-- MySQL Workbench Forward Engineering

SET @OLD\_UNIQUE\_CHECKS=@@UNIQUE\_CHECKS, UNIQUE\_CHECKS=0;

SET @OLD\_FOREIGN\_KEY\_CHECKS=@@FOREIGN\_KEY\_CHECKS, FOREIGN\_KEY\_CHECKS=0;

SET @OLD\_SQL\_MODE=@@SQL\_MODE, SQL\_MODE='ONLY\_FULL\_GROUP\_BY,STRICT\_TRANS\_TABLES,NO\_ZERO\_IN\_DATE,NO\_ZERO\_DATE,ERROR\_FOR\_DIVISION\_BY\_ZERO,NO\_ENGINE\_SUBSTITUTION';

-- -----------------------------------------------------

-- Schema mydb

-- -----------------------------------------------------

-- -----------------------------------------------------

-- Schema G7AgileExperience

-- -----------------------------------------------------

-- -----------------------------------------------------

-- Schema G7AgileExperience

-- -----------------------------------------------------

CREATE SCHEMA IF NOT EXISTS `G7AgileExperience` DEFAULT CHARACTER SET utf8mb4 ;

USE `G7AgileExperience` ;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`Class`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`Class` (

`idClass` INT(11) NOT NULL,

`name` VARCHAR(45) NULL DEFAULT NULL,

PRIMARY KEY (`idClass`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`Student`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`Student` (

`idStudent` INT(11) NOT NULL,

`fullName` VARCHAR(45) NULL DEFAULT NULL,

PRIMARY KEY (`idStudent`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`Grader`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`Grader` (

`idGrader` INT(11) NOT NULL,

PRIMARY KEY (`idGrader`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`Professor`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`Professor` (

`professorID` INT(11) NOT NULL,

`profName` VARCHAR(45) NULL DEFAULT NULL,

PRIMARY KEY (`professorID`),

CONSTRAINT `isA`

FOREIGN KEY (`professorID`)

REFERENCES `G7AgileExperience`.`Grader` (`idGrader`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`Section`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`Section` (

`sectionID` INT(11) NOT NULL,

`classID` INT(11) NOT NULL,

`skillsListID` INT(11) NOT NULL,

`professorID` INT(11) NULL DEFAULT NULL,

PRIMARY KEY (`sectionID`, `classID`),

INDEX `belongsToClass` (`classID` ASC) VISIBLE,

INDEX `teaches` (`professorID` ASC) VISIBLE,

CONSTRAINT `belongsToClass`

FOREIGN KEY (`classID`)

REFERENCES `G7AgileExperience`.`Class` (`idClass`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `teaches`

FOREIGN KEY (`professorID`)

REFERENCES `G7AgileExperience`.`Professor` (`professorID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`NoteSheet`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`NoteSheet` (

`noteSheetID` INT(11) NOT NULL,

PRIMARY KEY (`noteSheetID`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`GradeType`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`GradeType` (

`ID` INT(11) NOT NULL,

`TypeOfGrade` VARCHAR(20) NOT NULL,

PRIMARY KEY (`ID`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`Lab`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`Lab` (

`idLab` INT(11) NOT NULL,

`labName` VARCHAR(45) NULL DEFAULT NULL,

`GradeType` INT(11) NULL DEFAULT NULL,

`maxScore` VARCHAR(11) NULL DEFAULT '100',

`sectionID` INT(11) NOT NULL,

`classID` INT(11) NOT NULL,

`noteSheetID` INT(11) NULL DEFAULT NULL,

PRIMARY KEY (`idLab`, `sectionID`, `classID`),

INDEX `belongsToClassSection` (`sectionID` ASC, `classID` ASC) VISIBLE,

INDEX `containsA` (`noteSheetID` ASC) VISIBLE,

INDEX `isOfGradeType` (`GradeType` ASC) VISIBLE,

CONSTRAINT `belongsToClassSection`

FOREIGN KEY (`sectionID` , `classID`)

REFERENCES `G7AgileExperience`.`Section` (`sectionID` , `classID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `containsA`

FOREIGN KEY (`noteSheetID`)

REFERENCES `G7AgileExperience`.`NoteSheet` (`noteSheetID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `isOfGradeType`

FOREIGN KEY (`GradeType`)

REFERENCES `G7AgileExperience`.`GradeType` (`ID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`Grade`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`Grade` (

`gradeID` INT(11) NOT NULL,

`assignedValue` VARCHAR(11) NOT NULL COMMENT 'A letter score/rubric score with max 100 as default (3 digits) or complete/incomplete',

`maxScore` VARCHAR(11) NULL DEFAULT '100',

`labID` INT(11) NOT NULL,

`classID` INT(11) NOT NULL,

`sectionID` INT(11) NOT NULL,

`studentID` INT(11) NOT NULL,

`typeOfGrade` INT(11) NOT NULL,

`graderID` INT(11) NOT NULL,

PRIMARY KEY (`gradeID`),

INDEX `for` (`classID` ASC) VISIBLE,

INDEX `belongsTo` (`studentID` ASC) VISIBLE,

INDEX `gradedForLab` (`labID` ASC) VISIBLE,

INDEX `gradedForSection` (`sectionID` ASC, `classID` ASC) VISIBLE,

INDEX `typeOfGrade` (`typeOfGrade` ASC) VISIBLE,

INDEX `gradedByGrader` (`graderID` ASC) VISIBLE,

CONSTRAINT `belongsTo`

FOREIGN KEY (`studentID`)

REFERENCES `G7AgileExperience`.`Student` (`idStudent`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `gradedByGrader`

FOREIGN KEY (`graderID`)

REFERENCES `G7AgileExperience`.`Grader` (`idGrader`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `gradedForLab`

FOREIGN KEY (`labID`)

REFERENCES `G7AgileExperience`.`Lab` (`idLab`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `gradedForSection`

FOREIGN KEY (`sectionID` , `classID`)

REFERENCES `G7AgileExperience`.`Lab` (`sectionID` , `classID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `typeOfGrade`

FOREIGN KEY (`typeOfGrade`)

REFERENCES `G7AgileExperience`.`GradeType` (`ID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`CompleteIncomplete`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`CompleteIncomplete` (

`gradeID` INT(11) NOT NULL,

`assignedValue` VARCHAR(20) NULL DEFAULT NULL,

PRIMARY KEY (`gradeID`),

CONSTRAINT `isCompleteOrIncomplete`

FOREIGN KEY (`gradeID`)

REFERENCES `G7AgileExperience`.`Grade` (`gradeID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`EnrollsIn`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`EnrollsIn` (

`studentID` INT(11) NOT NULL,

`sectionID` INT(11) NOT NULL,

`classID` INT(11) NOT NULL,

PRIMARY KEY (`studentID`, `sectionID`, `classID`),

INDEX `forClass` (`classID` ASC) VISIBLE,

CONSTRAINT `enrolledIn`

FOREIGN KEY (`studentID`)

REFERENCES `G7AgileExperience`.`Student` (`idStudent`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `forClass`

FOREIGN KEY (`classID`)

REFERENCES `G7AgileExperience`.`Section` (`classID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`Rubric`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`Rubric` (

`rubricID` INT(11) NOT NULL,

`maxPoints` DECIMAL(5,0) NULL DEFAULT NULL,

PRIMARY KEY (`rubricID`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`GradeByRubric`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`GradeByRubric` (

`gradeID` INT(11) NOT NULL,

`assignedScore` DECIMAL(5,0) NULL DEFAULT NULL,

`rubricID` INT(11) NULL DEFAULT NULL,

PRIMARY KEY (`gradeID`),

INDEX `basedOnRubric` (`rubricID` ASC) VISIBLE,

CONSTRAINT `basedOnRubric`

FOREIGN KEY (`rubricID`)

REFERENCES `G7AgileExperience`.`Rubric` (`rubricID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `gradedByRubric`

FOREIGN KEY (`gradeID`)

REFERENCES `G7AgileExperience`.`Grade` (`gradeID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`Log`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`Log` (

`LogID` INT(11) NOT NULL,

`TimeStamp` DATETIME NOT NULL,

`gradeID` INT(11) NOT NULL,

`graderID` INT(11) NOT NULL DEFAULT '7',

`assignedValue` VARCHAR(11) NULL,

PRIMARY KEY (`LogID`, `graderID`),

INDEX `storesGrade` (`gradeID` ASC) VISIBLE,

INDEX `generatedByGraderID` (`graderID` ASC) VISIBLE,

CONSTRAINT `generatedByGraderID`

FOREIGN KEY (`graderID`)

REFERENCES `G7AgileExperience`.`Grader` (`idGrader`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `storesGrade`

FOREIGN KEY (`gradeID`)

REFERENCES `G7AgileExperience`.`Grade` (`gradeID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`Note`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`Note` (

`noteID` INT(11) NOT NULL,

`noteText` VARCHAR(200) NOT NULL,

`graderID` INT(11) NOT NULL,

`noteSheetID` INT(11) NOT NULL,

PRIMARY KEY (`noteID`, `noteSheetID`),

INDEX `enters` (`graderID` ASC) VISIBLE,

INDEX `isForNoteSheet` (`noteSheetID` ASC) VISIBLE,

CONSTRAINT `enters`

FOREIGN KEY (`graderID`)

REFERENCES `G7AgileExperience`.`Grader` (`idGrader`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `isForNoteSheet`

FOREIGN KEY (`noteSheetID`)

REFERENCES `G7AgileExperience`.`NoteSheet` (`noteSheetID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`RangedScore`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`RangedScore` (

`gradeID` INT(11) NOT NULL,

`assignedScore` DECIMAL(5,0) NULL DEFAULT NULL,

`maxScore` VARCHAR(11) NULL DEFAULT '100',

PRIMARY KEY (`gradeID`),

CONSTRAINT `isRangedScore`

FOREIGN KEY (`gradeID`)

REFERENCES `G7AgileExperience`.`Grade` (`gradeID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`RubricCriteria`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`RubricCriteria` (

`ID` INT(11) NOT NULL,

`rubricID` INT(11) NULL DEFAULT NULL,

`description` VARCHAR(45) NULL DEFAULT NULL,

`maxPoints` DECIMAL(5,0) NULL DEFAULT NULL,

PRIMARY KEY (`ID`),

INDEX `belongsToRubric` (`rubricID` ASC) VISIBLE,

CONSTRAINT `belongsToRubric`

FOREIGN KEY (`rubricID`)

REFERENCES `G7AgileExperience`.`Rubric` (`rubricID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`SI`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`SI` (

`siID` INT(11) NOT NULL,

`name` VARCHAR(45) NOT NULL,

PRIMARY KEY (`siID`),

CONSTRAINT `issA`

FOREIGN KEY (`siID`)

REFERENCES `G7AgileExperience`.`Grader` (`idGrader`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`SkillList`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`SkillList` (

`skillListID` INT(11) NOT NULL,

`siID` INT(11) NULL DEFAULT NULL,

PRIMARY KEY (`skillListID`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`Skill`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`Skill` (

`skillID` INT(11) NOT NULL,

`description` VARCHAR(45) NULL DEFAULT NULL,

`siID` INT(11) NULL DEFAULT NULL,

`skillListID` INT(11) NULL DEFAULT NULL,

`isLearned` INT(1) NOT NULL DEFAULT '0',

PRIMARY KEY (`skillID`),

INDEX `isPartOf` (`skillListID` ASC) VISIBLE,

INDEX `enteredBy` (`siID` ASC) VISIBLE,

CONSTRAINT `enteredBy`

FOREIGN KEY (`siID`)

REFERENCES `G7AgileExperience`.`SI` (`siID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `isPartOf`

FOREIGN KEY (`skillListID`)

REFERENCES `G7AgileExperience`.`SkillList` (`skillListID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`ViewsNoteSheet`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`ViewsNoteSheet` (

`graderID` INT(11) NOT NULL,

`noteSheetID` INT(11) NOT NULL,

PRIMARY KEY (`graderID`, `noteSheetID`),

INDEX `ReferencesA` (`noteSheetID` ASC) VISIBLE,

CONSTRAINT `ReferencesA`

FOREIGN KEY (`noteSheetID`)

REFERENCES `G7AgileExperience`.`NoteSheet` (`noteSheetID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `toBeViewedBy`

FOREIGN KEY (`graderID`)

REFERENCES `G7AgileExperience`.`Grader` (`idGrader`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4

COMMENT = 'New relation generated by the Views relationship between Grader and Notesheet since M:N relationship';

-- -----------------------------------------------------

-- Table `G7AgileExperience`.`ViewsSkillList`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `G7AgileExperience`.`ViewsSkillList` (

`siID` INT(11) NOT NULL,

`skillsListID` INT(11) NOT NULL,

PRIMARY KEY (`siID`, `skillsListID`),

INDEX `References` (`skillsListID` ASC) VISIBLE,

CONSTRAINT `IsViewedBy`

FOREIGN KEY (`siID`)

REFERENCES `G7AgileExperience`.`SI` (`siID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `References`

FOREIGN KEY (`skillsListID`)

REFERENCES `G7AgileExperience`.`SkillList` (`skillListID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8mb4;

SET SQL\_MODE=@OLD\_SQL\_MODE;

SET FOREIGN\_KEY\_CHECKS=@OLD\_FOREIGN\_KEY\_CHECKS;

SET UNIQUE\_CHECKS=@OLD\_UNIQUE\_CHECKS;