

Database Design

create table Assignment(assignmentId varchar(10), classGroupId varchar(10), classroomId varchar(10), courseId varchar(10), foreign key (classGroupId, classroomId, courseId) references ClassroomGroups(classGroupId, classroomId, courseId), primary key(classroomId, courseId, classGroupId, assignmentId), googleFormLink varchar(255), maximumGrade Float);

create table Attendance(studentId varchar(10), classroomId varchar(10), attendanceDate date, isParentsNotified Boolean, isPresent boolean, primary key(classroomId, studentId, attendanceDate), foreign key(classroomId) references Classrooms(classroomId), foreign key(studentId) references Users(userId));

create table ClassGroupRecordings(recordingId varchar(10), classGroupId varchar(10), classroomId varchar(10), courseId varchar(10), foreign key (classGroupId, classroomId, courseId) references ClassroomGroups (classGroupId, classroomId, courseId), classDate Date, recordingLink varchar(255), primary key (recordingId, classGroupId, classroomId, courseId));

create table ClassroomGroups(classGroupId varchar(10), classroomId varchar(10), courseId varchar(10), zoomLink varchar(255), classStartTimings varchar(50), classDuration float, primary key(classGroupId, classroomId, courseId), foreign key(classroomId) references Classrooms(classroomId), foreign key(courseId) references Courses(courseId));

create table ClassroomUsers(userJoinedAt Date, userId varchar(10), classGroupId varchar(10), classroomId varchar(10), courseId varchar(10), primary key(classroomId, courseId, classGroupId, userId), foreign key (classGroupId, classroomId, courseId) references ClassroomGroups (classGroupId, classroomId, courseId), foreign key (userId) references Users(userId));

create table Classrooms(classroomId varchar(10) primary key, className varchar(20) not null, createdAt date);

create table Courses(courseId varchar(10) primary key, subjectName varchar(10) not null, rating float);

create table Grades (assignmentId varchar(10), userId varchar(10), classGroupId varchar(10), classroomId varchar(10), courseId varchar(10), grade float, remarks varchar(255), sentimentScore INT, isNotificationSent boolean, primary key (userId, classroomId, courseId, classGroupId, assignmentId), foreign key (classGroupId, classroomId, courseId, assignmentId) references Assignment(classGroupId, classroomId, courseId, assignmentId), foreign key (userId) references Users(userId));

create table Users(userId varchar(10) primary key, firstName varchar(255), lastName varchar(255), email varchar(255) not null, password varchar(255) not null, userType Integer, address varchar(255), dob date, occupation varchar(255), studentIds varchar(100));