

Name : Gayathri Devi Kuppusamy

ID : 11954

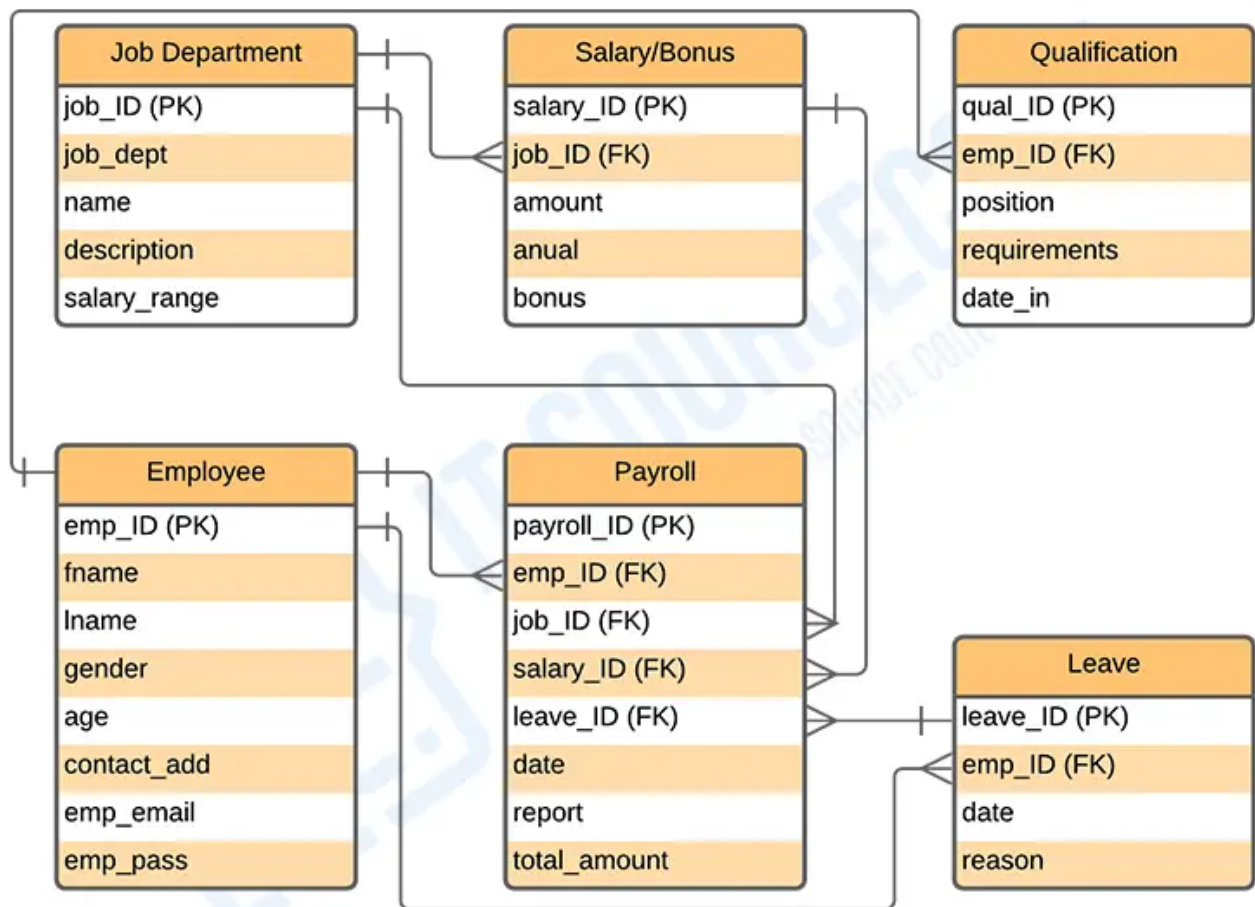
Date : 06.10.2023

Day : 6 & 7

## RDBMS : Database Design

Reference database design:

# EMPLOYEE MANAGEMENT SYSTEM



**My Work:**

create database TrialDBdesign;

use TrialDBdesign;

show databases;

```
create table Job_Department(job_id int primary key, job_dept int, name varchar(20), description
varchar(20),
salary_range int);
```

show tables;

```
create table Employee(emp_id int primary key, fname varchar(20),lname varchar(20), gender
char(1),
age int, contact_add varchar(20),emp_email varchar(20),emp_pass varchar(20));
```

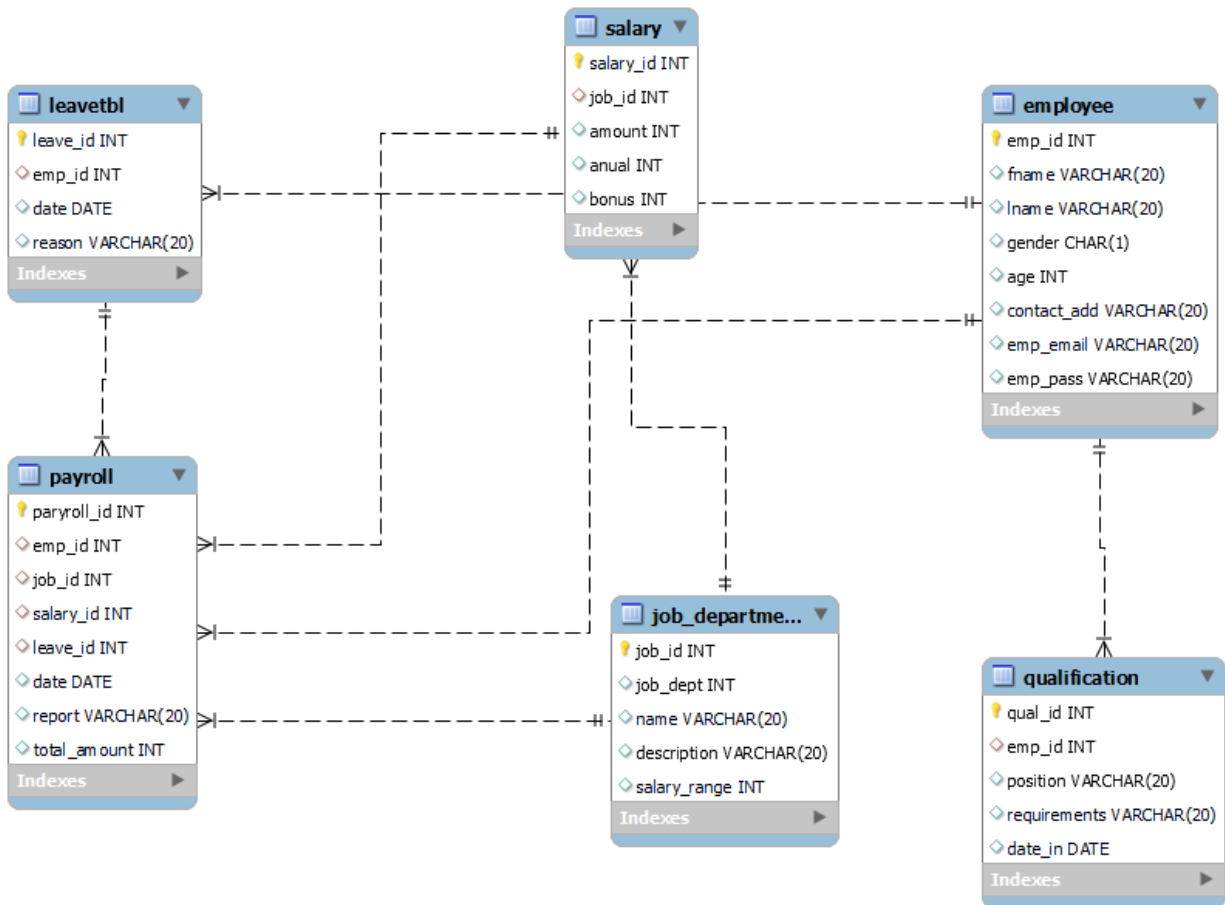
```
create table salary(salary_id int primary key, job_id int, amount int, anual int, bonus int,
foreign key (job_id) references Job_Department(job_id) );
```

```
create table Leavetbl (leave_id int primary key, emp_id int, date date, reason varchar(20), foreign
key
(emp_id) references Employee(emp_id));
```

```
create table qualification (qual_id int primary key, emp_id int, position varchar(20), requirements
varchar(20), date_in date,
foreign key(emp_id) references Employee(emp_id));
```

```
create table payroll(paryroll_id int primary key, emp_id int, job_id int, salary_id int, leave_id int,
date date, report varchar(20), total_amount int,
foreign key (emp_id) references Employee(emp_id), foreign key(job_id) references
Job_Department(job_id), foreign key(salary_id) references salary(salary_id),
foreign key(leave_id) references Leavetbl(leave_id));
```

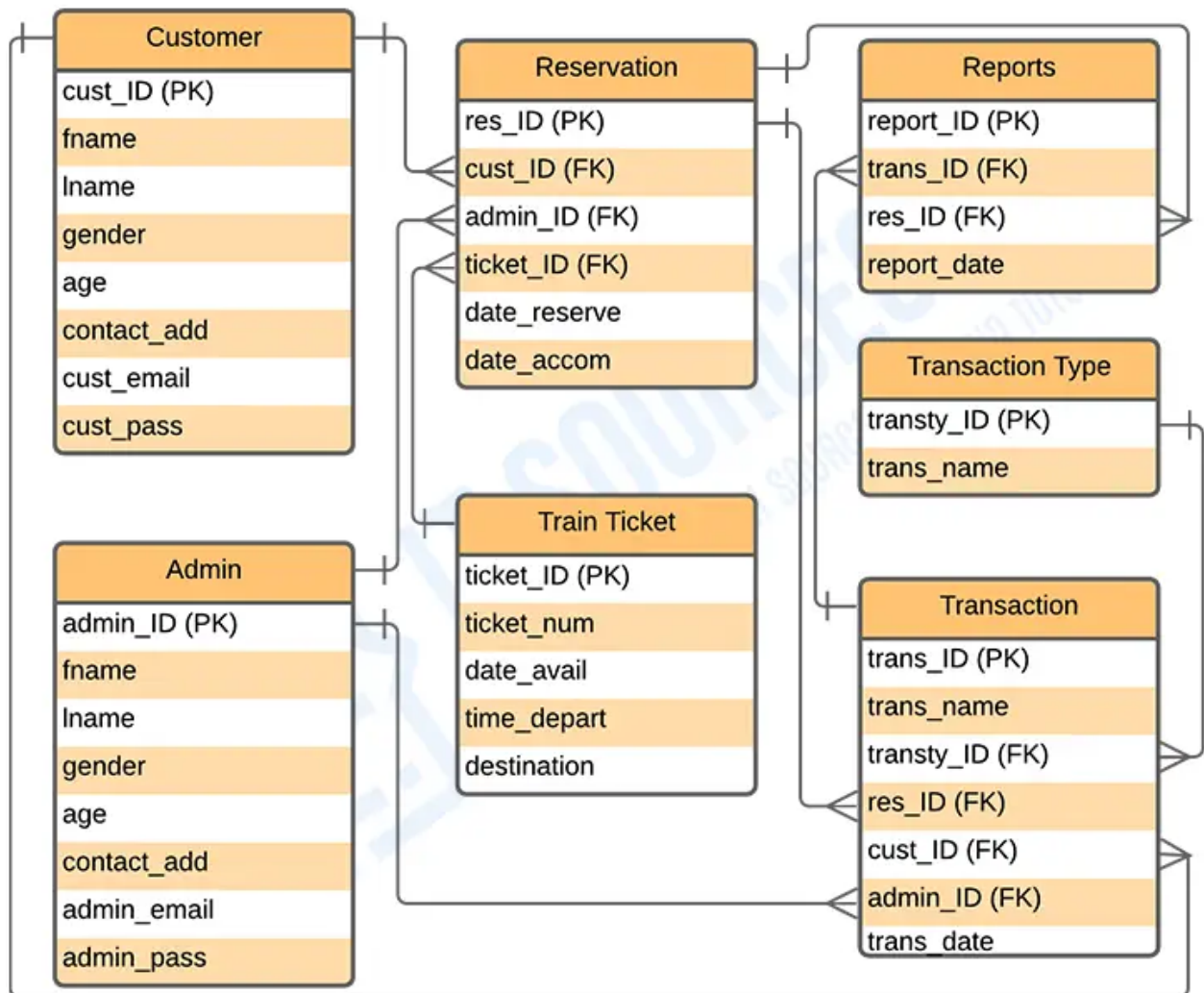
## ER Diagram:



## Exercise 2:

### Reference model:

# RAILWAY RESERVATION SYSTEM



### My Work:

```
create database railwayreservationsystem;
```

```
use railwayreservationsystem;
```

```
create table customer (cust_id int primary key, fname varchar(20), lname varchar(20), gender char(1), age int, contact_add varchar(10), cust_email varchar(20), cust_pass varchar(20));
```

```
insert into customer (cust_id,fname,lname,gender,age,contact_add,cust_email,cust_pass) values
(101,"Gayathri","Devi","F",22,"Sivaksi","g@gmail.com","P123"),(102,"Pravin","Kumar","M",2
3,"VNR","p@gmail.com","P234"),
(103,"Naveen","Raj","M",27,"Chennai","n@gmail.com","P345"),(104,"Dharshana","Sri","F",35,
"Srivi","d@gmail.com","P456"),
(105,"Jenisha","Raj","F",45,"RJPM","J@gmail.com","P567"),(106,"Valan","Arasu","M",39,"Vel
lore","v@gmail.com","P678");
```

```
delete from customer where cust_id = 105;
select * from customer;
```

```
create table admin (admin_id int primary key, fname varchar(20), lname varchar(20),gender
char(1), age int, contact_add varchar(10), admin_email varchar(20), admin_pass varchar(20));
insert into admin (admin_id,fname,lname,gender,age,contact_add,admin_email,admin_pass)
values
(1001,"Admin","Gowtham","M",29,"Dindugal","gm@gmail.com","A001"),(1002,"Admin","Raj
esh","M",32,"Madurai","rj@gmail.com","A002"),
(1003,"Admin","Munees","M",35,"RJPM","mw@gmail.com","A003"),(1004,"Admin","Pravina
","F",21,"Sivakasi","pn@gmail.com","A004"),
(1005,"Admin","Mahesh","F",42,"TTL","mh@gmail.com","A005");
```

```
select * from admin;
```

```
create table trainticket (ticket_id int primary key, ticket_num int, date_avail date, time_depart
timestamp, destination varchar(20));
alter table trainticket modify time_depart time;
insert into trainticket(ticket_id,ticket_num,date_avail,time_depart,destination) values
(9,9,"2023-10-07","11:28:01","sivakasi");
insert into trainticket(ticket_id,ticket_num,date_avail,time_depart,destination) values
(8,8,"2023-12-07","10:23:01","Srivi"),(7,7,"2023-05-01","09:08:01","RJPM"),(6,6,"2023-04-04"
,"12:12:12","Madurai"),(5,5,"2022-10-12","08:28:01","Chennai");
```

```
select * from trainticket;
```

```
create table transactiontype(transty_id int primary key, trans_name varchar(20));
insert into transactiontype(transty_id,trans_name)
values(456,"Raj"),(567,"Devi"),(789,"Sri"),(901,"Arasu"),(234,"Kumar");
select * from transactiontype;
```

```

create table reservation (res_id int primary key, cust_id int, admin_id int, ticket_id int,
date_reserve date, date_accom date,
foreign key(cust_id) references customer(cust_id),
foreign key(admin_id) references admin(admin_id),
foreign key(ticket_id) references trainticket(ticket_id));
insert into reservation(res_id,cust_id,admin_id,ticket_id,date_reserve,date_accom)
values(809,101,1001,9,"2012-12-12","2012-11-11"),
(808,102,1002,8,"2015-06-12","2013-07-11"),(807,103,1003,7,"2012-06-06","2006-06-11"),(80
6,104,1004,6,"2018-02-02","2012-08-21"),(805,105,1005,5,"2012-02-24","2019-03-03");
select * from reservation;
delete from reservation where res_id=809;
delete from reservation where res_id=808;

```

```

set foreign_key_checks =1;

```

```

show tables;

```

```

create table transaction(trans_id int primary key, trans_name varchar(20),transty_id int, res_id
int, cust_id int, admin_id int, trans_date date,
foreign key(transty_id) references transactiontype (transty_id),
foreign key(res_id) references reservation (res_id),
foreign key(cust_id) references customer(cust_id),
foreign key(admin_id) references admin(admin_id));

```

```

insert into transaction(trans_id, trans_name,transty_id, res_id , cust_id , admin_id ,trans_date)
values(401,"Gayathri",456,809,101,1001,"2023-01-01"),(402,"Pravin",567,808,102,1002,"2022-
01-01"),
(403,"Naveen",789,807,103,1003,"2021-01-01"),(404,"Jenisha",901,806,104,1004,"2024-01-01"
),(405,"Dharshana",234,805,105,1005,"2025-05-05");

```

```

desc transaction;
delete from transaction where trans_id=401;
delete from transaction where trans_id=402;

```

```

select @@foreign_key_checks;

```

```

select * from transaction;

```

```

create table reports(report_id int primary key, transty_id int, res_id int, report_date date,
foreign key(transty_id) references transactiontype(transty_id),

```

foreign key(res\_id) references reservation (res\_id));

```
insert into reports (report_id, transty_id, res_id, report_date)
values(501,456,809,"2009-09-09"),(502,567,808,"2010-10-10"),(503,789,807,"2007-09-08"),(50
4,901,806,"2024-05-05"),(505,234,805,"2023-07-10");
```

select \* from reports;

select a.lname,c.fname from admin a,customer c;

**ER diagram:**

