**Amusement Park Management System**

**ID : 17.02.05.035**

**ID : 17.02.05.050**

**ID : 17.02.05.055**

We have ensured up to 3rd normalization in the tables of our database. 13 tables of our database are mentioned below with necessary information.

1. **Visitor\_Info:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| visitor\_id | visitor\_name | visitor\_phone | visitor\_gender | visitor\_age |
|  |  |  |  |  |

In this table we are storing the information of the visitors who are visiting the park. Here, visitor\_id is our primary key.

**CREATE TABLE Visitor\_Info(**

**visitor\_id int  IDENTITY(1,1) PRIMARY KEY,**

**visitor\_name varchar(50) NOT NULL,**

**visitor\_phone int NOT NULL,**

**visitor\_gender varchar(10) NOT NULL CHECK**

**(visitor\_gender  IN  ('Male','Female','Other')),**

**visitor\_age int NOT NULL**

**)**

1. **Payout\_Amount:**

|  |  |
| --- | --- |
| staff\_designation | staff\_salary |
|  |  |

From this table, we can fetch the information about the salary amount of a specific designation of the staff. The primary key in this table is staff\_designation.

**CREATE TABLE Payout\_Amount(**

**staff\_designation varchar(20) PRIMARY KEY,**

**staff\_salary int NOT NULL**

**)**

1. **Staff\_Info**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| staff\_id | staff\_name | staff\_phone | staff\_gender | staff\_age | staff\_address | staff\_designation | region\_no |
|  |  |  |  |  |  |  |  |

In this table we are storing the information about the staff working at the park. Here, staff\_id is our primary key, staff\_designation is a foreign key from the table Payout\_Amount.

**CREATE TABLE Staff\_info(**

**staff\_id int IDENTITY(1,1) PRIMARY KEY,**

**staff\_name varchar(50) NOT NULL,**

**staff\_phone int NOT NULL,**

**staff\_gender varchar(10) NOT NULL**

**CHECK(staff\_gender IN('Male','Female','Other')),**

**staff\_age int NOT NULL,**

**staff\_address varchar(50) NOT NULL,**

**staff\_designation varchar(20) NOT NULL**

**FOREIGN KEY REFERENCES  Payout\_Amount  (staff\_designation),**

**staff\_salary int NOT NULL,**

**staff\_hiredate varchar(20) NOT NULL**

**region\_no varchar(10) NOT NULL,**

**)**

1. **Parking\_Info**

|  |  |  |  |
| --- | --- | --- | --- |
| license\_no | vehicle\_type | time\_of\_parking | garage\_section\_no |
|  |  |  |  |

In this table we are storing the information about the vehicles that are parked in the parking area of the park. The primary key is license\_no.

**CREATE TABLE Parking\_Info(**

**license\_no varchar(10) PRIMARY KEY ,**

**vehicle\_type varchar(20) NOT NULL,**

**time\_of\_parking varchar(20) NOT NULL,**

**garage\_section\_no varchar(10) NOT NULL**

**)**

1. **Visitor\_Vehicle:**

|  |  |
| --- | --- |
| visitor\_id | license\_no |
|  |  |

The primary is visitor\_id and license\_no is foreign from Parking\_Info.

**CREATE TABLE Visitor\_Vehicle(**

**visitor\_id int PRIMARY KEY ,**

**license\_no varchar(10) NOT NULL**

**FOREIGN KEY REFERENCES** **Parking\_Info(license\_no),**

**)**

1. **Ride\_Info**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ride\_id | ride\_name | region\_no | ticket\_price | age\_limit |
|  |  |  |  |  |

The information stored here is about the individual rides. Primary key is ride\_id.

**CREATE TABLE Ride\_info(**

**ride\_id int IDENTITY(1,1) PRIMARY KEY,**

**ride\_name varchar(20) NOT NULL,**

**region\_no int NOT NULL,**

**ticket\_price int NOT NULL,**

**age\_limit int NOT NULL**

**)**

1. **Food\_Info**

|  |  |  |
| --- | --- | --- |
| food\_id | food\_name | food\_price |
|  |  |  |

The information about the foods that are served in the canteen area of the park can be found here. The primary key in this table is food\_id.

**CREATE TABLE Food\_Info(**

**food\_id int IDENTITY(1,1) PRIMARY KEY,**

**food\_name varchar(30) NOT NULL,**

**food\_price int NOT NULL,**

**)**

1. **Food\_Counter**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| order\_sl\_no | visitor\_id | food\_id | no\_of\_food | total\_food\_price | food\_sold\_date |
|  |  |  |  |  |  |

The food order given by any visitor is stored in this table. The primary key is order\_sl\_no. The foreign keys here are visitor\_id from Visitor\_Info, food\_id from Food\_Info.

**CREATE TABLE Food\_Counter(**

**order\_sl\_no INT IDENTITY(1,1) PRIMARY KEY,**

**visitor\_id int NOT NULL**

**FOREIGN KEY REFERENCES** **Visitor\_Info(visitor\_id),**

**food\_id int NOT NULL**

**FOREIGN KEY REFERENCES Food\_Info(food\_id),**

**no\_of\_food int NOT NULL,**

**total\_food\_price int NOT NULL,**

**food\_sold\_date varchar(20) NOT NULL**

**)**

1. **Entry\_Ticket\_Counter**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| eticket\_sl\_no | visitor\_id | no\_of\_etickets | total\_eticket\_price | eticket\_sold\_time | eticket\_type |
|  |  |  |  |  |  |

In this table we are storing the information about the tickets the visitor is buying for entering the park. The primary key in this table is eticket\_sl\_no. The foreign key visitor\_id is from Visitor\_Info. The foreign key eticket\_type is from Entry\_Ticket\_type.

**CREATE TABLE Entry\_Ticket\_counter (**

**eticket\_sl\_no INT IDENTITY(1,1) PRIMARY KEY,**

**visitor\_id int NOT NULL**

**FOREIGN KEY REFERENCES** **Visitor\_Info(visitor\_id),**

**no\_of\_etickets int NOT NULL,**

**total\_eticket\_price int NOT NULL,**

**eticket\_sold\_time** **varchar(20) NOT NULL**

**eticket\_type varchar(20) NOT NULL**

**FOREIGN KEY REFERENCES** **Entry\_Ticket\_type(eticket\_type),**

**)**

1. **Ride\_Ticket\_Counter**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| rticket\_sl\_no | visitor\_id | ride\_id | no\_of\_rtickets | total\_rticket\_price | rticket\_sold\_time |
|  |  |  |  |  |  |

In this table we are storing the information about the tickets the visitor is buying for riding any ride. The primary key in this table is eticket\_sl\_no. The foreign keys are visitor\_id from Visitor\_Info, ride\_id from Ride\_Info.

**CREATE TABLE Ride\_Ticket\_counter (**

**rticket\_sl\_no int IDENTITY(1,1) PRIMARY KEY,**

**visitor\_id int NOT NULL**

**FOREIGN KEY REFERENCES** **Visitor\_Info(visitor\_id),**

**ride\_id int  NOT NULL**

**FOREIGN KEY REFERENCES** **Ride\_info(ride\_id),**

**no\_of\_etickets int NOT NULL,**

**total\_eticket\_price int NOT NULL,**

**eticket\_sold\_time varchar(20) NOT NULL**

**)**

1. **Feedback**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| feedback\_sl\_no | visitor\_id | feedback\_time | visitor\_rating | comments |
|  |  |  |  |  |

We are storing the feedback of the visitors in this table. The primary key is feedback\_sl\_no. Foreign key is visitor\_id from Visitor\_Info.

**CREATE TABLE Feedback(**

**feedback\_sl\_no int IDENTITY(1,1) PRIMARY KEY,**

**visitor\_id int NOT NULL**

**FOREIGN KEY REFERENCES Visitor\_Info(visitor\_id),**

**feedback\_time varchar(20) NOT NULL,**

**visitor\_rating int NOT NULL,**

**comments varchar(100)**

**)**

1. **Service\_region**

|  |  |
| --- | --- |
| service\_name | region\_no |
|  |  |

From this table we can know the service provided by a specific region. Primary key here is service\_name.

**CREATE TABLE Service\_Region(**

**service\_name varchar(20) PRIMARY KEY ,**

**region\_no int NOT NULL**

**)**

1. **Entry\_Ticket\_type:**

|  |  |
| --- | --- |
| eticket\_type | eticket\_price |
|  |  |

In this table we are storing the information about the ticket’s price according to different offers and packages.

**CREATE TABLE Entry\_Ticket\_type (**

**eticket\_type varchar(20) PRIMARY KEY NOT NULL,**

**eticket\_price int NOT NULL**

**)**

The entity relationship diagram of our project is given below :

