**Database Name**: attendance\_system

**1. Users Table**

Stores information about all users (students, teachers, and admins).

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** |
| user\_id | INT | PRIMARY KEY, AUTO\_INCREMENT |
| name | VARCHAR(100) | NOT NULL |
| email | VARCHAR(100) | UNIQUE, NOT NULL |
| password | VARCHAR(255) | NOT NULL |
| role | ENUM('student', 'teacher', 'admin') | NOT NULL |

**2. Courses Table**

Stores information about courses.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** |
| course\_id | INT | PRIMARY KEY, AUTO\_INCREMENT |
| course\_name | VARCHAR(100) | NOT NULL |
| teacher\_id | INT | FOREIGN KEY (Users.user\_id) |

**3. Students Table**

Stores details of students and their associated courses.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** |
| student\_id | INT | PRIMARY KEY, AUTO\_INCREMENT |
| user\_id | INT | FOREIGN KEY (Users.user\_id) |
| course\_id | INT | FOREIGN KEY (Courses.course\_id) |

**4. Attendance Table**

Stores attendance records.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** |
| attendance\_id | INT | PRIMARY KEY, AUTO\_INCREMENT |
| student\_id | INT | FOREIGN KEY (Students.student\_id) |
| course\_id | INT | FOREIGN KEY (Courses.course\_id) |
| date | DATE | NOT NULL |
| status | ENUM('present', 'absent', 'late') | NOT NULL |