1. **Logical modelling:**

Diagram

Description automatically generated

**Data dictionary:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Table | Driver | | | |
| Field Name | Description | Datatype | Key Field | Constraint |
| ID | Unique ID for a driver | INT | PK | NOT NULL |
| Name | Drivers last name | VARCHAR |  | NOT NULL |
| Phone | Drivers First Name | VARCHAR |  | NOT NULL |
| DateOfBirth | Drivers birth date | DATE |  | NOT NULL |
| Address | Drivers contactable address | VARCHAR |  | NULL |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Table | License | | | |
| Field Name | Description | Datatype | Key Field | Constraint |
| ID | ID – for License | VARCHAR | PK | NOT NULL |
| Class | Licence class type (learners, restricted or full) | VARCHAR |  | NOT NULL |
| License No. | Licence No. combination of alpha-numeric | VARCHAR |  | NOT NULL |
| Expiry Date | The date license will expire | DATE |  | NOT NULL |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Table | Driver License | | | |
| Field Name | Description | Datatype | Key Field | Constraint |
| DriverID | Driver ID foreign key | INT | FK | NOT NULL |
| LicenseID | License ID foreign key | VARCHAR | FK | NOT NULL |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Table | Testing Station | | | |
| Field Name | Description | Datatype | Key Field | Constraint |
| ID | Testing station ID | INT | PK | NOT NULL |
| Testing Station No. | Testing station Number | VARCHAR |  | NOT NULL |
| Address | Address of the testing station | VARCHAR |  | NOT NULL |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Table | Booking | | | |
| Field Name | Description | Datatype | Key Field | Constraint |
| ID | Booking ID | INT | PK | NOT NULL |
| DriverID | Driver ID foreign key | INT | FK | NOT NULL |
| TestingStationID | Testing station ID foreign key | INT | FK | NOT NULL |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Table | Exam | | | |
| Field Name | Description | Datatype | Key Field | Constraint |
| ID | Exam ID | INT | PK | NOT NULL |
| Date | Exam date | DATE |  | NOT NULL |
| Type | Type of exam (online or written) | VARCHAR |  | NOT NULL |
| Score | Marks obtained in exam | DECIMAL |  | DEFAULT(0.0) |
| BookingID | Booking ID foreign key | INT | FK | NOT NULL |

1. **Normalisation:**

**Step 1 (UNF – 1NF):**

**Diagram

Description automatically generated**

**Step 2 ( 1NF – 2NF):**

**Diagram

Description automatically generated**

**Step 3 ( 2NF – 3NF):**

**Diagram

Description automatically generated**