First Place Data Model and Constraints

LY!!!

**Role**

|  |  |  |
| --- | --- | --- |
| ID | INT | PK SYSTEM ASSIGNED |
| NAME | VARCHAR 12 | NN |

* List of values for NAME: Teacher, Case Worker, Admin

**Person**

|  |  |  |
| --- | --- | --- |
| ID | INT | PK SYSTEM ASSIGNED |
| LNAME | VARCHAR 40 | NN |
| FNAME | VARCHAR 40 | NN |
| EMAIL | VARCHAR 60 |  |
| PHONE\_AC | CHAR 3 |  |
| PHONE | CHAR 8 | 999-9999 |
| PASSWORD | VARCHAR 20 | NN |
| ROLE.ID | INT | FK->ROLE, NN |

**Class**

|  |  |  |
| --- | --- | --- |
| ID | INT | PK SYSTEM ASSIGNED |
| ROOM | VARCHAR 40 |  |
| GRADE\_LEVEL.ID | INT | FK->GRADE\_LEVEL, NN |
| TERM\_ID | INT | FK->TERM.ID |
| MAIN\_TEACHER | INT | FK->PERSON, NN |

 Authenticate that PERSON is a TEACHER role and is not assigned to any other class.

 Validate that same class is not entered twice for same academic year.

**Student**

|  |  |  |
| --- | --- | --- |
| ID | INT | PK SYSTEM ASSIGNED |
| LNAME | VARCHAR 40 | NN |
| FNAME | VARCHAR 40 | NN |
| EMAIL | VARCHAR 60 |  |
| PHONE\_AC | CHAR 3 |  |
| PHONE | CHAR 8 | 999-9999 |
| CURRENT\_CLASS | INT | FK->CLASS |
| CASE\_WORKER | INT | FK->PERSON, NN |

* Validate CASE\_WORKER has correct role

**Grade**

|  |  |  |
| --- | --- | --- |
| ID | INT | PK SYSTEM ASSIGNED |
| NAME | VARCHAR 12 | NN |

* List of values for NAME: Grade1 – Grade6

**KATHERINE!!!**

**Alert**

|  |  |  |
| --- | --- | --- |
| STUDENT | INT | PK , FK->STUDENT |
| CLASS | INT | PK, FK->CLASS |
| ALERT\_DATE | DATETIME | PK |
| ATT\_CODE\_ID | INT | FK->ATT\_CODE.ID |

**Attendance**

|  |  |  |
| --- | --- | --- |
| STUDENT | INT | PK , FK->STUDENT |
| CLASS | INT | PK, FK->CLASS |
| ATTENDANCE\_DATE | DATETIME | PK |
| ATTENDANCE\_STATUE | INT | FK->ATT\_CODES, NN |
| COMMENT | VARCHAR 800 |  |

 Only teacher of this class or admin can create a new attendance record

 New attendance must be on valid class day – between start and end of current term, not weekend, not a holiday, not in the future, can be in the pass

 Any attendance of type UNEXCUSED generates an alert to the alert table

 Any update of an existing record creates a log entry in the LOG table

**Att\_Code**

|  |  |  |
| --- | --- | --- |
| ID | INT | PK SYSTEM ASSIGNED |
| NAME | VARCHAR 40 | NN |
| SHORT\_NAME | VARCHAR 2 | NN |

 List of values for NAME: Unexcused Absence, Unexcused Tardy, Excused Absence, Excused Tardy, Present

 List of values for SHORT\_NAME: UA, UE, EA, ET, P

**ANTHONY!!!**

**Term**

|  |  |  |
| --- | --- | --- |
| ID | INT | PK SYSTEM ASSIGNED |
| ACAD\_YEAR | VARCHAR 40 | NN |
| START\_DATE | DATE | NN |
| END\_DATE | DATE | NN |

END\_DATE must be later than START\_DATE

**Log**

|  |  |  |
| --- | --- | --- |
| STUDENT | INT | PK , FK->STUDENT |
| CLASS | INT | PK, FK->CLASS |
| LOG\_DATE | DATETIME | PK |
| OLD\_STATUS | VARCHAR 40 | NN |
| NEW\_STATUS | VARCHAR 40 | NN |
| ID\_OF\_UPDATER | INT | FK->PERSON, NN |

**Holiday**

|  |  |  |
| --- | --- | --- |
| ID | INT | PK SYSTEM ASSIGNED |
| NAME | VARCHAR 40 | NN |
| H\_DATE | DATE | NN |

**Reports**

View attendance by:

Date Range

Class Range

Academic Year

Student

View Alerts:

Date range, Student, Case Worker

Log:

View by date range

**Privileges**

**Admin**

 Provide ability to Sel/Ins/Upd/Del (SIUD)all tables except Alert and Log

 (SD) on Alert and Log

 Ability to assign Teachers to Class, Students to Class, Case Workers to Students (SIUD)

 Ability to run all reports

**Teacher**

 (SIU) on attendance for their class

 (S) on students for their class

 (S) on attendance reports for their class – when a teacher queries attendance it should default to attendance for their class for the current day

**Case Worker**

* (S) on Alerts for them