Project Name: ExamResultSearchApp

Detail: App is use to process the student exam result for different use cases.

Search result
Store result
Update Result
Delete result

Architecture:

The app should have two microservice:
1) StudentResult
2) ResultProcessor

The microservice StudentResult expose one Rest Endpoint use to search the result of student based on studentname query parameter

Ex: localhost:8081/getresult/name=studentname (GET) The end point has access only by user authorization

The microservice ResultProcessor expose three Rest Endpoint use to store update and delete exam result as following.

1) localhost:8082/storeresult (POST) send student exam result in body data

2) localhost:8082/updateresult/name=studentname   (PUT) update the student exam result data send the exam updated marks in body data and student name send through request parameter

3) localhost:8082/deleteresult/name=studentname (DELETE) delete the student exam result based on student name

The above all three endpoind should be only access for admin user.

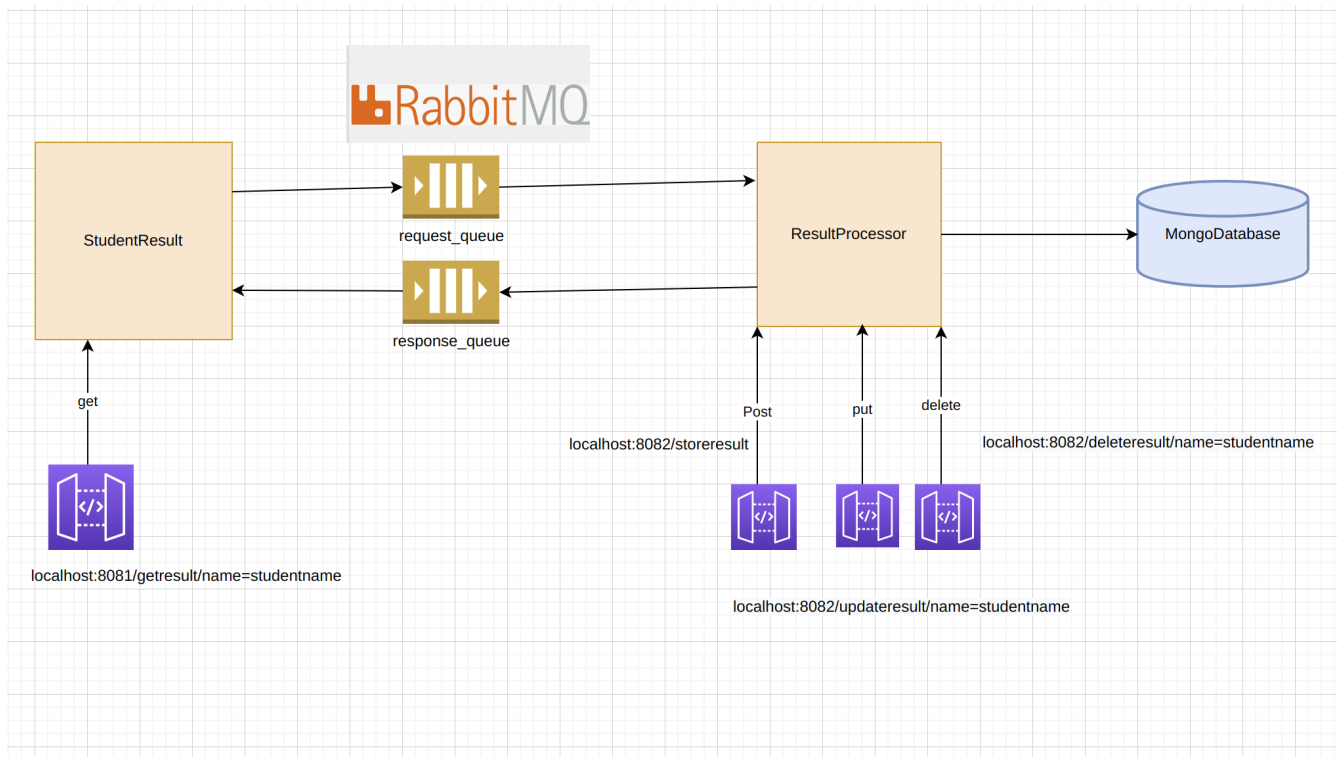Detail of user access

Users
1) user:
    username: student1
    password: password123

    username: student2
    password: password123

1) admin:
    username: schooladmin1
    password: password124

    username: schooladmin2
    password: password124

Data model for database store:

ExamResultModel:

name: String
role: String
schoolName: String
scienceMarks: Integer
mathMarks: Integer
socialScienceMarks: Integer
artMarks:Integer
sportMarks: Integer

Post and Put body data should be as above model json.

The Get result should be on json data which should display as a response.

Task to do:

1) Create both the project using maven command
2) Implement the both springboot microservice with latest library
3) Run the Rabbitmq and mongodb in docker containe(create docker-compose file for both)

5) Create ReadMe file and provide the steps to run this
6) Update the curl command in readme file
7) Create docker image for both microservice and deploy and run on Azure Virtual machine(The machine which all participants are using)
8) Create Presentation and present the project at end on the session.

Based on approach and presentation the evaluation will done