for MS3): option to delete specific user over given ID(email/username)-[email has 3 purposes overall through service: as userID, user name and users email address]- 8080/users/{id} //method=DELETE

Login (used by MS3): verification of given users. Request contains JSON file containing user name(email) & password for verification. Filters searched user out through its user name to find and compare specific one. Similar to registration, upon successful verification or credential error, sends corresponding Http message (200-OK, 204-FAIL)- 8080/login //method=POST

3.Installation & requirements

Service is standalone and really easy to start up/install. All that is needed is Spring Boot API which automatically boots service (run as: Spring Boot App) dealing with all dependencies (through Maven) and starts up service on server (tomcat). The site can be accessed locally at: localhost:8080

4.Testing and presentation

Service was first tested locally and afterwards over Postman App.

After changing/removing minor errors from project, functionality was tested with other members. All requirements needed from MS1 by other members are tested and working in multiple ways (over OpenVPN through Postman, ms3 service, ms4 service).

Upon start up, service already contains 4 different users containing all needed info (name, last name, email/user name & password +specific ToDo list's id's), so it's ready for testing at any given time in most simple way.

Apologies once again to all team members for misunderstanding from my side upon 1st Milstein, and for given postpones.

Apologies to teachers/dse team if commit section looks messy, as I was using 2 different pc's so I have 3 names under commits (a1547764 / XXX / Kristijan Matic)