**KT Lau**

TAFESA

120 Currie Street

27th of November, 2019

**Dear Mr Lau**

Please find below our modification to the provided Database for your kind consideration and approval.

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| **Before** | **After** |
| CREATE TABLE IF NOT EXISTS `db\_tafebuddy`.`student` (  `StudentID` VARCHAR(9) NOT NULL,  `GivenName` VARCHAR(64) NOT NULL,  `LastName` VARCHAR(64) NOT NULL,  `EmailAddress` VARCHAR(64) NOT NULL,  PRIMARY KEY (`StudentID`))  ENGINE = InnoDB  DEFAULT CHARACTER SET = utf8mb4  COLLATE = utf8mb4\_0900\_ai\_ci  CREATE TABLE IF NOT EXISTS `db\_tafebuddy`.`lecturer` (  `LecturerID` CHAR(9) NOT NULL,  `GivenName` VARCHAR(64) NOT NULL,  `LastName` VARCHAR(64) NOT NULL,  `EmailAddress` VARCHAR(64) NOT NULL,  PRIMARY KEY (`LecturerID`))  ENGINE = InnoDB  DEFAULT CHARACTER SET = utf8mb4  COLLATE = utf8mb4\_0900\_ai\_ci | CREATE TABLE IF NOT EXISTS `db\_tafebuddy`.`user` (  `UserID` VARCHAR(9) NOT NULL,  `GivenName` VARCHAR(64) NOT NULL,  `LastName` VARCHAR(64) NOT NULL,  `EmailAddress` VARCHAR(64) NOT NULL,  `Password` VARCHAR(255) NOT NULL,  `Role` VARCHAR(45) NOT NULL,  `ParchmentRequest` TINYINT(1) NOT NULL,  PRIMARY KEY (`UserID`))  ENGINE = InnoDB  DEFAULT CHARACTER SET = utf8mb4  COLLATE = utf8mb4\_0900\_ai\_ci |

We understand that creating client-oriented software takes a mixture of technical excellence and clear communication and our team works hard to ensure you receive both. We know that every client is unique, and we strive to deliver an individual and innovative proposal every time, and to follow it through with an outstanding delivery which is both on time and within budget.

Therefore, we modified the provided database, so we can ensure your requirements are completely fulfilled.

Here are the reasons to change the database.

* The system required a login to access the system, but there was not field to store the password.
* The table lecturer and student were the same. And the table lecturer only was being referenced from the table crn\_detail, as well as the table student.
* There was no field to store whether a student have requested a parchment.
* There was no field to store whether a lecturer have received a parchment request.

After analysis, our team came up with an efficient and elegant solution that we hope you approve.

* Drop the table Lecturer
* Change the name of the table **Student** for **User** and store all the users in it.
* Add a new field **Password**, that stores the hashed passwords.
* Add a new field **Role**, that separates the users by Administrator, Lecturer and Student.
* Add a new field **ParchmentRequest**, that would act as a flag to let us know whether a student have requested a parchment and whether a lecturer have received a parchment request.

Please find attached both models for your reference.

We need and request your approval for this change. Please sign off below.

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