

Test exam application documentation

Test exam application where users can pass exams and see own results. There we have two roles **user** and **admin**.

Tables:

users (id, **role_id (1 – admin, 2 – user)**, login, password, name, surname, active)

test_questions (
id - int,
content - longtext,
variant_one - longtext,
variant_two - longtext,
variant_three - longtext,
variant_four - longtext,
correct_variant_value – **int (1,2,3 or 4)**

)

contests (id, user_id, created_time)

contest_questions (
id - int,
contest_id – int,
test_question_content - longtext,
variant_one - longtext,
variant_two - longtext,
variant_three - longtext,
variant_four - longtext,
answer_value (1,2,3 or 4),
user_answer_value (1,2,3,or 4),
is_correct – (1 or 2)

)

Functionality:

- a. Admin can add/edit/delete users
- b. Admin can add/edit/delete test questions.
 - i. Our test questions is a base of all questions
 - ii. Normal user will randomly generate test from this base
- c. User can login/logout from application
- d. User can generate new test contest with 10, 20 or 30 questions
 - i. After submitting all answers, our application must calculate each test question is correct or not. (For this we user MDB and JMS)
- e. User must be able see own contest history
- f. User must be able to see own answered test and score of each contest

Note:

Add this code for your standalone.xml file inside of tag <datasouces></datasources> if you will user wildfly server.

```
<datasource jndi-name="java:/jdbc/SchoolERPDS" pool-name="SchoolERPDS" enabled="true" use-java-context="true">  
  <connection-url>jdbc:mysql://localhost:3306/SchoolERP</connection-url>  
  <driver>mysql</driver>  
  <security>  
    <user-name>root</user-name>  
  </security>  
</datasource>
```