**Database Test Suite**

**NASA EVA Gamification**

*Group 3*

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| **Version Number** | **Description of Change** | **Author** | **Date** |
| 1.0 | Initial Creation of Document | Okechukwu Ogudebe | 03/03/2018 |
| 1.1 | Revised Document for Formatting | Michael Salgo | 03/15/2018 |
| 1.2 | Revised Test Scripts | Okechukwu Ogudebe | 03/26/2018 |
| 1.3 | Revised Test Scripts | Michael Salgo | 03/27/2018 |

# Test Script Create Gamification Badges Table New

## Identification

Unique Identifier of Script: Database-01

Test Script Version: Version 01

Author of Test Script: Michael Salgo

Test Object: Database

## Preparation of the environment

Before this script is loaded, the following actions should be taken to meet the desired environment conditions:

* MediaWiki (version 1.27.4) is installed on either a Windows or CentOS hosting environment. This includes, but is not limited to the following required components: MariaDB/MySQL (version 5.5.59 of MariaDB) and PHP (version 5.6)
* NASA\_EVA\_Gamification MediaWiki extension has not been installed yet; if it has, the gamification\_badges table should be deleted from the MediaWiki database

## Test Script

Tester:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  | **Logging** | | |
| **Step#** | **Action to take** | **Expected Result** | **Actual Result** | **Pass/Fail** | **Remarks** |
| 1 | Check that the table gamification\_badges does not exist in the database in use for MediaWiki | The gamification\_badges table does not exist in the MediaWiki database |  |  |  |
| 2 | Copy the CREATE TABLE script from the add\_objects.sql file and paste it into the query editor of the database in use for MediaWiki | Code pasted into query editor matches the origin source |  |  |  |
| 3 | Execute the query | Query is executed without error |  |  |  |
| 4 | Check that the gamification\_badges table has been created by the SQL script; this may require a refresh of the tables listed | The gamification\_badges table now exists in the MediaWiki database |  |  |  |
| 5 | Check that the field user\_id is spelled correctly, is all lowercase, is of type int(10), and does not allow nulls | The field user\_id is spelled correctly, is all lowercase, is of type int(10), and does not allow nulls |  |  |  |
| 6 | Check that the field badge\_tag is spelled correctly, is all lowercase, is of type varchar(255), and does not allow nulls | The field badge\_tag is spelled correctly, is all lowercase, is of type varchar(255), and does not allow nulls |  |  |  |
| 7 | Check that the field badge\_rank is spelled correctly, is all lowercase, is of type varchar(255), and does not allow nulls | The field badge\_rank is spelled correctly, is all lowercase, is of type varchar(255), and does not allow nulls |  |  |  |
| 8 | Check that the field date\_badge\_earned is spelled correctly, is all lowercase, is of type binary(14), has a default of NULL, and allows nulls | The field date\_badge\_earned is spelled correctly, is all lowercase, is of type binary(14), has a default of NULL, and allows nulls |  |  |  |
| 9 | Check that the primary key is comprised of user\_id, badge\_tag, and badge\_rank | The gamification\_badges table primary key is comprised of user\_id, badge\_tag, and badge\_rank |  |  |  |

# Test Script Create Gamification Badges Table Preexisting

## Identification

Unique Identifier of Script: Database-02

Test Script Version: Version 01

Author of Test Script: Michael Salgo

Test Object: Database

## Preparation of the environment

Before this script is loaded, the following actions should be taken to meet the desired environment conditions:

* Test Script Database-01 has already been performed

## Test Script

Tester:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  | **Logging** | | |
| **Step#** | **Action to take** | **Expected Result** | **Actual Result** | **Pass/Fail** | **Remarks** |
| 1 | Check that the table gamification\_badges already exists in the database in use for MediaWiki | The gamification\_badges table exists in the MediaWiki database |  |  |  |
| 2 | Manually create two records in the gamification\_badges table with the following values (user\_id, badge\_tag, badge\_rank, date\_badge\_earned, respectively):   * 1, tag, rank, (NULL) * 2, tag, rank, (NULL) | The gamification\_badges table now contains at least two records, with user\_id, badge\_tag, badge\_rank, and date\_badge\_earned values of (respectively):   * 1, tag, rank, (NULL) * 2, tag, rank, (NULL) |  |  |  |
| 3 | Copy the CREATE TABLE script from the add\_objects.sql file and paste it into the query editor of the database in use for MediaWiki | Code pasted into query editor matches the origin source |  |  |  |
| 4 | Execute the query | Query is executed without error |  |  |  |
| 5 | Check that the gamification\_badges table still exists | The gamification\_badges table still exists in the MediaWiki database |  |  |  |
| 6 | Check that the field user\_id is still spelled correctly, is all lowercase, is of type int(10), and does not allow nulls | The field user\_id is spelled correctly, is all lowercase, is of type int(10), and does not allow nulls |  |  |  |
| 7 | Check that the field badge\_tag is still spelled correctly, is all lowercase, is of type varchar(255), and does not allow nulls | The field badge\_tag is spelled correctly, is all lowercase, is of type varchar(255), and does not allow nulls |  |  |  |
| 8 | Check that the field badge\_rank is still spelled correctly, is all lowercase, is of type varchar(255), and does not allow nulls | The field badge\_rank is spelled correctly, is all lowercase, is of type varchar(255), and does not allow nulls |  |  |  |
| 9 | Check that the field date\_badge\_earned is still spelled correctly, is all lowercase, is of type binary(14), has a default of NULL, and allows nulls | The field date\_badge\_earned is spelled correctly, is all lowercase, is of type binary(14), has a default of NULL, and allows nulls |  |  |  |
| 10 | Check that the primary key is comprised of user\_id, badge\_tag, and badge\_rank | The gamification\_badges table primary key is comprised of user\_id, badge\_tag, and badge\_rank |  |  |  |
| 11 | Check that the manually created two records in the gamification\_badges table still exist with the following values (user\_id, badge\_tag, badge\_rank, date\_badge\_earned, respectively):   * 1, tag, rank, (NULL) * 2, tag, rank, (NULL) | The gamification\_badges table still contains at least two records, with user\_id, badge\_tag, badge\_rank, and date\_badge\_earned values of (respectively):   * 1, tag, rank, (NULL) * 2, tag, rank, (NULL) |  |  |  |

# Test Script Insert Gamification Badges New

## Identification

Unique Identifier of Script: Database-03

Test Script Version: Version 01

Author of Test Script: Michael Salgo

Test Object: Database

## Preparation of the environment

Before this script is loaded, the following actions should be taken to meet the desired environment conditions:

* Test Script Database-02 has already been performed
* The gamification\_badges table has already been created and no records are present in this table; if there are records present, delete them

If any users exist in the user table, ensure that the user\_id numbers listed in the script below are available and if not, increment these script user\_id numbers to the max user\_id currently in use in the user table + 1.

## Test Script

Tester:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  | **Logging** | | |
| **Step#** | **Action to take** | **Expected Result** | **Actual Result** | **Pass/Fail** | **Remarks** |
| 1 | Manually create two records in the user table with the following values (user\_id, user\_name, user\_password, user\_newpassword, user\_email, user\_email\_authenticated, respectively):   * 10, 123, 123, 123, ‘’, (NULL) * 11, 456, 456, 456, ‘’, 4500000000000   000000000000000 | The user table now contains at least two records, with user\_id, user\_name, user\_password, user\_newpassword, user\_email, user\_email\_authenticated values of (respectively):   * 10, 123, 123, 123, ‘’, (NULL) * 11, 456, 456, 456, ‘’, 0x45000000000000   00000000000000 |  |  |  |
| 2 | Copy the INSERT script from the add\_objects.sql file and paste it into the query editor of the database in use for MediaWiki | Code pasted into query editor matches the origin source |  |  |  |
| 3 | Execute the query | Query is executed without error |  |  |  |
| 4 | Check that one record was created in the gamification\_badges table for user\_id 11 with the following values (badge\_tag, badge\_rank, date\_badge\_earned, respectively):   * gamification-badge-emailverification * gamification-rank-1 * (NULL) | One record was created in the gamification\_badges table for user\_id 11 with badge\_tag, badge\_rank, date\_badge\_earned values of (respectively):   * gamification-badge-emailverification * gamification-rank-1 * (NULL) |  |  |  |
| 5 | Check that no record was created in the gamification\_badges table for user\_id 10 | No record was created in the gamification\_badges table for user\_id 10 |  |  |  |

# Test Script Insert Gamification Badges Preexisting

## Identification

Unique Identifier of Script: Database-04

Test Script Version: Version 01

Author of Test Script: Michael Salgo

Test Object: Database

## Preparation of the environment

Before this script is loaded, the following actions should be taken to meet the desired environment conditions:

* Test Script Database-03 has already been performed

## Test Script

Tester:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  | **Logging** | | |
| **Step#** | **Action to take** | **Expected Result** | **Actual Result** | **Pass/Fail** | **Remarks** |
| 1 | Check that the manually created two records in the user table still exist with the following values (user\_id, user\_name, user\_password, user\_newpassword, user\_email, user\_email\_authenticated, respectively):   * 10, 123, 123, 123, ‘’, (NULL) * 11, 456, 456, 456, ‘’, 4500000000000   000000000000000 | The user table still contains at least two records, with user\_id, user\_name, user\_password, user\_newpassword, user\_email, user\_email\_authenticated values of (respectively):   * 10, 123, 123, 123, ‘’, (NULL) * 11, 456, 456, 456, ‘’, 0x45000000000000   00000000000000 |  |  |  |
| 2 | Copy the INSERT script from the add\_objects.sql file and paste it into the query editor of the database in use for MediaWiki | Code pasted into query editor matches the origin source |  |  |  |
| 3 | Execute the query | Query is executed without error |  |  |  |
| 4 | Check that one record still exists in the gamification\_badges table for user\_id 11 with the following values (badge\_tag, badge\_rank, date\_badge\_earned, respectively):   * gamification-badge-emailverification * gamification-rank-1 * (NULL) | One record still exists in the gamification\_badges table for user\_id 11 with badge\_tag, badge\_rank, date\_badge\_earned values of (respectively):   * gamification-badge-emailverification * gamification-rank-1 * (NULL) |  |  |  |
| 5 | Check that no record was created in the gamification\_badges table for user\_id 10 | No record was created in the gamification\_badges table for user\_id 10 |  |  |  |