16/03/17

# CS4014/CS4065/ET4243 Software Engineering Project/Web Application Development

# Deliverable 2

# Week 8

# Group 8

# William O’Leary (15155528)

# Aaron Dunne (15148602)

# Aidan Cleere (15160009)

# Bernard Steemers (15182819)

# Contents:

# Introduction…………………………………………………………………………………………………………2

# Database Tables……………………………………………………………………………………………………3

Introduction

This report details the database schema created by Group 8 for the CS4014/CS4065/ET4243 Software Engineering Project/Web Application Development project. This document consists of a single section, containing;

1. Database Table Synopsis – a simple listing of the attributes and datatypes for every table in the database. In some cases this is followed by a short note explaining the logic behind the grouping of certain attributes in the same table.
2. Table SQL Creation Declarations – the SQL statements used to create each table on the group’s MySQL database, including information on Foreign Key constraints, use of auto-increment , and default attribute values.
3. Link to Git Repository file - https://github.com/willoleary6/CS4014-Project/tree/master/Database%20schema

Database Tables

This section displays all database tables, attributes and datatypes, with the SQL create table statements included to show foreign keys, default values and auto-increments.

In all tables with their own generated id attribute, this attribute is named simply id, but is also used as foreign keys for other tables.

User Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| User\_id(primary) | First\_name | Last\_name | Student/staff\_id | Email |
| int(11) | varchar(16) | varchar(16) | int(10) | varchar(30) |

|  |  |  |
| --- | --- | --- |
| Subject\_id(foreign) | password | Reputation\_score |
| int(11) | varchar(16) | Int(11) |

CREATE TABLE `user\_details` (

`user\_id` int(11) NOT NULL COMMENT ' unique id number for every user .',

`first\_name` varchar(16) COLLATE utf8\_unicode\_ci NOT NULL COMMENT 'first name of the user',

`last\_name` varchar(16) COLLATE utf8\_unicode\_ci NOT NULL COMMENT 'last name of the user ',

`student/staff\_id` int(10) NOT NULL COMMENT 'id number of the student or staff member',

`email` varchar(30) COLLATE utf8\_unicode\_ci NOT NULL COMMENT 'email of the user',

`subject\_id` int(11) NOT NULL COMMENT ' foreign key linking to a set table of predefined major\_subjects ',

`password` varchar(16) COLLATE utf8\_unicode\_ci NOT NULL COMMENT 'password of user',

`reputation\_score` int(11) NOT NULL COMMENT 'reputation score of the user'

) ENGINE=Inno

DB DEFAUL

T CHAR

SET=utf8 COLLATE=utf8\_unicode\_ci COMMENT='Table containing all the details of users in the systems';

ALTER TABLE `user\_details`

ADD PRIMARY KEY (`user\_id`),

ADD KEY `subject\_id` (`subject\_id`);

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| File\_type | Tag\_1(foreign) | Tag\_2(foreign) | Tag\_3(foreign) | Tag\_4(foreign) |
| int(11) | Int(11) | Int(11) | Int(11) | Int(11) |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attached\_files | No\_of\_pages | No\_of\_words | Deadline | Claim\_by\_date |
| blob | Int(11) | Int(11) | Date\_time | Claim\_by\_date |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| task\_id(primary) | user\_id(foreign) | title | Text\_description | Task\_type |
| int(11) | Int(11) | varchar(16) | Varchar(300) | varchar(100) |

tasks

CREATE TABLE `tasks` (

`task\_id` int(11) NOT NULL,

`user\_id` int(11) NOT NULL,

`title` varchar(16) COLLATE utf8\_unicode\_ci NOT NULL,

`text\_description` varchar(300) COLLATE utf8\_unicode\_ci NOT NULL,

`task\_type` varchar(100) COLLATE utf8\_unicode\_ci NOT NULL,

`Attached\_files` blob NOT NULL,

`no\_of\_pages` int(11) NOT NULL,

`no\_of\_words` int(11) NOT NULL,

`Deadline` datetime NOT NULL,

`claim\_by\_date` datetime NOT NULL,

`file\_type` varchar(10) COLLATE utf8\_unicode\_ci NOT NULL,

`tag\_1` int(11) DEFAULT NULL,

`tag\_2` int(11) DEFAULT NULL,

`tag\_3` int(11) DEFAULT NULL,

`tag\_4` int(11) DEFAULT NULL

) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8\_unicode\_ci COMMENT='table with all the details of the table key';

ALTER TABLE `tasks`

ADD PRIMARY KEY (`task\_id`),

ADD KEY `tag1` (`tag\_1`),

ADD KEY `tag2` (`tag\_2`),

ADD KEY `tag3` (`tag\_3`),

ADD KEY `tag4` (`tag\_4`),

ADD KEY `link to user` (`user\_id`);

|  |  |
| --- | --- |
| Subject\_id(primary) | Subject\_name |
| int(11) | varchar(30) |

major\_subjects

CREATE TABLE `major\_subjects` (

`subject\_id` int(11) NOT NULL COMMENT ' holds the unique id number of each subject ',

`subject\_name` varchar(30) COLLATE utf8\_unicode\_ci NOT NULL COMMENT 'name of each subject.'

) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8\_unicode\_ci;

ALTER TABLE `major\_subjects`

ADD PRIMARY KEY (`subject\_id`);

status

|  |  |
| --- | --- |
| Status\_id(primary) | status |
| int(11) | Varhar(16) |

CREATE TABLE `status` (

`status\_id` int(11) NOT NULL,

`status` varchar(16) COLLATE utf8\_unicode\_ci NOT NULL

) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8\_unicode\_ci;

ALTER TABLE `status`

ADD PRIMARY KEY (`status\_id`);

tags

|  |  |
| --- | --- |
| tag\_id(primary) | text |
| int(11) | Varhar(16) |

CREATE TABLE `tags` (

`tag\_id` int(11) NOT NULL,

`text` varchar(16) COLLATE utf8\_unicode\_ci NOT NULL

) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8\_unicode\_ci;

ALTER TABLE `tags`

ADD PRIMARY KEY (`tag\_id`);

taskStatus

|  |  |  |  |
| --- | --- | --- | --- |
| TaskStatus\_id(primary) | Status\_id(foreign) | Claim\_id(foreign) | timestamp |
| int(11) | Int(11) | Int(11) | timestamp |

CREATE TABLE `taskStatus` (

`taskStatus\_id` int(11) NOT NULL,

`status\_id` int(11) NOT NULL,

`claim\_id` int(11) NOT NULL,

`timestamp` timestamp NOT NULL DEFAULT CURRENT\_TIMESTAMP ON UPDATE CURRENT\_TIMESTAMP

) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8\_unicode\_ci;

ALTER TABLE `taskStatus`

ADD PRIMARY KEY (`taskStatus\_id`),

ADD KEY `link to claim` (`claim\_id`),

ADD KEY `link to status` (`status\_id`);

Task\_claims

|  |  |  |
| --- | --- | --- |
| Claim\_id(primary) | task\_id(foreign) | user\_id(foreign) |
| int(11) | Int(11) | Int(11) |

CREATE TABLE `task\_claims` (

`claim\_id` int(11) NOT NULL,

`task\_id` int(11) NOT NULL,

`user\_id` int(11) NOT NULL

) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8\_unicode\_ci;

ALTER TABLE `task\_claims`

ADD PRIMARY KEY (`claim\_id`),

ADD KEY `link to task` (`task\_id`),

ADD KEY `link to claimant` (`user\_id`);