**DATABASE FOR EGERTON UNIVERSITY TRANSPORT MANAGEMENT SYSTEM**

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**S13/21403/14**

There are seven tables:

* Users
* Drivers
* Vehicles
* Mechanics
* Items
* Requests
* Bookings

**USERS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **column** | **constraints** | **Data type** | **size** | **Description** |
| 1.StaffId | Primary key | Character varying | 15 | Staff id of the user |
| 2.Contact |  | Character varying | 15 | Contact of user |
| 3.Email |  | Character varying | 100 | Email of user |
| 4.Password |  | Character varying | 100 | Password of user |
| 5.Department |  | Character varying | 100 | Department of user |
| 6. User\_type |  | SmallInt | 1 | The category of user |
|  |  |  |  |  |

**DRIVERS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **constraints** | **Data type** | **size** | **Description** |
| 1.StaffId | Primary key | Character varying | 15 | Staff id of the driver |
| 2.Contact |  | Character varying | 15 | Contact of driver |
| 3.Email |  | Character varying | 100 | Email of driver |
| 4.Name |  | Character varying | 100 | Name of the driver |
| 5.Availability |  | Character varying | 40 | Availability of the driver |
|  |  |  |  |  |

**MECHANICS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **constraints** | **Data type** | **size** | **Description** |
| 1.Mechanic\_Id | Primary key | integer | 11 | Unique identifier of the mechanic |
| 2.Contact |  | Character varying | 15 | Contact of mechanic |
| 3.Name |  | Character varying | 100 | Name of the mechanic |
| 4.Availability |  | Character varying | 40 | Availability of the mechanic |
|  |  |  |  |  |

**VEHICLE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **constraints** | **Data type** | **size** | **Description** |
| 1.VehicleId | Primary key | integer | 11 | Unique identifier to vehicle |
| 2.Vehicle\_type |  | Character varying | 15 | The type of vehicle |
| 3.Number\_plate |  | Character varying | 10 | License plate of the vehicle |
| 4.Capacity |  | Integer | 11 | Capacity of vehicle |
| 5.Availability |  | Character varying | 40 | Availability of the vehicle |
| 6.Driver\_id | Foreign key |  | 15 | driver Identifier |
| 7.Mechanic\_id | Foreign key |  | 11 | mechanic Identifier |

**Spare parts**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **constraints** | **Data type** | **size** | **Description** |
| 1.Item\_id | Primary key | Integer | 11 | Unique identifier to items |
| 2.Amount |  | Integer | 11 | Quantity of item |
| 3.Name |  | Character varying | 100 | Name of the item |
| 4.Cost |  | Integer | 11 | Cost of the item |
| 5. Description |  | Character varying | 100 | Supplier of the item |

**REQUESTS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **column** | **constraints** | **Data type** | **size** | **Description** |
| 1.Request\_id | Primary key | integer | 11 | Unique identifier to vehicle |
| 2.deptrequesting |  | integer | 11 | Number of travelers |
| Reason |  |  |  | Reason for requesting |
| 3.Travel\_date |  | Timestamp without time zone | 10 | Day and time of travelling |
| 4.Return\_date |  | Timestamp without time zone | 11 | Day and time of travelling back |
| 5.Destination |  | Character varying | 40 | Destination |
| 6.Travellers\_desc |  | SmallInt | 1 | Type of travelers i.e. staff |
| Capacity |  |  |  |  |
| 7.User\_id | Foreign key |  | 15 | User Identifier |
| 8.Confirm\_status |  | Boolean(default=false) |  | Shows if request is confirmed or denied |

**Bus\_Allocation**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **column** | **constraints** | **Data type** | **size** | **Description** |
| 1.REquest\_id | Primary key,foreign key | Integer | 11 | Unique identifier to booking made |
| Driver fee |  |  | 15 | User Identifier |
| Fuel money |  |  |  |  |
| 3.Vehicle\_id | Foreign key |  | 11 | Vehicle Identifier |
| 4Estimated distance | Foreign key |  | 11 | Request Identifier |
| 5.Driver\_id | Foreign key |  | 15 | Driver Identifier |

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Provides requisition

**Items**

Manages

1

**Users**

N **1**

Drives

Work on

Assigns

**Mechanics**

**Vehicles**

**Drivers**

Make booking

1 N 1

Assigns

N 1

N 1 N

N

**Requests**

Manages

N N

**Bookings**

Confirmed requests

N