| **Field Name** | **Data Type** | **Description** | **Constraints** |
| --- | --- | --- | --- |
| user\_id | BIGINT | Unique identifier for user | PK, AUTO\_INCREMENT |
| username | VARCHAR(50) | Username of the user | UNIQUE, NOT NULL |
| email | VARCHAR(100) | Email address | UNIQUE, NOT NULL |
| password | VARCHAR(255) | Hashed password | NOT NULL |
| role | ENUM | 'ADMIN', 'SELLER', 'BUYER' | DEFAULT 'BUYER' |
| is\_verified | int(11) | Verified or Not Verified (0,1) | NOT NULL |
| created\_at | DATETIME | Account creation timestamp | DEFAULT CURRENT\_TIMESTAMP |

users

artworks

| **Field Name** | **Data Type** | **Description** | **Constraints** |
| --- | --- | --- | --- |
| artwork\_id | BIGINT | Unique identifier for the artwork | PK, AUTO\_INCREMENT |
| title | VARCHAR(100) | Name/title of the artwork | NOT NULL |
| description | TEXT | Detailed description of the art |  |
| image\_url | VARCHAR(255) | Path/URL to image |  |
| artist\_name | VARCHAR(100) | Name of the artist | NOT NULL |
| starting\_price | DECIMAL(10,2) | Minimum bid price | NOT NULL |
| user\_id | BIGINT | Creator/Seller | FK → users(user\_id) |
| auction\_id | BIGINT | auction ID | FK->auctions(auction\_id) |
| category\_id | BIGINT | Art category | FK → categories(category\_id) |
| status | ENUM | PENDING, APPROVED, REJECTED | DEFAULT 'PENDING' |
| Rejection\_reason | text | Reason of Rejection of Artwork |  |
| created\_at | DATETIME | Upload timestamp | DEFAULT CURRENT\_TIMESTAMP |

auctions

| **Field Name** | **Data Type** | **Description** | **Constraints** |
| --- | --- | --- | --- |
| auction\_id | BIGINT | Unique auction ID | PK, AUTO\_INCREMENT |
| auction\_name | VARCHAR(50) | Name of Auction | NOT NULL |
| image\_url | VARCHAR(255) | Path/URL to image |  |
| Apply\_start\_time | DATETIME | Auction Application start time | NOT NULL |
| Apply\_end\_time | DATETIME | Auction Application end time | NOT NULL |
| start\_time | DATETIME | Auction start time | NOT NULL |
| end\_time | DATETIME | Auction end time | NOT NULL |
| status | ENUM | 'UPCOMING', 'ONGOING', 'ENDED' | DEFAULT 'UPCOMING' |

bids

| **Field Name** | **Data Type** | **Description** | **Constraints** |
| --- | --- | --- | --- |
| bid\_id | BIGINT | Unique bid ID | PK, AUTO\_INCREMENT |
| artwork\_id | BIGINT | Linked artwork | FK → artworks(artwork\_id) |
| user\_id | BIGINT | Bidder | FK → users(user\_id) |
| bid\_amount | DECIMAL(10,2) | Bid value | NOT NULL |
| bid\_time | DATETIME | Timestamp of the bid | DEFAULT CURRENT\_TIMESTAMP |

Transactions

| **Field Name** | **Data Type** | **Description** | **Constraints** |
| --- | --- | --- | --- |
| transaction\_id | BIGINT | Unique ID for payment | PK, AUTO\_INCREMENT |
| auction\_id | BIGINT | Auction won | FK → auctions(auction\_id) |
| user\_id | BIGINT | Buyer | FK → users(user\_id) |
| amount | DECIMAL(10,2) | Final paid amount | NOT NULL |
| payment\_status | ENUM | 'PENDING', 'COMPLETED', 'FAILED' | DEFAULT 'PENDING' |
| payment\_date | DATETIME | Timestamp of payment |  |

categories

| **Field Name** | **Data Type** | **Description** | **Constraints** |
| --- | --- | --- | --- |
| category\_id | BIGINT | Unique identifier for category | PK, AUTO\_INCREMENT |
| name | VARCHAR(100) | Name of the category (e.g. Abstract, Portrait) | NOT NULL |
| description | TEXT | Optional description |  |