-- 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,

```sql
  `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`)
```

```sql
    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,
```

```sql
  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`
```

```sql
-- -----------------------------------------------------
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';
```

```sql
-- -----------------------------------------------------
-- 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;
```