

C-Lens Veri Tabanı Taslağı

Öğrenci Bilgileri

```
CREATE TABLE Students (  
    StudentID INT IDENTITY(1,1) PRIMARY KEY,      -- Her öğrenciye özel ID  
    FirstName NVARCHAR(50) NOT NULL,              -- Ad  
    LastName NVARCHAR(50) NOT NULL,               -- Soyad  
    StudentNumber NVARCHAR(20) UNIQUE NOT NULL,    -- Okul numarası  
    Department NVARCHAR(100),                     -- Bölüm  
    ClassLevel NVARCHAR(10),                      -- Sınıf (örnek: 1, 2, 3, 4)  
    FaceVector VARBINARY(MAX),                    -- Yüz tanıma vektörü (veya encoding)  
    RegistrationDate DATETIME DEFAULT GETDATE()   -- Sisteme kayıt tarihi  
);
```

Eğitmen / Yönetici Bilgileri

```
CREATE TABLE Instructors (  
    InstructorID INT IDENTITY(1,1) PRIMARY KEY,  
    FirstName NVARCHAR(50) NOT NULL,  
    LastName NVARCHAR(50) NOT NULL,  
    Username NVARCHAR(50) UNIQUE NOT NULL,  
    PasswordHash NVARCHAR(255) NOT NULL,          -- Şifrelerin hashlenmiş hali  
    Email NVARCHAR(100) UNIQUE,  
    Role NVARCHAR(20) CHECK (Role IN ('Admin', 'Instructor')) DEFAULT 'Instructor',  
    CreatedAt DATETIME DEFAULT GETDATE()  
);
```

Ders Bilgileri

```
CREATE TABLE Courses (  
    CourseID INT IDENTITY(1,1) PRIMARY KEY,  
    CourseName NVARCHAR(100) NOT NULL,  
    CourseCode NVARCHAR(20) UNIQUE NOT NULL,  
    InstructorID INT NOT NULL,  
    DayOfWeek NVARCHAR(15),          -- Pazartesi, Salı vs.  
    StartTime TIME,  
    EndTime TIME,  
    FOREIGN KEY (InstructorID) REFERENCES Instructors(InstructorID)  
        ON DELETE CASCADE  
        ON UPDATE CASCADE  
);
```

Öğrenci-Ders ilişkisi

```
CREATE TABLE Enrollments (  
    EnrollmentID INT IDENTITY(1,1) PRIMARY KEY,  
    StudentID INT NOT NULL,  
    CourseID INT NOT NULL,  
    EnrollmentDate DATETIME DEFAULT GETDATE(),  
    FOREIGN KEY (StudentID) REFERENCES Students(StudentID)  
        ON DELETE CASCADE  
        ON UPDATE CASCADE,  
    FOREIGN KEY (CourseID) REFERENCES Courses(CourseID)  
        ON DELETE CASCADE  
        ON UPDATE CASCADE,  
    CONSTRAINT UQ_Enrollment UNIQUE (StudentID, CourseID)
```

);

Yoklama Kayıtları

```
CREATE TABLE Attendances (  
    AttendanceID INT IDENTITY(1,1) PRIMARY KEY,  
    StudentID INT NOT NULL,  
    CourseID INT NOT NULL,  
    AttendanceDate DATE NOT NULL,  
    AttendanceTime TIME NOT NULL,  
    Status NVARCHAR(20) CHECK (Status IN ('Present', 'Absent', 'Late')) DEFAULT 'Present',  
    RecognitionScore FLOAT CHECK (RecognitionScore BETWEEN 0 AND 1), -- Model güven skoru  
    FOREIGN KEY (StudentID) REFERENCES Students(StudentID)  
        ON DELETE CASCADE  
        ON UPDATE CASCADE,  
    FOREIGN KEY (CourseID) REFERENCES Courses(CourseID)  
        ON DELETE CASCADE  
        ON UPDATE CASCADE  
);
```