

Schools(name, vision, mission, main_language, fees, city, street, block, zipcode, phone_number, email, type, max_grade, min_grade, general_info)

Levels(value)

Elementary_schools(school_name, level)

- - - - -

Elementary_school.school_name references Schools

Elementary_school.level references Levels

Constraint: Elementary_school is a predicate-defined relation : School.min_grade

Elementary_Supplies(school_name, supply)

- - - - -

Elementary_Supplies.school_name references Elementary_schools

Middle_schools(school_name, level)

- - - - -

Middle_school.school_name references Schools Middle_school.level references Levels

Constraint: Middle_school is a predicate-defined relation : School.min_grade AND School.max_grade

High_schools(school_name, level)

- - - - -

High_school.school_name references Schools

High_school.level references Levels

Constraint: High_school is a predicate-defined relation : School.max_grade

Parents(username, password, email, first_name, last_name, home_phone, city, street, block, zipcode)

Parent_mobile_numbers(username, mobile_number)

- - - - -

Parent_mobile_numbers.username references Parents

Employees(ssn ,username, password, first_name, middle_name, last_name, birthdate, age, email, gender, salary, city, street, block, zipcode, school_name)

- - - - -

Employee.school_name references Schools

Teachers(ssn, start_date, experience, seniority_level,

- - - - -

overall_rating, supervisor)

Teacher.ssn references Employee

Where experience = current date – start_date

Overall_rating= average value of all ratings in Parent_rates_Teacher

Parent_rates_Teacher(parent_username, teacher_ssn,

- - - - -

rate_value)

Parent_rates_Teacher.parent_username references Parents

Parent_rates_Teacher.teacher_ssn references Teachers

Admins(ssn)

- - -

Admin.username references Employees

Assignments(id, content , post_date, due_date)

Courses(code, name, description, grade, level)

- - - -

Courses.level references Levels

Children(ssn, name, birthdate, age, gender, parent_username)

- - - - -

Child.parent_username references Parents

Where age= current date – birthdate

Students(ssn, id, username, password, grade,

- - - -

school_name)

- - - - -

Student.ssn references Children

Student.school_name references Schools

Activities(id, description, location, type, date, teacher_ssn,

- - - - -

admin_ssn)

- - - - -

Activity.teacher_ssn references Teachers

Activity.admin_ssn references Admins

Announcements(id, title, description, type, date, admin_ssn)

Announcements.admin_ssn references Admins

Clubs(high_School, name, purpose)

Club.high_School references High_School

Equipment(activity_id, name, quantity, availability)

Equipment.activity_id references Activities

Reports (teacher_ssn title, comment, date, student_ssn,

parent_username)

Report.teacher_ssn references Teachers

Report.parent_username references Parents

Report.student_ssn references Students

Questions (student_ssn, course_code, title, content,

answer)

Question.student_ssn references Students

Question.course_code references Courses

Assignments_Solved_by_Students (student_ssn,

assignment_id, solution, mark)

Student_solves_Assignment.student_ssn references Students

Student_solves_Assignment.assignment_id references Assignments

Parents_review_Schools(school_name,parent_username,

review)

Parent_reviews_School.school_name references Schools Parent_re-
views_School.parent_username references Parents

Clubs_Joined_by_Students (student_ssn, school_name,

club_name)

School_joins_Club.(school_name, club_name) references Clubs

School_joins_Club.student_ssn references Students

Courses_Prerequisites_Courses(course_code,

prerequisite_code)

Courses_Prerequisites.course_code references Courses Courses_Prerequisites.prerequisite_code references Courses

Activities_Joined_by_Students (student_ssn, activity_id)

Student_Activity_Participation.student_ssn references Students Student_Activity_Participation.activity_id references Activities

Parents_Apply_for_Schools (school_name, child_ssn,

accepted, grade, parent_username)

parents_Apply_for_schools.school_name references Schools

parents_Apply_for_schools.child_ssn references Children

parents_Apply_for_schools.parent_username references Parents

Assignments_posted_by_Teachers(assignment_id,

course_code, teacher_ssn)

Assignments_posted.assignment_id references Assignments

Assignments_posted.course_code references Courses

Assignments_posted.teacher_ssn references Teachers

Assignments_Solved_by_Students(student_ssn,

assignment_id, solution, mark)

Assignmnets_Solved_by_Students.student_ssn references Students Assignm-

nets_Solved_by_Students.assignment_id references Assignments

Courses_taken_by_Students(course_code, student_ssn)

Courses_taken_by_Students.course_code references Courses

Courses_taken_by_Students.student_ssn references Students

Courses_taught_by_Teachers(course_code, teacher_ssn)

Courses_taught_by_Teachers.course_code references Courses

Courses_taught_by_Teachers.teacher_ssn references Teachers