**< DATE 17/03/17>**

**Proof Reading Website**

**Deliverable 2**

**Week 8**

**Group 18**

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# Introduction

This report details the database schema as created by Group 18 for the CS4056 Web Infrastructures project. The document consists of a single section, containing;

* **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.
* **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.
* **Entity Relationship diagram –** An entity relationship diagram of the tables.
* **Link to Git Repository file** - <https://github.com/CS4014group18/web> filename is web7.sql The sql file was generated using MySQL Workbench constraint names were deleted to remove problems with duplicate names.

# 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.

**User**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ID** | **FirstName** | **LastName** | **Email** | **Password** | **Reputation** |
| VARCHAR(8) | VARCHAR(30) | VARCHAR(30) | VARCHAR(50) | VARCHAR(50) | INT |

CREATE TABLE IF NOT EXISTS `group18`.`User` (

`ID` VARCHAR(8) NOT NULL,

`FirstName` VARCHAR(30) NOT NULL,

`LastName` VARCHAR(30) NOT NULL,

`Email` VARCHAR(50) NOT NULL,

`Password` VARCHAR(50) NOT NULL,

`Reputation` INT ZEROFILL NULL,

PRIMARY KEY (`ID`),

UNIQUE INDEX `Email\_UNIQUE` (`Email` ASC));

**NOTE** Email is declared as unique and Reputation is initialised to zero.

**Major**

|  |  |
| --- | --- |
| **ID** | **Major** |
| VARCHAR(8) | VARCHAR(50) |

CREATE TABLE IF NOT EXISTS `group18`.`Major` (

`ID` VARCHAR(8) NOT NULL,

`Major` VARCHAR(50) NOT NULL,

PRIMARY KEY (`ID`),

CONSTRAINT

FOREIGN KEY (`ID`)

REFERENCES `group18`.`User` (`ID`)

ON DELETE CASCADE

ON UPDATE CASCADE);

**Banned**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Moderator** | **Date** | **Reason** |
| VARCHAR(8) | VARCHAR(8) | DATETIME | VARCHAR(50) |

CREATE TABLE IF NOT EXISTS `group18`.`Banned` (

`ID` VARCHAR(8) NOT NULL,

`Moderator` VARCHAR(8) NOT NULL,

`Date` DATETIME NOT NULL,

`Reason` VARCHAR(50) NULL,

PRIMARY KEY (`ID`),

INDEX `moderator\_idx` (`Moderator` ASC),

CONSTRAINT

FOREIGN KEY (`ID`)

REFERENCES `group18`.`User` (`ID`)

ON DELETE CASCADE

ON UPDATE CASCADE,

CONSTRAINT

FOREIGN KEY (`Moderator`)

REFERENCES `group18`.`User` (`ID`)

ON DELETE CASCADE

ON UPDATE CASCADE);

**Task**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **idTaskNo** | **UserCreated** | **Title** | **Type** | **Description** | **Pages** | **Words** |
| INT | VARCHAR(8) | VARCHAR(100) | VARCHAR(50) | VARCHAR(200) | INT | INT |

|  |  |  |  |
| --- | --- | --- | --- |
| **Format** | **Sample** | **DeadlineClaiming** | **DeadlineSubmission** |
| VARCHAR(10) | TEXT | DATETIME | DATETIME |

CREATE TABLE IF NOT EXISTS `group18`.`Task` (

`idTaskNo` INT NOT NULL,

`UserCreated` VARCHAR(8) NOT NULL,

`Title` VARCHAR(100) NOT NULL,

`Type` VARCHAR(50) NOT NULL,

`Description` VARCHAR(200) NOT NULL,

`Pages` INT NOT NULL,

`Words` INT NOT NULL,

`Format` VARCHAR(10) NOT NULL,

`Sample` TEXT NULL,

`DeadlineClaiming` DATETIME NOT NULL,

`DeadlineSubmission` DATETIME NOT NULL,

PRIMARY KEY (`idTaskNo`),

INDEX `UserCreated\_idx` (`UserCreated` ASC),

CONSTRAINT

FOREIGN KEY (`UserCreated`)

REFERENCES `group18`.`User` (`ID`)

ON DELETE CASCADE

ON UPDATE CASCADE);

**Claimed**

|  |  |  |  |
| --- | --- | --- | --- |
| **idClaimed** | **ID** | **TaskNo** | **date** |
| INT | VARCHAR(8) | INT | DATETIME |

CREATE TABLE IF NOT EXISTS `group18`.`Claimed` (

`idClaimed` INT NOT NULL,

`ID` VARCHAR(8) NOT NULL,

`TaskNo` INT NOT NULL,

`date` DATETIME NOT NULL,

PRIMARY KEY (`idClaimed`),

INDEX `ID\_idx` (`ID` ASC),

INDEX `TaskNo\_idx` (`TaskNo` ASC),

CONSTRAINT

FOREIGN KEY (`ID`)

REFERENCES `group18`.`User` (`ID`)

ON DELETE CASCADE

ON UPDATE CASCADE,

CONSTRAINT

FOREIGN KEY (`TaskNo`)

REFERENCES `group18`.`Task` (`idTaskNo`)

ON DELETE CASCADE

ON UPDATE CASCADE);

**Tags**

|  |  |
| --- | --- |
| **idTags** | **Description** |
| INT | VARCHAR(30) |

CREATE TABLE IF NOT EXISTS `group18`.`Tags` (

`idTags` INT NOT NULL,

`Description` VARCHAR(30) NOT NULL,

PRIMARY KEY (`idTags`));

**UserTags**

|  |  |  |
| --- | --- | --- |
| **idUserTags** | **ID** | **Tag** |
| INT | VARCHAR(8) | INT |

CREATE TABLE IF NOT EXISTS `group18`.`UserTags` (

`idUserTags` INT NOT NULL,

`ID` VARCHAR(8) NOT NULL,

`Tag` INT NOT NULL,

PRIMARY KEY (`idUserTags`),

INDEX `ID\_idx` (`ID` ASC),

INDEX `idTags\_idx` (`Tag` ASC),

CONSTRAINT

FOREIGN KEY (`ID`)

REFERENCES `group18`.`User` (`ID`)

ON DELETE CASCADE

ON UPDATE CASCADE,

CONSTRAINT

FOREIGN KEY (`Tag`)

REFERENCES `group18`.`Tags` (`idTags`)

ON DELETE CASCADE

ON UPDATE CASCADE);

**TaskTags**

|  |  |  |
| --- | --- | --- |
| **idTaskTags** | **TaskNo** | **Tag** |
| INT | INT | INT |

CREATE TABLE IF NOT EXISTS `group18`.`TaskTags` (

`idTaskTags` INT NOT NULL,

`TaskNo` INT NOT NULL,

`Tag` INT NOT NULL,

PRIMARY KEY (`idTaskTags`),

INDEX `taskNo\_idx` (`TaskNo` ASC),

INDEX `idTags\_idx` (`Tag` ASC),

CONSTRAINT

FOREIGN KEY (`Tag`)

REFERENCES `group18`.`Tags` (`idTags`)

ON DELETE CASCADE

ON UPDATE CASCADE,

CONSTRAINT

FOREIGN KEY (`TaskNo`)

REFERENCES `group18`.`Task` (`idTaskNo`)

ON DELETE CASCADE

ON UPDATE CASCADE);

**StatusName**

|  |  |
| --- | --- |
| **idStatusName** | **Status** |
| INT | VARCHAR(13) |

CREATE TABLE IF NOT EXISTS `group18`.`StatusName` (

`idStatusName` INT NOT NULL,

`Status` VARCHAR(13) NOT NULL,

PRIMARY KEY (`idStatusName`));

**Status**

|  |  |  |  |
| --- | --- | --- | --- |
| **idStatus** | **TaskNo** | **StatusName** | **Date** |
| INT | INT | INT | DATETIME |

CREATE TABLE IF NOT EXISTS `group18`.`Status` (

`idStatus` INT NOT NULL,

`TaskNo` INT NOT NULL,

`StatusName` INT NOT NULL,

`Date` DATETIME NULL,

PRIMARY KEY (`idStatus`),

INDEX `idStatus\_idx` (`StatusName` ASC),

INDEX `TaskNo\_idx` (`TaskNo` ASC),

CONSTRAINT

FOREIGN KEY (`StatusName`)

REFERENCES `group18`.`StatusName` (`idStatusName`)

ON DELETE CASCADE

ON UPDATE CASCADE,

CONSTRAINT

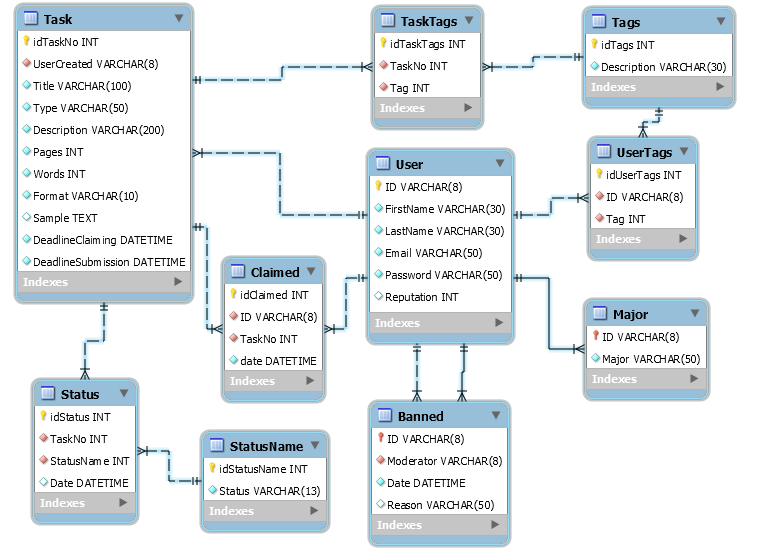
FOREIGN KEY (`TaskNo`)

REFERENCES `group18`.`Task` (`idTaskNo`)

ON DELETE CASCADE

ON UPDATE CASCADE);

**Entity Relationship Diagram**

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