**User Table**

|  |  |  |
| --- | --- | --- |
| **Column** | **Data Type** | **Description** |
| id | INT | Primary key (auto-increment) |
| username | VARCHAR(150) | Unique username for the user |
| password | VARCHAR(128) | Password hash for the user |
| email | VARCHAR(254) | User's email address |
| first\_name | VARCHAR(150) | User's first name |
| last\_name | VARCHAR(150) | User's last name |
| role\_id | INT | Foreign key to the Role |
| phone\_number | VARCHAR(15) | User's phone number |
| date\_joined | DATETIME | The date and time the user joined |
| status | VARCHAR(15) | Current status of the user |

**Role Table**

|  |  |  |
| --- | --- | --- |
| **Column** | **Data Type** | **Description** |
| id | INT | Primary key (auto-increment) |
| role\_name | VARCHAR(150) | Unique role name |
| role\_description | TEXT | Description of the Role |

**LastLogin Table**

|  |  |  |
| --- | --- | --- |
| **Column** | **Data Type** | **Description** |
| id | INT | Primary key (auto-increment) |
| user\_id | INT | Foreign key to the user |
| device\_id | VARCHAR(254) | Id of device used for signing in |
| login\_time | DATETIME | The date and time the user logged in |

**Community Table**

|  |  |  |
| --- | --- | --- |
| **Column** | **Data Type** | **Description** |
| id | INT | Primary key (auto-increment) |
| name | VARCHAR(255) | Name of the community |
| description | TEXT | Description of the community |
| created\_at | DATETIME | The date and time the community was created |
| created\_by\_id | INT | Foreign key to the user who created the community |
| admin\_id | INT | Foreign key to the community admin |

**UserCommunity Table**

|  |  |  |
| --- | --- | --- |
| **Column** | **Data Type** | **Description** |
| id | INT | Primary key (auto-increment) |
| user\_id | INT | Foreign key to the user |
| community\_id | INT | Foreign key to the community |
| joined\_at | DATETIME | The date and time the user joined the community |

**Event Table**

|  |  |  |
| --- | --- | --- |
| **Column** | **Data Type** | **Description** |
| id | INT | Primary key (auto-increment) |
| name | VARCHAR(255) | Name of the event |
| description | TEXT | Description of the event |
| category\_id | INT | Foreign key to the event category |
| date | DATETIME | Date and time of the event |
| address | VARCHAR(255) | Address of the event location |
| location | VARCHAR(255) | Location of the event |
| community\_id | INT | Foreign key to the community hosting the event |
| organizer\_id | INT | Foreign key to the user organizing the event |
| created\_at | DATETIME | The date and time the event was created |
| updated\_at | DATETIME | The date and time the event was last updated |
| status | VARCHAR(15) | Current status of the event |

**EventCategory Table**

|  |  |  |
| --- | --- | --- |
| **Column** | **Data Type** | **Description** |
| id | INT | Primary key (auto-increment) |
| name | VARCHAR(255) | Name of the event category |
| description | TEXT | Description of the event category |

**Task Table**

|  |  |  |
| --- | --- | --- |
| **Column** | **Data Type** | **Description** |
| id | INT | Primary key (auto-increment) |
| name | VARCHAR(255) | Name of the task |
| description | TEXT | Description of the task |
| category\_id | INT | Foreign key to the event category |

**EventRegistration Table**

|  |  |  |
| --- | --- | --- |
| **Column** | **Data Type** | **Description** |
| id | INT | Primary key (auto-increment) |
| user\_id | INT | Foreign key to the user |
| event\_id | INT | Foreign key to the event |
| registration\_date | DATETIME | The date and time the user registered for the event |
| status | VARCHAR(15) | Current status of the registration |

**Payment Table**

|  |  |  |
| --- | --- | --- |
| **Column** | **Data Type** | **Description** |
| id | INT | Primary key (auto-increment) |
| user\_id | INT | Foreign key to the user |
| event\_id | INT | Foreign key to the event |
| amount | DECIMAL(10,2) | Amount paid |
| method | VARCHAR(255) | Payment method |
| payment\_date | DATETIME | The date and time the payment was made |

**Notification Table**

|  |  |  |
| --- | --- | --- |
| **Column** | **Data Type** | **Description** |
| id | INT | Primary key (auto-increment) |
| user\_id | INT | Foreign key to the user |
| message | TEXT | Notification message |
| created\_at | DATETIME | The date and time the notification was created |
| read | BOOLEAN | Whether the notification has been read |

**Volunteer Table**

|  |  |  |
| --- | --- | --- |
| **Column** | **Data Type** | **Description** |
| id | INT | Primary key (auto-increment) |
| user\_id | INT | Foreign key to the user |
| event\_id | INT | Foreign key to the event |
| task\_id | INT | Foreign key to the Task |
| assigned\_at | DATETIME | The date and time the volunteer was assigned |

**Analytics Table**

|  |  |  |
| --- | --- | --- |
| **Column** | **Data Type** | **Description** |
| id | INT | Primary key (auto-increment) |
| event\_id | INT | Foreign key to the event |
| metrics\_id | INT | Foreign key to the metric type |
| value | INT | Metric value |
| recorded\_at | DATETIME | The date and time the metric was recorded |

**Metrics Table**

|  |  |  |
| --- | --- | --- |
| **Column** | **Data Type** | **Description** |
| id | INT | Primary key (auto-increment) |
| name | VARCHAR(255) | Name of the metric |
| description | TEXT | Description of the metric |

**AuditLog Table**

|  |  |  |
| --- | --- | --- |
| **Column** | **Data Type** | **Description** |
| id | INT | Primary key (auto-increment) |
| table\_name | VARCHAR(255) | Name of the table where the change occurred |
| record\_id | INT | ID of the record that was changed |
| user\_id | INT | Foreign key to the user who made the change |
| action | VARCHAR(50) | Type of action (INSERT, UPDATE, DELETE) |
| timestamp | DATETIME | The date and time the action occurred |
| old\_value | TEXT | Previous value before the change |
| new\_value | TEXT | New value after the change |

Django Apps

**Users App**

Handles user authentication, profiles, roles, and audit logs.

* **User Table**
* **Role Table**
* **LastLogin Table**
* **AuditLog Table**

**Communities App**

Manages communities, their creation, and member associations.

* **Community Table**
* **UserCommunity Table**

**Events App**

Handles event creation, management, registrations, payments, notifications, and analytics.

* **Event Table**
* **EventCategory Table**
* **EventRegistration Table**
* **Payment Table**
* **Notification Table**
* **Volunteer Table**
* **Analytics Table**
* **Metrics Table**

**Tasks App**

Manages tasks related to events and volunteers.

* **Task Table**

**Users App**

|  |  |
| --- | --- |
| **Table Name** | **Description** |
| User | Stores user details and credentials. |
| Role | Defines different roles within the system. |
| LastLogin | Records login details for users. |
| AuditLog | Logs changes to records across the system. |

**Communities App**

|  |  |
| --- | --- |
| **Table Name** | **Description** |
| Community | Stores community details. |
| UserCommunity | Manages the association between users and communities. |

**Events App**

|  |  |
| --- | --- |
| **Table Name** | **Description** |
| Event | Stores event details. |
| EventCategory | Defines categories for events. |
| EventRegistration | Manages event registrations by users. |
| Payment | Records payments made for events. |
| Notification | Stores notifications sent to users. |
| Volunteer | Manages volunteers assigned to events and tasks. |
| Analytics | Records analytics data for events. |
| Metrics | Defines metrics used for event analysis. |

**Tasks App**

|  |  |
| --- | --- |
| **Table Name** | **Description** |
| Task | Stores task details related to events. |