**Database Documentation**

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**Report title**: School Mangment System

**Date:** 24/11/2023

# Purpose and Scope

# Purpose of the Database:

* ● School Management system will help You to manage daily school activities like Student registration, Subject Assign Teachers with Subject, Teachers management, Student Grads, Student Exam , leave management system.

# Scope:

● Helping the school stuff to organize the school mangment system .

# Database Design

# Logical Design:

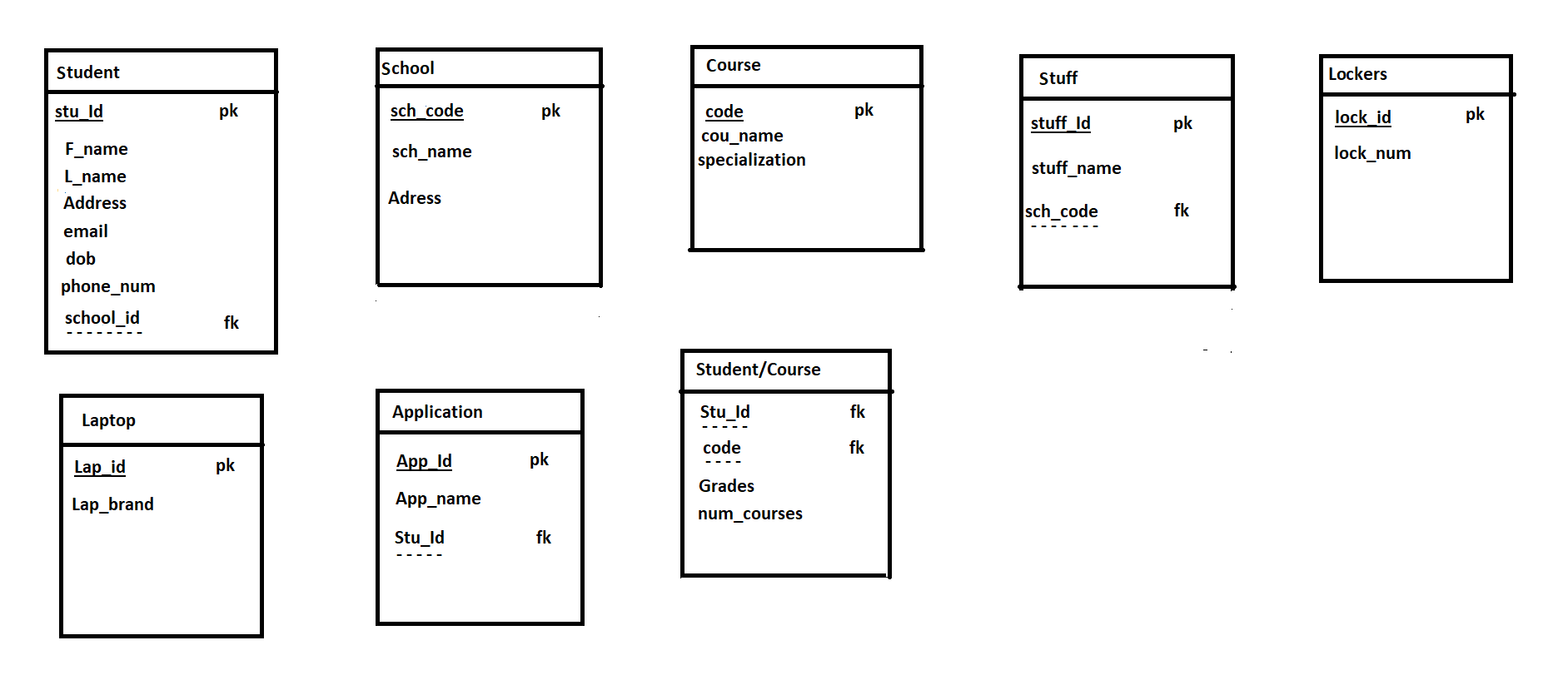
There are Relation between student and school,

There are Relation between student and Application,

There are Relation between stuff and school,

There are Relation between student and school.

# Physical Design:

● 

# Data Dictionary

|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Data Type | Allowed Values | Constraints |
| school\_Code | Int | 0 to 2,147,483,647 | Primary key |
| school\_name | Varchar | A to Z | Not null |
| school\_Address | Varchar | A to Z | Not null |
| Student\_id | Int | 0 to 2,147,483,647 | Primary key |
| Student\_Fname | Varchar | A to Z | Not null |
| Student\_Lname | Varchar | A to Z | Not null |
| student\_Address | Varchar | A to Z | Not null |
| student\_Phonenumber | Varchar | A to Z | Not null |
| Student\_DOB | Date | Year-month-day | Not Null |
| Student\_Email | Varchar | A to Z | Not null |
| school\_code | int | A to Z | Foreign Key |
| Appliction\_id | int | 0 to 2,147,483,647 | Primary Key |
| Appliction\_name | Varchar | A to Z | Not null |
| Course\_Code | Int | 0 to 2,147,483,647 | Primary key |
| Course\_name | varchar | A to Z | Not null |
| Course\_Specialization | Varchar | A to Z | Not null |
| laptop\_id | int | 0 to 2,147,483,647 | Primary key |
| laptop\_prand | varchar | A to Z | Not Null |
| Stuf\_id | int | 0 to 2,147,483,647 | Primary Key |
| Stuf\_name | Varchar | A to Z | Not null |
| school\_Code | int | 0 to 2,147,483,647 | Foreign key |
| lockers\_id | Int | 0 to 2,147,483,647 | Primary key |
| locer\_num | Int | 0 to 2,147,483,647 | Not Null |

# Database Schema:

* **Entities:**
* School
* Student
* Stuff
* Course
* Laptop
* Lockers
* Application

**Relationship:**

.The Student join **Zero** **or** **One** Application, and application join at least **One** student and at most **One**.

. The Student have **One** School, and School have at least **One** student and at most **Many**.

The Student have **One** Laptop, and Laptop have at least **One** student and at most **One**.

The Student have **One** Lockers, and Lockers have at least **One** student and at most **One**.

The Student Register **Zero or Many** Course, and Course Register at least **One** student and at most **Many**.

The School have **One** or **Many** Stuff, and Stuff have at least **One** School and at most **One**.

**Types of data:**

. Int

. Date

. Varchar

. char

**5- Rules and indexes established (Constraints):**

In table Studentt, the **Student\_id**  column constrains (Primary key).

In table Studentt, the **school\_code**  column constrains (Foreign key).

In table Schooll, the **school\_Code**  column constrains (Primary key).

In table Applictionn, the **Appliction\_id**  column constrains (Primary key).

In table Applictionn, the **Student\_id**  column constrains (Foreign key).

In table Course, the **Course\_Code**  column constrains (Primary key).

In table Laptop, the **laptop\_id**  column constrains (Primary key).

In table sStuf, the **Stuf\_id** column constrains (Primary key).

In table sStuf, the **school\_Code** column constrains (Foreign key).

In table LOKARS, the **lockers\_id**  column constrains (Primary key).

**6- Users and their permissions:**

User = ’Adam’

Password = ’123’

**7- Approved by:**

**Eng.Rawan**

**Adam Walled Zeyad maged Alaa mahomed Retaj Khaled Habiba Mohamed**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ERD | 20 Query | ERD on Paper | Edit on Maping to solve some errors | Mapping |
| Plan |  | Solve Errors |  |  |
| Document |  |  |  |  |
| Create Tables |  |  |  |  |
| Insert tables |  |  |  |  |
| 13 Query |  |  |  |  |