**Dock**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data Type | Mandatory | Description |
| 1 | X |  | id | UUID | Yes | Dock ID |
| 2 |  |  | name | VARCHAR(25) | Yes | Name of the dock |
| 3 |  |  | location | TEXT | Yes | Address of the dock |
| 4 |  |  | imageURL | TEXT | Yes | URL of image of dock |
| 5 |  |  | capacity | INTEGER | Yes | Number of slots in the dock |
| 6 |  |  | createdAt | TIMESTAMP | Yes | Created Time |
| 7 |  |  | availability | INTEGER | Yes | Number of available bikes in dock |

**Bike**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data Type | Mandatory | Description |
| 1 | X |  | id | UUID | Yes | Bike ID |
| 2 | X |  | barcode | UUID | Yes | Barcode for renting |
| 3 |  | X | dockId | UUID | Yes | Dock ID |
| 4 |  |  | licensePlate | VARCHAR(10) | Yes | License Plate |
| 5 |  |  | charge | INTEGER | Yes | Charge to rent bike per hour |
| 6 |  |  | type | VARCHAR(20) | Yes | Bike type |
| 7 |  |  | createdAt | TIMESTAMP | Yes | Created time |
| 8 |  |  | imageURL | TEXT | Yes | URL of image of bike |
| 9 |  |  | deposit | INTEGER | Yes | Deposit of renting |
| 10 |  |  | seatNum | INTEGER | Yes | Number of seats |
| 11 |  |  | pedalNum | INTEGER | Yes | Number of pedals |
| 12 |  |  | saddleNum | INTEGER | Yes | Number of saddles |

**E\_Bike**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data Type | Mandatory | Description |
| 1 | X | X | id | UUID | Yes | Bike ID |
| 2 |  |  | battery | INTEGER | Yes | Battery left percentage |
| 3 |  |  | timeRemain | TIME | Yes | Time remaining |

**Session**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data Type | Mandatory | Description |
| 1 | X |  | id | UUID | Yes | Session ID |
| 2 |  | X | bikeId | UUID | Yes | Bike Id |
| 3 |  | X | rentDockId | UUID | Yes | Reting Dock ID |
| 4 |  | X | returnDockId | UUID | Yes | Returning Dock ID |
| 5 |  |  | start\_time | TIMESTAMP | Yes | Start time of session |
| 6 |  |  | endTime | TIMESTAMP | No | End time of session |
| 7 |  |  | isEnd | BOOLEAN | Yes | Check session finished |

**Invoice**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data Type | Mandatory | Description |
| 1 | X |  | id | UUID | Yes | Invoice ID |
| 2 |  | X | sessionId | UUID | Yes | Session ID |
| 3 |  |  | createdAt | TIMESTAMP | Yes | Created time |
|  |  |  | type | VARCHAR(20) | Yes | Type of Invoice |
| 5 |  |  | totalCharge | INTEGER | Yes | Total charge money |

**PaymentTransaction**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data Type | Mandatory | Description |
| 1 | X |  | id | UUID | Yes | Payment Transaction ID |
| 2 |  | X | cardId | UUID | Yes | Card ID |
| 3 |  |  | createAt | TIMESTAMP | Yes | Created transaction time |
| 4 |  |  | contents | TEXT | No | Transaction contents |
| 5 |  |  | method | VARCHAR(25) | Yes | Method of payment |
| 6 |  |  | amount | INTEGER | Yes | Transaction amount |
| 7 |  | X | invoiceId | UUID | Yes | Invoice ID |

**CreditCard**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data Type | Mandatory | Description |
| 1 | X |  | id | UUID | Yes | Card ID |
| 2 |  |  | cardNum | VARCHAR(12) | Yes | Card number |
| 3 |  |  | cardOwner | VARCHAR(25) | Yes | Card holder name |
| 4 |  |  | issuingBank | VARCHAR(20) | Yes | Issuing Bank |
| 5 |  |  | expiredDate | DATETIME | Yes | Expired date |
| 6 |  |  | securityCode | VARCHAR(20) | Yes | Security code |