Face Recognition Attendance System ER Diagram

The **ER Diagram for Face Recognition Attendance** reveals the relationships between the system's entity sets in a database. This displays the logical structure of databases. It is done by identifying entities, their properties, and the interactions between them. The Face Recognition Attendance System database design is sketched out using ER diagrams. This database sketch for a face recognition system is made up of **entities, their attributes, and their relationships**.

Definition of Face Recognition Attendance System ER Diagram

The Face Recognition Attendance ER Diagram is referred to as the software database design. This ER Diagram is the graphical depiction of relationships between all the entities involved in the system. Its major components are Entities, Attributes, and Relationships. The ER Diagram is used to build and troubleshoot the System's relational database. It works best with DFD (Data Flow Diagram), which is responsible for data movement.

Importance of ER Diagram for Face Recognition Attendance System

The importance of ER diagram for a face recognition attendance system is to help in modeling its data storage or database. It is the basis of the project's database foundation for construction. This entity-relationship diagram (ERD) also aids in defining the data types to be stored such as their attributes and characteristics. In addition to that, the ER Diagram also describes how an entity interacts with other entities. All other real-world projects are presented with ER Diagrams (database designs).

ER Diagram for Face Recognition Attendance System with Tables

These tables below provide the complete database table details such as **Field Name**, **Descriptions**, **data types**, and **character lengths**.

Table Name: Student

Field	Description	Type	Length
stud_ID (PK)	Student ID	Int	11
name	Student Name	Varchar	255
age	Student Age	Int	11
gender	Student Gender	Varchar	255
address	Student Address	Text	
garde_ID (FK)	Grade ID	Int	11
section	Section	Varchar	255

Table Name: Face Records

Field	Description	Type	Length
face_ID (PK)	Face ID	Int	11
stud_ID (FK)	Student ID	Int	11

teacher_ID (FK)	Teacher ID	Int	11
details	Details	Text	

Table Name: Attendance Status

Field	Description	Type	Length
stat_ID (PK)	Status ID	Int	11
stat_name	Status Name	Varchar	255
description	Description	Text	
date	Date	Date	

Table Name: Grade Level

Field	Description	Type	Length
grade_ID (PK)	Grade ID	Int	11
grade_level	Grade Level	Varchar	255
ac_year	Academic Year	Varchar	255
subject_ID (FK)	Subject ID	Int	11

Table Name: Subject

Field	Description	Type	Length
subject_ID (PK)	Subject ID	Int	11
name	Name	Varchar	255
description	Description	Text	
schedule	Schedule	Varchar	255

Table Name: Attendance Records

Field	Description	Type	Length
record_ID (PK)	Record ID	Int	11
record_date	Record Date	Date	
subject_ID (FK)	Subject ID	Int	11
face_ID (FK)	Face ID	Int	11
stat_ID (FK)	Status Id	Int	11

Table Name: User Accounts

Field	Description	Type	Length
user_ID	User ID	Int	11
user_type	User Type	Varchar	255
username	Username	Varchar	255
password	Password	Varchar	255

Table Name: Teacher

Field	Descri[ption	Type	Length
teacher_ID (PK)	Teacher ID	Int	11

user_ID (FK)	User ID	Int	11
name	User Name	Varchar	255
age	Age	Varchar	255
gender	Gender	Varchar	255
address	Address	Text	
subject_ID (FK)	Subject ID	Int	11
record_ID (FK)	Record ID	Int	11

Table Name: Teacher

Face Recognition Attendance System ER Diagram

ER Diagram of Face Recognition Attendance System shows the system entity and the supposed functions in each relationship. It is the supposed database design of the project. This conveys the data that would be present in the registration system, its characteristics, and its connection with other data (entity).
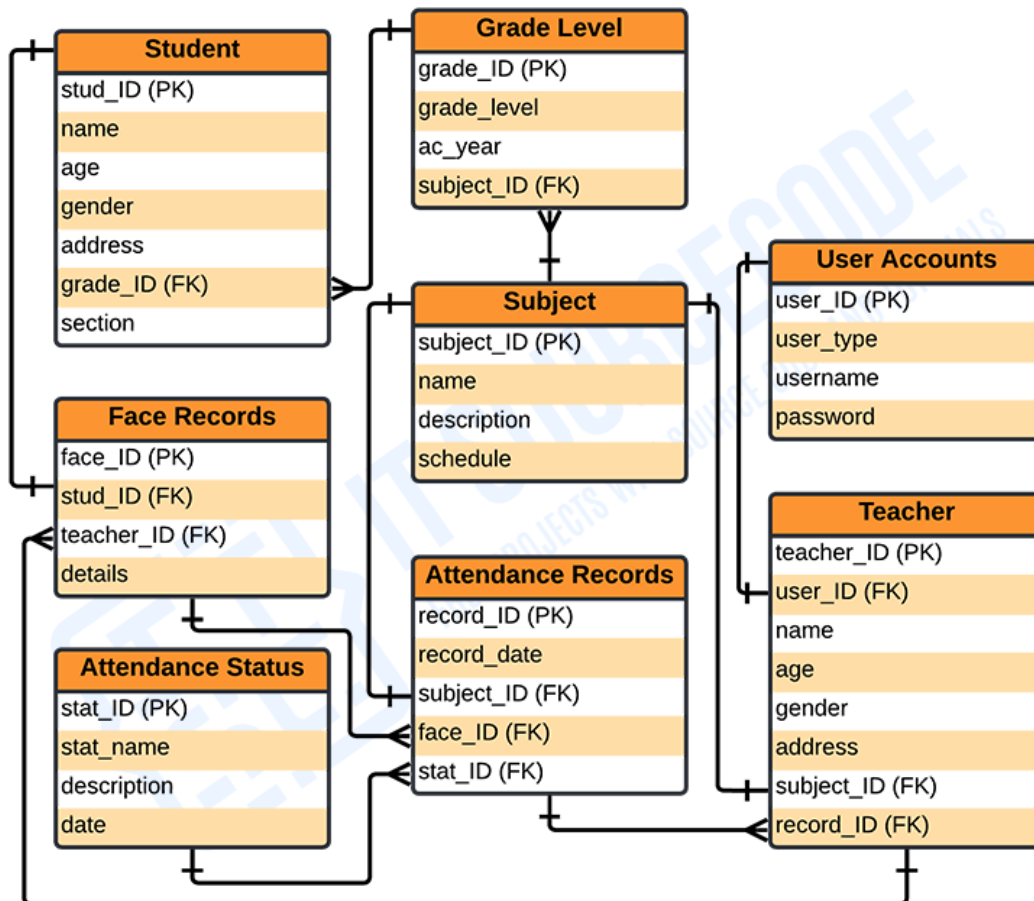
ER Diagram for Face Recognition Attendance System

This diagram presents the entities' relational model for the face recognition attendance system. It is used to enlighten you on how the back end of the database of the project works. The

tables are made to meet the required specification of the system and provide much more specific details of each entity within the system.