**DB Design for NEW COE**

**DB Design for Degree:**

1. Degree Id : Auto Increment, Primary Key, Not Null
2. Degree Code : BE (Varchar 25)
3. Degree Name : Bachelor of Engineering (Varchar 255)
4. Graduation : Varchar(45)
5. Created At : Time of creation (datetime)
6. Created By : Admin / Users (Foreign Key with users table)
7. Updated At : Time of Update (datetime)
8. Updated By : Admin / User (Foreign Key with users table)

**Course DB Design :**

1. Course Id : Auto Increment, Primary Key, Not Null
2. Course Code : U10 (Varchar 25)
3. Course Name : BECSE (Varchar 45)
4. Created Time : Datetime
5. Updated Time : Datetime
6. Created By : Admin / User (Foreign Key with users table)
7. Updated By : Admin / User (Foreign Key with users table)

**Batch Db Design**

1. Batch Id : Auto ,Primary, Not Null
2. Batch Course Id : Foreign Key from Courses
3. Batch Name : Varchar (10)
4. Created : Datetime
5. Updated : Datetime
6. Created By : Admin / User (Foreign Key with users table)
7. Updated By : Admin / User (Foreign Key with users table)

**Mapping Table for Batch & Course & Degree**

1. Mapping id : Auto, Primary, Not null
2. Degree Id : Foreign Key from Degree
3. Course Id : Foreign Key from Courses
4. Batch Id : Foreign Key from Batches
5. Section Name : Varchar(10)
6. Status : Active / Inactive INT OR VARCHAR
7. Created : Datetime
8. Updated : Datetime
9. Created By : Admin / User (Foreign Key with users table)
10. Updated By : Admin / User (Foreign Key with users table)
11. Group Unique of (Degree id,Course Id,Batch Id,Section Name)

**User Table**

1. Id : INT, PRIMARY,AUTO INCREMENT
2. Username : Varchar NOTNULL
3. Auth\_key : Varchar NOTNULL
4. Password\_hash : Varchar Not Null
5. Password\_reset\_token : Varchar Not Null, Default Null
6. Email : Varchar Not Null
7. Status : Small Int, Not NULL, Default (10)
8. Created At : DATETIME
9. Update At : DATETIME

**Authentication Rule**

1. Name : Varchar, Primary Key
2. Data : BLOB
3. Created At : DATETIME
4. Updated At : DATETIME

**Authentication Item**

1. Name : Varchar, Primary Key
2. Type : Smallint
3. Descrition : Text (Default Null)
4. Rule Name : Varchar (Foreign Key from Authentication Rule name) Default Null
5. Data : BLOB (Default Null)
6. Created At : DATETIME
7. Updated At : DATETIME

**Authentication Item Child**

1. Parent : Primary Key, Varchar (Foreign Key from Authentication Item)
2. Child : Primary Key, Varchar (Foreign Key from Authentication Item)

**Authentication Assignment**

1. Item Name : Varchar, Primary Key (Foreign Key from Authentication Item)
2. User Id : Varchar, Primary Key
3. Created At : DATETIME

**Plug & Play DB Design (Configuration)**

1. Id : INT, Primary Key,Not null, Auto Increment
2. Name : Varchar
3. Value : Varchar
4. Created At : DATETIME
5. Created By : Admin / User (Foreign Key with users table)
6. Update at : DATETIME
7. Updated By : Admin / User (Foreign Key with users table)

**Student**

coe\_student\_id

name

register\_number

gender

dob

religion

nationality

caste

sub\_caste

bloodgroup

email\_id

admission\_year

admission\_date

mobile\_no

status

**Address**

coe\_address\_id

stu\_address\_id

current\_address

current\_city

current\_state

current\_country

current\_pincode

permanant\_address

permanant\_city

permanant\_state

permanant\_country

permanant\_pincode

**Guardian**

coe\_guardian\_id

stu\_guardian\_id

guardian\_name

guardian\_relation

guardian\_mobile\_no

guardian\_occupation

guardian\_email

guardian\_address

**Student Mapping**

coe\_stu\_details\_mapping\_id

student\_id

course\_batch\_mapping\_id

address\_id

section\_name

status\_category\_type\_id

**Student details mapping**

I go by the assumption that all the mapping fields are 1-1 if sai sees any other details mapping that is not 1-1, then have another relevant mapping table created

1. Student id

2. Batch\_course\_mapping\_id

3. student\_status\_id (Regular/Re-Join/General/Discontinued)

4. section

5. address\_id

6. guardian id

Student Guardian