

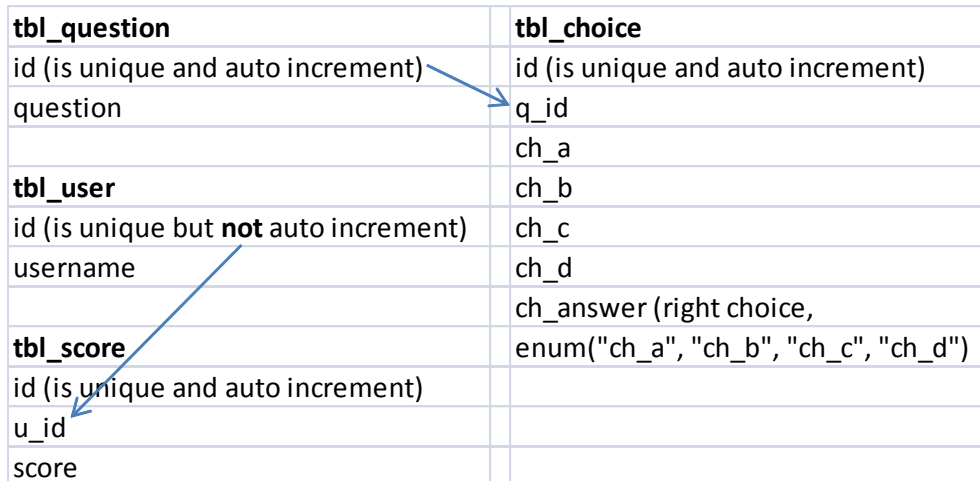
Homework-6

Creating Restful Web Services from a DB and calling Restful Web Services.

First Part: Creating a Web Service (JAVA)

- Firstly you have to create a DB. DB modal is as follows:

tbl_question	tbl_choice
id (is unique and auto increment)	id (is unique and auto increment)
question	q_id
	ch_a
	ch_b
tbl_user	ch_c
id (is unique but not auto increment)	ch_d
username	ch_answer (right choice,
	enum("ch_a", "ch_b", "ch_c", "ch_d"))
tbl_score	
id (is unique and auto increment)	
u_id	
score	



- In the DB, 4 tables exist. tbl_choice.q_id is foreign key for tbl_question.id and tbl_score.u_id is foreign key for tbl_user.id.
- The Paths and HTTP methods are defined as below:
 - your project/questions
 - Use POST method for creating a new question.
 - Use GET method to get all questions.
 - your project/questions/{id}
 - Use GET method to get question #id.
 - Use DELETE method for deleting question #id.
 - your project/questions/{id}/choices
 - Use GET method to get choices for question #id.
 - Use POST method for adding choices and answer for question #id.

- yourproject/users
 - Use GET method to get all users.
- yourproject/users/{id}
 - Use PUT method for creating new user.
 - Use DELETE method for deleting user #id.
- yourproject/users/{id}/score
 - Use GET to get score for user #id
 - Use PUT to create/update score for user #id
- yourproject/competition/{q_number}
 - Organize a competition. (Details are in the second part)
- ! For GET methods, check the id parameter that is correctly formed or not (it must be integer). If not return BAD_REQUEST 400 error.
- ! For PUT method, check the id parameter for user. If id is found than return a are correctly formed (only int). If not return CONFLICT 409 error.

Second Part: Organize a competition

- Write a web application (client) to test GET/POST/PUT/DELETE
- operations. You can use any programming language (Java, ASP.NET, PHP etc.).
- The pages of the web application (Homepage includes page links.)
 - USERS (Display all users, each one has a delete link/button)
 - Add User
 - QUESTIONS (Display all questions with choices, each one has a delete link/button)
 - Add Question
 - Add Choices for Question

- COMPETITION

- Call using GET method this path:
yourproject/competition/{q_number}
- This methods get a number of q_number questions with choices. Create a form to fill the choices for user. Form includes:
 - Select Box : Select username (You can use GET yourproject/users to get all username)
 - Question 1 : ?
 - Answer: Four radio button choices
 - Question 2 : ?
 - Answer: Four radio button choices
 - ...
 - Question q_number : ?
 - Answer: Four radio button for choices
 - Submit: Send a request.

- Calculate the score and update score for user. (PUT yourproject/users/{id}/score) Then go to homepage.

Last Word: Content-type for response must be **JSON**.

Submission of homework: Upload your ***yourstudentnumber.rar*** file which is included root directory of projects.

If any question about homework, please use <http://ask.fm/emrullahsonuc>

Deadline: 07.12.2017 Sunday 19:00