**DATABASE FOR EGERTON UNIVERSITY TRANSPORT MANAGEMENT SYSTEM**

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**S13/21403/14**

There are eight tables:

* Staff
* Users
* Drivers
* Vehicles
* Mechanics
* Spare Parts
* Requests
* Bus Allocation

**STAFF**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **column** | **constraints** | **Data type** | **size** | **Description** |
| 1.StaffId | Primary key | Character varying | 15 | Unique identifier of staff |
| 2.Contact |  | Character varying | 15 | Contact of staff member |
| 3.Email |  | Character varying | 100 | Email of staff member |
| 4.Name |  | Character varying | 70 | Name of staff member |
| 5.Department |  | Character varying | 100 | Department of staff member |

**USERS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **constraints** | **Data type** | **size** | **Description** |
| 1.StaffId | Primary key, Foreign key | Character varying | 15 | Staff id of the user |
| 2.Password |  | Character varying | 100 | Password of user |
| 3.Role |  | Small integer | 2 | Role of the user |

**DRIVERS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **constraints** | **Data type** | **size** | **Description** |
| 1.StaffId | Primary key, Foreign key | Character varying | 15 | Staff id of the user |
| 2.Availability |  | Boolean |  | Availability of the driver |
| 3.Date |  | Date |  | Date the driver is available |

**MECHANICS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **constraints** | **Data type** | **size** | **Description** |
| 1.StaffId | Primary key, Foreign key | Character varying | 15 | Staff id of the mechanics |
| 2.Availability |  | Boolean |  | Availability of the mechanic |
| 3.Date |  | Date |  | Date the mechanic is available |

**VEHICLES**

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

**SPARE PARTS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **constraints** | **Data type** | **size** | **Description** |
| 1.Spare\_parts\_id | Primary key | Integer | 11 | Unique identifier to spare part |
| 2.Amount |  | Integer | 11 | Quantity of spare part |
| 3.Name |  | Character varying | 100 | Name of the spare part |
| 4.Cost |  | Double | 11 | Cost of the spare part |
| 5. Description |  | Character varying | 100 | Description of the spare part |

**REQUESTS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **column** | **constraints** | **Data type** | **size** | **Description** |
| 1.Request\_id | Primary key | Integer | 11 | Unique identifier to request |
| 2.Deptrequesting |  | Character varying | 100 | Department making the request |
| 3.Reason |  | Character varying | 100 | Reason for requesting |
| 4.Travel\_date |  | Timestamp without time zone | 10 | Day and time of travelling |
| 5.Return\_date |  | Timestamp without time zone | 11 | Day and time of travelling back |
| 6.Destination |  | Character varying | 40 | Destination |
| 7.Travellers\_desc |  | SmallInt | 1 | Type of travelers i.e. staff |
| 8.Capacity |  | Integer | 11 | Number of travelers |
| 9.User\_id | Foreign key |  | 15 | User Identifier |
| 10.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 |
| 2.Driver fee |  | integer | 11 | Fee paid to driver |
| 3.Fuel money |  | integer | 11 | Fueling cost |
| 4.Vehicle\_id | Foreign key |  | 11 | Vehicle Identifier |
| 5Estimated distance |  | integer | 11 | Estimated distance of travel |
| 6.Driver\_id | Foreign key |  | 15 | Driver Identifier |
| 7.Travel\_date | Foreign key |  |  | Foreign key of the request date |

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**STAFF**

**1**

Profile info

Profile info

**1**

Manages

**1**

**N 1** **1**

Profile info

**MECHANICS**

**USERS**

**N** **1**

Work on

Provide requisition

**1** **1**

**N**

Booking request

**DRIVERS**

**N N**

**SPARE PARTS**

Drives

**N 1 N**

**VEHICLES**

**REQUESTS**

Driver info

**1 1**

Allocation

Vehicle info

**BUS ALLOCATION**

**N**

**N**

**N**