**Rental database**

Database model documentation

Created with Vertabelo.com

# 1. Model details

**Model name:** 
Rental database

**Version:** 
2.3

**Database engine:** 
PostgreSQL

# 2. Tables

## 2.1. Table user\_account

2.1.1. Columns

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Type** | **Properties** | **Description** |
| id | int | PK |  |
| username | varchar(64) |  |  |
| password | varchar(64) |  |  |
| location\_id | int |  |  |
| location\_details | text |  |  |
| phone | varchar(255) | null |  |
| mobile | varchar(255) | null |  |
| email | varchar(255) |  |  |
| registration\_time | timestamp |  |  |

2.1.2. Alternate keys

|  |  |  |
| --- | --- | --- |
| **Key name** | **Columns** | **Description** |
| user\_account\_ak\_1 | username |  |
| user\_account\_ak\_2 | email |  |

## 2.2. Table item

2.2.1. Columns

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Type** | **Properties** | **Description** |
| id | int | PK |  |
| item\_name | varchar(255) |  |  |
| item\_type\_id | int |  |  |
| location\_id | int |  |  |
| item\_location | text |  |  |
| description | text |  |  |
| owner\_id | int |  |  |
| price\_per\_unit | decimal(8,2) |  | price per unit |
| unit\_id | int |  |  |
| available | blob |  | is item currently available (maybe it's leased at the moment or owner canceled it) |

## 2.3. Table location

2.3.1. Columns

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Type** | **Properties** | **Description** |
| id | int | PK |  |
| postal\_code | varchar(16) |  |  |
| name | varchar(255) |  |  |
| description | text |  |  |

## 2.4. Table location

2.4.1. Columns

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Type** | **Properties** | **Description** |
| id | int | PK |  |
| name | varchar(128) |  |  |

2.4.2. Alternate keys

|  |  |  |
| --- | --- | --- |
| **Key name** | **Columns** | **Description** |
| country\_ak\_1 | name |  |

## 2.5. Table item\_type

2.5.1. Columns

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Type** | **Properties** | **Description** |
| id | int | PK |  |
| type\_name | varchar(64) |  |  |

2.5.2. Alternate keys

|  |  |  |
| --- | --- | --- |
| **Key name** | **Columns** | **Description** |
| item\_type\_ak\_1 | type\_name |  |

## 2.6. Table unit

2.6.1. Columns

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Type** | **Properties** | **Description** |
| id | int | PK |  |
| unit\_name | varchar(64) |  |  |

2.6.2. Alternate keys

|  |  |  |
| --- | --- | --- |
| **Key name** | **Columns** | **Description** |
| unit\_ak\_1 | unit\_name |  |

## 2.7. Table item\_leased

2.7.1. Columns

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Type** | **Properties** | **Description** |
| id | int | PK |  |
| item\_id | int |  |  |
| renter\_id | int |  |  |
| time\_from | timestamp |  |  |
| time\_to | timestamp |  |  |
| unit\_id | int |  |  |
| price\_per\_unit | decimal(8,2) |  |  |
| fee | decimal(8,2) |  |  |
| price\_total | decimal(8,2) |  |  |
| rentier\_grade\_description | text | null | description renter wrote about rentier |
| renter\_grade\_description | text | null | description rentier wrote about renter |

## 2.8. Table grade\_category

2.8.1. Columns

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Type** | **Properties** | **Description** |
| id | int | PK |  |
| category\_name | varchar(64) |  |  |
| item\_type\_id | int |  |  |
| who\_grades | int |  | e.g. 1 - rentier, 2 - renter |

2.8.2. Alternate keys

|  |  |  |
| --- | --- | --- |
| **Key name** | **Columns** | **Description** |
| grade\_category\_ak\_1 | category\_name, item\_type\_id, who\_grades |  |

## 2.9. Table grade

2.9.1. Columns

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Type** | **Properties** | **Description** |
| id | int | PK |  |
| item\_leased\_id | int |  |  |
| grade\_category\_id | int |  |  |
| user\_from | int |  |  |
| user\_to | int |  |  |
| grade | decimal(3,1) |  |  |
| description | text |  |  |

# 3. References

## 3.1. Reference location\_country

|  |  |  |
| --- | --- | --- |
| **location** | **0..\*** | **location** |
| id | <-> |  |

## 3.2. Reference user\_account\_location

|  |  |  |
| --- | --- | --- |
| **location** | **0..\*** | **user\_account** |
| id | <-> | location\_id |

## 3.3. Reference item\_location

|  |  |  |
| --- | --- | --- |
| **location** | **0..\*** | **item** |
| id | <-> | location\_id |

## 3.4. Reference item\_item\_type

|  |  |  |
| --- | --- | --- |
| **item\_type** | **0..\*** | **item** |
| id | <-> | item\_type\_id |

## 3.5. Reference item\_user\_account

|  |  |  |
| --- | --- | --- |
| **user\_account** | **0..\*** | **item** |
| id | <-> | owner\_id |

## 3.6. Reference item\_unit

|  |  |  |
| --- | --- | --- |
| **unit** | **0..\*** | **item** |
| id | <-> | unit\_id |

## 3.7. Reference item\_leased\_item

|  |  |  |
| --- | --- | --- |
| **item** | **0..\*** | **item\_leased** |
| id | <-> | item\_id |

## 3.8. Reference item\_leased\_user\_account

|  |  |  |
| --- | --- | --- |
| **user\_account** | **0..\*** | **item\_leased** |
| id | <-> | renter\_id |

## 3.9. Reference item\_leased\_unit

|  |  |  |
| --- | --- | --- |
| **unit** | **0..\*** | **item\_leased** |
| id | <-> | unit\_id |

## 3.10. Reference grade\_category\_item\_type

|  |  |  |
| --- | --- | --- |
| **item\_type** | **0..\*** | **grade\_category** |
| id | <-> | item\_type\_id |

## 3.11. Reference grade\_item\_leased

|  |  |  |
| --- | --- | --- |
| **item\_leased** | **0..\*** | **grade** |
| id | <-> | item\_leased\_id |

## 3.12. Reference grade\_grade\_category

|  |  |  |
| --- | --- | --- |
| **grade\_category** | **0..\*** | **grade** |
| id | <-> | grade\_category\_id |

## 3.13. Reference grade\_user\_account\_from

|  |  |  |
| --- | --- | --- |
| **user\_account** | **0..\*** | **grade** |
| id | <-> | user\_from |

## 3.14. Reference grade\_user\_account\_to

|  |  |  |
| --- | --- | --- |
| **user\_account** | **0..\*** | **grade** |
| id | <-> | user\_to |

# 4. Subject areas

## 4.1. Subject area Locations

4.1.1. Tables  
 - location  
 - location

4.1.2. Views  
 - location  
 - location

4.1.3. References  
 - location  
 - location

## 4.2. Subject area Items

4.2.1. Tables  
 - item  
 - unit

4.2.2. Views  
 - item  
 - unit

4.2.3. References  
 - item  
 - unit

## 4.3. Subject area Leased items and grades

4.3.1. Tables  
 - item\_leased  
 - grade\_category  
 - grade

4.3.2. Views  
 - item\_leased  
 - grade\_category  
 - grade

4.3.3. References  
 - item\_leased  
 - grade\_category  
 - grade