

Distributed Systems Programming

A.Y. 2023/24

Exam Assignment for Exam Call on 12/02/2024

Deadline for submission: 07/02/2024 EOD

Extend the REST APIs of Laboratory 1, by introducing the possibility for a user who has been assigned a review 1) to update the review partially before completing it and 2) to delegate the review to another user, according to the following specifications:

1. A reviewer who has been invited to do a review for a public film can update the review fields partially at different times, e.g., save a first draft of the review text, then, after some time, save the rating, and finally update the review draft to the final text, and set the date and the completed flag to true. When the completed flag has been set to true, no further modification of the review is possible.
2. After a review invitation has been issued to a reviewer, this reviewer can delegate that review to another user. This operation can be done only if the review has not yet been completed. The reviewer cannot delegate the review to more than one user.
3. After a review has been delegated, it can be updated and completed only by the user the review has been delegated to, not by the delegating user.
4. When a review of a public film which has been delegated is retrieved, it must carry the information of both the user the review was issued to, and the user it was delegated to.
5. A user a review has been delegated to can only update and complete the review. It is not possible for this user to delegate the review to yet another user.
6. After delegating a review, the reviewer who was originally invited to do the review can cancel the delegation, provided the review has not yet been completed. After cancelling the delegation of a review, the review must return to the state it had before delegating the review.
7. The owner of a public film can cancel a review request for that film, even if there is a delegation. In that case, also the related delegation is canceled.

Extend the implementation of the service so that it implements the extended REST APIs. Of course, the database must also be extended accordingly. Note that it is not

required to extend the REACT client. Test the extended REST APIs by using a client like Postman.

Submit the updated solution, including all the following items:

- All the json schemas
- The full Open API documentation of the REST APIs, including examples of JSON documents to be used when invoking the operations, and examples of invocations of the API operations, possibly as a Postman collection
- The REST APIs implementation code
- The database file, including some sample data
- README.md files that specify the contents of folders, the instructions on how to run the code from scratch and the main design choices made.

Important:

- Organize the project files as in the solution provided for Laboratory 1.
- The solution must work within the Labinf Ubuntu machines, with the software already installed in those machines.
- The solution will be tested by running it in the Labinf machines.
- The solution must be uploaded to a git repository for which you will soon get the credentials.