College Management system

The aim of the project is to maintain all the day to day operations as well as manage the data of the students, faculties , about courses, subjects, marks management . Using this system admin can register new student, courses, new faculty, assign faculty with subjects, etc .Future aim is to mark attendance of each student in a specific manner , add fees , add assignments and accounts details using a practical approach.

Roles:

ADMIN:

Admin will going to have the access of each and every table and can perform crud operations in it . They can add, remove, any course, student, teachers and faculty. Admin can assign the particular teacher with subjects which they will going to teach. Check mark sheet report of the whole course, section etc.

TEACHER:

Teachers will going to have access to only the subject which they have assigned. They can only enter marks of the subject which have assigned to them . They can only view the mark sheet of the students which have the

subjects that the particular teacher is teaching to them. They can't remove , add, or assign any thing but can edit their own details like username,password, etc.

STUDENT:

Students will going to have the least access, they are similar to read-only mode except their own basic informations. They can view their marks of all subjects but can't have access to the marks of other subjects. They can view their subjects, teachers assigned to them, their personal details and they can edit/update their basic personal details like password, etc

Tables:

USERS_LOGIN:

Users_login

user_id (varchar)(fk)
first_name (varchar)
last_name (varchar)
username (varchar)
password (varchar)
role (varchar)
created_at (date)
modify_at (date)

Users_login table will going to have the details which will

help the project to perform login authentication , it will have user_id which is a foreign key and will be unique , depending upon the role of the user which can be admin, teacher, student. Username will be unique and password that will going to be store in users_login table will be in hashed form so no one will have the access to the particular account.

COURSES:

Courses
course_code (varchar)(pk)
course_name (varchar)
total_sem (int)
created_at (date)
modify_at (date)

Courses table will going to have course_code as a primary key along with course_name which can be like " bca / bba / btech etc " with total_sem which is the total duration of the course like bba/bca will have 6 semester and btech with 8 semesters.

SUBJECTS:

subjects

subjects
sub_code (varchar)(pk)
course_code (varchar)(fk)
semester (int)
sub_name (varchar)
theory_marks (int)
practical_marks (int)
created_at (date)
modify_at (date)

Subjects table will have the data of subjects like their name, marks splits etc, it will going to be link with course table for course detail, semester will be manually mark. It is one of the important table for this project as students marks, faculty assign will be depending on sub_code.

STUDENTS_DATA:

Students_data

std_id (varchar)(pk)
First_name (varchar)
Last_name (varchar)
course_code (varchar)(fk)
semester (int)
roll_number (int)
std_email (varchar)
std_phone (int)
dob (date)
gender (varchar)
add_state (varchar)
add_place (varchar)
father_name (varchar)
father_occ (varchar)
mother_name (varchar)
mother_occ (varchar)
profile_photo (varchar)
created_at (date)
modify_at (date)

Students_data will going to have the details of students like their name, course, semester and their parents like their names and occupation. This table will be dependent on course_code , and std_id will be use in other tables like for assigning marks , student documents, view mark sheets etc. profile_photo will be store in the form of the address where that photo will be stored in the project.

STUDENTS_DOCUMENTS:

Students_documents

std_id (varchar)(fk)
adhar_number (int)
birth_certificate (varchar)
created_at (date)
modify_at (date)

Students_documents will have the details of the official documents of a particular student assigned to its std_id.

FACULTY:

Faculty

fac_id (varchar)(pk)
First_name (varchar)
Last_name (varchar)
fac_email (varchar)
fac_phone (int)
dob (date)
gender (varchar)
fac_state (varchar)
fac_place (varchar)
profile_photo (varchar)
created_at (date)
modify_at (date)

Faculty table will going to have fac_id as primary key with basic details of staff like their name, email, phone numbers, date of birth etc. profile_photo will be store in the form of the address where that photo will be stored in the project.

STAFF_DOCUMENTS:

Staff_documents
fac_id (varchar)(fk)
adhar_number (int)
pan_number (varchar)
birth_certificate (varchar)
created_at (date)
modify_at (date)

Staff_Documents will have the details of the official documents of a particular student assigned to its std_id.

ASSIGN_SUBJECT:

assign_subject
fac_id (varchar)(fk)
sub_code (varchar)(fk)
created_at (date)
modify_at (date)

Assign_subject will be having data regarding the particular faculty and the subjects assigned to that teacher.

ENTER_MARKS:

enter_marks

- course_code (varchar)(fk)
- semester (int)
- sub_code (varchar)(fk)
- std_id (varchar)(fk)
- theory_makrs (int)
- practical_marks (int)
- created_at (date)
- modify_at (date)

Enter_marks table will going to store the data of the marks of a particular subject assigned to a particular student. It will be dependent on course_code , sub_code, std_id and marks regarding the same.

SCHEMA

Users_login

- user_id (varchar)(fk)
- first_name (varchar)
- last_name (varchar)
- username (varchar)
- password (varchar)
- role (varchar)
- created_at (date)
- modify_at (date)

enter_marks

- course_code (varchar)(fk)
- semester (int)
- sub_code (varchar)(fk)
- std_id (varchar)(fk)
- theory_makrs (int)
- practical_marks (int)
- created_at (date)
- modify_at (date)

subjects

- sub_code (varchar)(pk)
- course_code (varchar)(fk)
- semester (int)
- sub_name (varchar)
- theory_marks (int)
- practical_marks (int)
- created_at (date)
- modify_at (date)

assign_subject

- fac_id (varchar)(fk)
- sub_code (varchar)(fk)
- created_at (date)
- modify_at (date)

Faculty

- fac_id (varchar)(pk)
- First_name (varchar)
- Last_name (varchar)
- fac_email (varchar)
- fac_phone (int)
- dob (date)
- gender (varchar)
- fac_state (varchar)
- fac_place (varchar)
- profile_photo (varchar)
- created_at (date)
- modify_at (date)

Students_data

- std_id (varchar)(pk)
- First_name (varchar)
- Last_name (varchar)
- course_code (varchar)(fk)
- semester (int)
- roll_number (int)
- std_email (varchar)
- std_phone (int)
- dob (date)
- gender (varchar)
- add_state (varchar)
- add_place (varchar)
- father_name (varchar)
- father_occ (varchar)
- mother_name (varchar)
- mother_occ (varchar)
- profile_photo (varchar)
- created_at (date)
- modify_at (date)

Courses

- course_code (varchar)(pk)
- course_name (varchar)
- total_sem (int)
- created_at (date)
- modify_at (date)

Students_documents

- std_id (varchar)(fk)
- adhar_number (int)
- birth_certificate (varchar)
- created_at (date)
- modify_at (date)

Staff_documents

- fac_id (varchar)(fk)
- adhar_number (int)
- pan_number (varchar)
- birth_certificate (varchar)
- created_at (date)
- modify_at (date)