A9 - Main Accesses to the database and transactions

This artefact shows the main accesses to the database, including the transactions.

For each transaction, the isolation level is explicitly stated and read-only transactions are identified to improve global performance. For each identified access, the SQL code and the reference of web resources (A7) are provided.

1. Main Accesses

Main accesses to the database.

* 1. M01: Authentication

|  |  |
| --- | --- |
| SQL101 | Creates a new user in the system |
| Web Resource | R103 |
| INSERT INTO users (username,password,email,regist\_date,  first\_name,last\_name, image\_path,city\_id)  VALUES ($username, $password, $email, $regist\_date,  $first\_name, $last\_name, $image\_path, $city\_id); | |

|  |  |
| --- | --- |
| SQL101 | Log use rinto the system |
| Web Resource | R101 |
| SELECT username, last\_name, first\_name, email, image\_path, city\_id FROM users  WHERE users.username = $user\_username AND users.password=$user\_password; | |

* 1. M02: Users

|  |  |
| --- | --- |
| SQL101 | Show user profile |
| Web Resource | R103 |
| SELECT username, last\_name, first\_name, email, image\_path, city\_id  FROM users WHERE users.id = $user\_id; | |

|  |  |
| --- | --- |
| SQL101 | Show user’s notifications |
| Web Resource | R103 |
| SELECT sender\_id FROM friend\_requests WHERE receiver\_id = $user\_id;  SELECT sender\_id, event\_id FROM friend\_activities WHERE receiver\_id = $user\_id;  SELECT owner\_id, event\_id FROM event\_invites WHERE receiver\_id = $user\_id;  SELECT event\_name FROM event\_delete\_warnings WHERE receiver\_id = $user\_id;  SELECT event\_id FROM event\_update\_warnings WHERE receiver\_id = $user\_id; | |

|  |  |
| --- | --- |
| SQL101 | Search users |
| Web Resource | R103 |
| SELECT id, username, image\_path FROM users  WHERE username LIKE %$search% ORDER BY username; | |

|  |  |
| --- | --- |
| SQL101 | Search users |
| Web Resource | R103 |
| SELECT id, username, image\_path FROM users  WHERE username LIKE %$search% ORDER BY username; | |