bike

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data Type | Mandatory | Description |
| 1 | X |  | id | INT | Yes | UUID |
| 2 |  |  | type | INT | Yes | Bike type, e.g., Standard Bike, E-Bike, … |
| 3 |  |  | barcode | INT | Yes | Barcode for renting |
| 4 |  |  | saddle\_num | INT | Yes | Number of saddles |
| 5 |  |  | pedal\_num | INT | Yes | Number of pedals |
| 6 |  |  | rear\_seat\_num | INT | Yes | Number of rear seats |
| 7 |  |  | value | INT | Yes | Value of the bike |
| 8 |  |  | rental\_fees | INT | Yes | Rental fees |
| 9 |  | X | dock\_id | INT | No | Dock ID |
| 10 |  |  | image\_url | TEXT | Yes | URL of image of bike |
| 11 |  |  | description | TEXT | No |  |
| 12 |  |  | created\_at | TIMESTAMP WITH TIME ZONE | No | Created time |

e\_bike

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data Type | Mandatory | Description |
| 1 |  | X | bike\_id | INT | Yes | ID, same as ID of Bike of which type is E-Bike |
| 2 |  |  | battery | NUMERIC | Yes | Battery left percentage |
| 3 |  |  | time\_remain | INT | Yes | Time remaining |
| 4 |  |  | created\_at | TIMESTAMP WITH TIME ZONE | No | Created time |

dock

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data Type | Mandatory | Description |
| 1 | X |  | id | INT | Yes | UUID |
| 2 |  |  | name | TEXT | Yes | Name of the dock |
| 3 |  |  | location | TEXT | Yes | Address of the dock |
| 4 |  |  | capacity | INT | Yes | Total parking slot |
| 5 |  |  | bike\_num | INT | Yes | Number of bike in the dock |
| 6 |  |  | image\_url | TEXT | Yes | URL of image of dock |
| 7 |  |  | created\_at | TIMESTAMP WITH TIME ZONE | No | Created time |
| 8 |  |  | taken\_slot | integer | Yes | Taken slot in a dock |

session

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data Type | Mandatory | Description |
| 1 | X |  | id | INT | Yes | UUID |
| 2 |  | X | card\_id | INT | Yes | Card Id |
| 3 |  | X | bike\_id | INT | Yes | Bike Id |
| 4 |  |  | start\_time | TEXT | No | Start time of session |
| 5 |  |  | end\_time | TEXT | No | End time of session |
| 6 |  | X | rent\_transaction\_id | INT | Yes | Renting transaction ID |
| 7 |  | X | return\_transaction\_id | INT | No | Returning transaction ID |
| 8 |  |  | last\_resume\_time | TEXT | No | Last resume time |
| 9 |  |  | active | boolean | No | Session state |
| 10 |  |  | created\_at | TIMESTAMP WITH TIME ZONE | No | Created time |
| 11 |  |  | last\_rent\_time\_before\_lock | INT | No | Last rent time before lock |

payment\_transaction

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data Type | Mandatory | Description |
| 1 | X |  | id | INT | Yes | UUID |
| 2 |  | X | card\_id | INT | Yes | Card ID |
| 3 |  |  | type | TEXT | Yes | Type of the transaction |
| 4 |  |  | create\_at | TIMESTAMP | Yes | Time when the transaction is created |
| 5 |  |  | amount | NUMERIC | Yes | Transaction amount |
| 6 |  |  | method | TEXT | Yes | Method of payment |
| 7 |  |  | created\_at | TIMESTAMP WITH TIME ZONE | No | Created time |

card

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data Type | Mandatory | Description |
| 1 | X |  | id | INT | Yes | UUID |
| 2 |  |  | card\_owner | TEXT | Yes | Full name of the card owner |
| 3 |  |  | card\_num | TEXT | Yes | Card number, hashed |
| 4 |  |  | security\_code | TEXT | Yes | Security code, hashed |
| 5 |  |  | exp\_date | TEXT | Yes | Expiration date |
| 6 |  |  | created\_at | TIMESTAMP WITH TIME ZONE | No | Created time |

invoice

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data Type | Mandatory | Description |
| 1 | X |  | id | INT | Yes | UUID |
| 2 |  | X | session\_id | INT | Yes | Session ID |
| 3 |  |  | total\_charge | NUMERIC | No | Total charge money |
| 4 |  |  | created\_at | TIMESTAMP WITH TIME ZONE | No | Created time |