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***PROJECT***

***SCHOOL MANAGEMENT SYSTEM***

School management system helps to manage student data. These systems store and **process** large amounts of personal and critical data.

This system store details information about students ,teacher , staff , parents , dependents of staff etc.

Student table includes :

* student\_id which is primary key, unique and not null and it would be a number (int(10)).
* Registration number is also a number(int(10)).It changes as the student class changes or it may remain same .It should also be unique and not null.
* Student first name and last name will be in characters (varchar(20)).It should not be null.
* Address is in text form and it should be not null.
* Phone number is a numeric attribute its type would be int(11).
* Email of student would be in characters form (varchar(20)).
* Date of birth is not null and its type would be a date.
* Age would be a derived attribute from date of birth and it would be update time to time.
* Class\_no would be number from 1 to 10. Its type would be int(1) and it is also not null.It is a foreign key refernces from class table.
* Section\_id would be a number its type will be int(11), it is a foreign key references table section.
* Class\_teacher\_id would be of class teacher who is head of his\her section.It is a foreign key references section table.

Teacher table includes:

* Teacher\_id is a primary key , unique and not null. It would be a number (int(10)).
* Teacher’s first name and last name would be in the form of characters varchar(20).It should be not null.
* Teacher qualification (varchar(20)).
* Salary would be in integer form int(10).
* Address is in text form and it should be not null.
* Phone number is a numeric attribute its type would be int(11).

In school there are different classes with different number of sections of every classes.

Class table contains :

* Class\_no which is primary key not null and unique.
* No\_of \_section will be a number (int(1)).

Section table contains:

* Section\_id is a primary key , unique and not null .
* Section name would be a character varchar(20).
* No\_of\_students (int(11)).

Class\_teacher\_id would ne in integers not null and unique

* Section\_id and class\_teacher\_id is a composite primary key.

Subjects table includes:

* There are many subject which are taught in school . every subject has its unique and not null
* Subject\_id primary key (unique and not null) .int(11).
* Subject\_name unique not null and it is in characters form varchar(20).
* Teacher\_id is a foreign key from table teachers containing detail of teachers.

Every class and section have different timetable.

Timetable contain the elements :

* Subject\_id is a foreign key from subjects table.its type is int(11).
* Teacher\_id is also a foreign key from teachers table .It tells us which subject is taught by whom. Its type is int(10).
* Time shows the duration of lectures.
* Room\_no is also important element in timetable , it cannot be null as place is required for lectures.it type is int(11).

In school every student pay dues. Fee structure contain the following elements:

* Chanllan\_form\_no its is a primary key it should be unique and not null .It type is integers (int(11)).
* Student\_id is a foreign key from students table. Its cannot be null and every student has unique student\_id.
* Total\_fee is an muneric value so its type will be int(11) and it cannot be null.
* Payable\_amount or first\_installment .Its type is also int(11).
* Second installment.Its type is int(11).

The most important part of school management system is there result or grading report.

For result of students we make table grades which contain:

* Subject\_id is foreign key from table subjects.
* Student\_id is foreign key from table students.
* Marks of students in int(11),
* Status of student pass or fail .Its type is varchar(10).

Data of parents is also important .parents information includes:

* Parent\_id which is primary key , unique and not null .One parent can have more than one child in same school.
* Firstname and lastname in varchar(20), it cannot be null.
* Address in text form .
* Phone number in int(11).
* Occupation in varchar(20).
* Email in varchar(20)
* Student\_id is foreign key from table students.

School should also know about students medical fitness which will be useful in any case of emergency.

Health table includes parameters like:

* Boold group in varchar(1) , it cannot be null.
* Any\_disease . deatail information of mediacals reports in text form.
* Student\_id is foreign key