**Data model for a hotel room booking system - final**

Database model documentation

Created with Vertabelo.com

# 1. Model details

**Model name:** 
Data model for a hotel room booking system - final

**Version:** 
2.3

**Database engine:** 
PostgreSQL

# 2. Tables

## 2.1. Table reservation

2.1.1. Columns

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Type** | **Properties** | **Description** |
| id | int | PK |  |
| date\_in | date |  |  |
| date\_out | date |  |  |
| made\_by | varchar(20) |  |  |
| guest\_id | int |  |  |

## 2.2. Table room

2.2.1. Columns

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Type** | **Properties** | **Description** |
| id | int | PK |  |
| number | varchar(10) |  |  |
| name | varchar(40) |  |  |
| status | varchar(10) |  |  |
| smoke | boolean |  |  |
| room\_type\_id | int |  |  |

## 2.3. Table reserved\_room

2.3.1. Columns

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Type** | **Properties** | **Description** |
| id | int | PK |  |
| number\_of\_rooms | int |  |  |
| room\_type\_id | int |  |  |
| reservation\_id | int |  |  |
| status | varchar(20) |  |  |

## 2.4. Table guest

2.4.1. Columns

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Type** | **Properties** | **Description** |
| id | int | PK |  |
| first\_name | varchar(80) |  |  |
| last\_name | varchar(80) | null |  |
| member\_since | date |  |  |

## 2.5. Table occupied\_room

2.5.1. Columns

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Type** | **Properties** | **Description** |
| id | int | PK |  |
| check\_in | timestamp |  |  |
| check\_out | timestamp |  |  |
| room\_id | int |  |  |
| reservation\_id | int |  |  |

## 2.6. Table hosted\_at

2.6.1. Columns

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Type** | **Properties** | **Description** |
| id | int | PK |  |
| guest\_id | int |  |  |
| occupied\_room\_id | int |  |  |

## 2.7. Table room\_type

**Description:** 
example: Standard 2 separate beds, or Luxury 1 double bed

2.7.1. Columns

|  |  |  |  |
| --- | --- | --- | --- |
| **Column name** | **Type** | **Properties** | **Description** |
| id | int | PK |  |
| description | varchar(80) |  |  |
| max\_capacity | int |  |  |

# 3. References

## 3.1. Reference reserved\_room\_room\_type

|  |  |  |
| --- | --- | --- |
| **room\_type** | **0..\*** | **reserved\_room** |
| id | <-> | room\_type\_id |

## 3.2. Reference occuped\_room\_room

|  |  |  |
| --- | --- | --- |
| **room** | **0..\*** | **occupied\_room** |
| id | <-> | room\_id |

## 3.3. Reference occuped\_room\_reservation

|  |  |  |
| --- | --- | --- |
| **reservation** | **0..\*** | **occupied\_room** |
| id | <-> | reservation\_id |

## 3.4. Reference reserved\_room\_reservation

|  |  |  |
| --- | --- | --- |
| **reservation** | **0..\*** | **reserved\_room** |
| id | <-> | reservation\_id |

## 3.5. Reference reservation\_guest

|  |  |  |
| --- | --- | --- |
| **guest** | **0..\*** | **reservation** |
| id | <-> | guest\_id |

## 3.6. Reference hosted\_at\_guest

|  |  |  |
| --- | --- | --- |
| **guest** | **0..\*** | **hosted\_at** |
| id | <-> | guest\_id |

## 3.7. Reference hosted\_at\_occuped\_room

|  |  |  |
| --- | --- | --- |
| **occupied\_room** | **0..\*** | **hosted\_at** |
| id | <-> | occupied\_room\_id |

## 3.8. Reference room\_room\_type

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