

## Relational Model

School(school\_code, name, main\_language, vision, mission, fees, type, address,  
phone\_number, email, general\_info)

GradeOffered(grade\_offered, school\_code)

-----

*GradeOffered.school\_code references School*

Middle(school\_code)

-----

*Middle.school\_code references School*

MiddleCourses(course\_code, school\_code)

-----      -----

*MiddleCourses.course\_code references Course*

*MiddleCourses.school\_code references Middle*

Elementary(school\_code)

-----

*Elementary.school\_code references School*

Supplies(supply, school\_code)

-----

*Supplies.school\_code references Elementary*

ElementaryCourses(course\_code, school\_code)

-----      -----

*ElementaryCourses.course\_code references Course*

*ElementaryCourses.school\_code references Elementary*

High(school\_code)

-----

*High.school\_code references School*

HighCourses(course\_code, school\_code)

-----      -----

*HighCourses.course\_code references Course*

*HighCourses.school\_code references High*

---

Employee(username, password, first\_name, middle\_name, last\_name, gender, birthday,  
address, salary, email, school\_code)

-----  
*Employee.school\_code references School.school\_code*

Teacher(username, start\_date\_of\_teaching, years\_of\_experience)  
 -----  
*Teacher.username references Employee.username*  
*where Teacher.years of experience= Current.date- Teacher.start day of teaching*

Supervises(susurname, tusername)  
 -----  
*Supervises.susurname references Teacher*  
*Supervises.tusername references Teacher*

Administrator(username)  
 -----  
*Administrator.username references Employee*

---

Club(name, purpose, school\_code)  
 -----  
*Club.school\_code references High*

---

Child(SSN, name, birthday, gender, age)  
*where Child.age= Current.date - Child.birthday*

Student(SSN, username, password, grade, school\_code)  
 -----  
*Student.SSN references Child*  
*Student.school\_code references School.school\_code*

GradeAge(age, gradeForThisAge)  
 -----  
*GradeAge.age references Child.age*

StudentJoinsClub(SSN, name)  
 -----  
*StudentJoinsClub.SSN references Student.SSN*  
*StudentJoinsClub.name references Club.name*

StudentTakesCourse(SSN, course\_code)  
 -----

*StudentTakesCourse.SSN* refernces *Student.SSN*  
*StudentTakesCourse.course\_code* references *Course.course\_code*

*StudentReviewsQsAndAs*(SSN1, course\_code2, SSN2, username, course\_code3, SSN3)

-----  
*StudentReviewsQsAndAs.SSN1* references *Student.SSN*  
*StudentReviewsQsAndAs.(course\_code2, SSN2)* references *Question.(course\_code, SSN)*  
*StudentReviewsQsAndAs.(username, course\_code3, SSN3)* references  
*Answer.(username, course\_code, SSN)*

---

*Parent*(username, password, first\_name, last\_name, email, address, home\_number,  
school\_code)

-----  
*Parent.school\_code* references *School*

*ParentMobiles*(username, mobile number)

-----  
*ParentMobiles.username* references *Parent*

*ParentCanApplyForChildAtSchool*(school\_code, SSN, username)

-----  
*ParentCanApplyForChildAtSchool.school\_code* references *School.school\_code*  
*ParentCanApplyForChildAtSchool.SSN* references *Child.SSN*  
*ParentCanApplyForChildAtSchool.username* references *Parent.username*

*ParentBrowseForSchool*(school\_code, username)

-----  
*ParentBrowseForSchool.school\_code* references *School.school\_code*  
*ParentBrowseForSchool.username* references *Parent.username*

*ParentCanRateTeacher*(pusername, tusername)

-----  
*ParentCanRateTeacher.pusername* references *Parent.username*  
*ParentCanRateTeacher.tusername* refernces *Teacher.username*

---

*Announcement*(date, title, description, type, username)

-----  
*Announcement.username references Administrator.username*

AnnouncementInformsStudentAndParent(date, title, SSN, username)

-----  
*AnnouncementInformsStudentAndParent.title references Announcement*  
*AnnouncementInformsStudentAndParent.SSN references Student.SSN*  
*AnnouncementInformsStudentAndParent.username references Parent.username*

---

Assignment(assignment\_number, tusername, SSN, course\_code, content,  
-----  
due\_date, posting\_date)

*Assignment.tusername references Teacher.username*  
*Assignment.SSN references Student.SSN*  
*Assignment.course\_code references Course.course\_code*

---

Report(report\_ID, teachers\_comment, issue\_date, username)

-----  
*Report.username references Parent.username*

ReportIssuedByTeacherAboutStudent(report\_ID, SSN, username)

-----  
*ReportIssuedByTeacherAboutStudent.report\_ID references Report.report\_ID*  
*ReportIssuedByTeacherAboutStudent.username references Teacher.username*  
*ReportIssuedByTeacherAboutStudent.SSN references Student.SSN*

Activity(name, school\_code, description, date, location, type, ausername, tusername)

-----  
*Activity.ausername references Administrator.username*  
*Activity.tusername references Teacher.username*  
*Activity.school\_code references School.school\_code*

Equipment(name, school\_code, equipment)

-----

Equipment.(name, school\_code) references Activity.(name, school\_code)

StudentAppliesForActivity(SSN, name, school\_code)

-----

*StudentAppliesForActivity.SSN references Student.SSN*

*StudentAppliesForActivity.(name, school\_code) references Activity*

---

Course (course\_code, description, tusername, grade, name)

*Course.tusername References Teacher*

CourseHasPrerequisiteCourse(course\_code1, course\_code2)

-----

*CourseHasPrerequisiteCourse.course\_code1 references Course.course\_code*

*CourseHasPrerequisiteCourse.course\_code2 references Course.course\_code*

Question (questionText, course\_code, SSN)

-----

*Question.course\_code references Course*

*Question.SSN references Student*

Answer (text, qc\_code, qSSN, tusername)

-----

*Answer.(qc\_code,qSSN) references Question.(course\_code, SSN)*

*Answer.tusername references Teacher.username*