* **Aditi**

/\* Ticketing system \*/

-- to create all the tables.

CREATE TABLE TICKETS (

TktID char(10) not null,

TktType varchar(5) not null,

TktSubj varchar(50) not null,

TktDesc varchar(255),

TktCreateDt date not null,

TktPrio int not null,

TktCreatedBy varchar(20) not null,

TktSolvedBy varchar(20),

TktStatus varchar(15) not null,

TktCloseDt date,

primary key (TktID));

CREATE TABLE TicketType (

TktType varchar(5) not null,

TypDesc varchar(15),

primary key (TktType));

CREATE TABLE SLA (

TktPrio int not null,

TktDur int not null,

primary key (TktPrio));

CREATE TABLE EMPLOYEE (

EmpNum int not null,

EmpFName varchar(15) not null,

EmpInitial char(1),

EmpLName varchar(15),

EmpID varchar(50) not null,

DeptCode int not null

primary key (EmpNum));

CREATE TABLE Department (

DeptCode int not null,

DeptName varchar(15),

primary key (DeptCode));

CREATE TABLE UserLogin (

UserID varchar(20) not null,

UserPassword varchar(15) not null,

RoleID varchar(5) not null,

QueueID varchar(15),

EmpNum int not null,

primary key (UserID));

CREATE TABLE Roles (

RoleID varchar(5) not null,

RoleDesc varchar(20),

Access varchar(15),

primary key (RoleID));

-- changed table name from QUEUE to TktQueue as 'QUEUE' is a key word in sql.

CREATE TABLE TktQueue (

QueueID varchar(15) not null,

QueueName varchar(20),

DeptCode int not null,

primary key (QueueID));

--

-- Modify Tables using ALTER

-- add column DeptHead in Department table to identify an Head of the Department

ALTER TABLE Department

Add DeptHead int;

ALTER TABLE TICKETS

Add QueueID varchar(15);

-- Add FK constraints to tables to build realtionships between them.

ALTER TABLE TICKETS

ADD CONSTRAINT TktType\_FK FOREIGN KEY (TktType)

REFERENCES TicketType (TktType);

ALTER TABLE TICKETS

ADD CONSTRAINT TktPrio\_FK FOREIGN KEY (TktPrio)

REFERENCES SLA (TktPrio);

ALTER TABLE TICKETS

ADD CONSTRAINT TktCreated\_FK FOREIGN KEY (TktCreatedBy)

REFERENCES UserLogin (UserID);

ALTER TABLE TICKETS

ADD CONSTRAINT TktSolved\_FK FOREIGN KEY (TktSolvedBy)

REFERENCES UserLogin (UserID);

ALTER TABLE TICKETS

ADD CONSTRAINT Queue\_FK FOREIGN KEY (QueueID)

REFERENCES TktQueue (QueueID);

ALTER TABLE EMPLOYEE

ADD CONSTRAINT DeptCode\_FK FOREIGN KEY (DeptCode)

REFERENCES Department (DeptCode);

ALTER TABLE Department

ADD CONSTRAINT DeptHead\_fk FOREIGN KEY (DeptHead)

REFERENCES EMPLOYEE (EmpNum);

ALTER TABLE UserLogin

ADD CONSTRAINT RoleID\_FK FOREIGN KEY (RoleID)

REFERENCES Roles (RoleID);

ALTER TABLE UserLogin

ADD CONSTRAINT QueueID\_FK FOREIGN KEY (QueueID)

REFERENCES TktQueue (QueueID);

ALTER TABLE UserLogin

ADD CONSTRAINT EmpNum\_FK FOREIGN KEY (EmpNum)

REFERENCES EMPLOYEE (EmpNum);

ALTER TABLE TktQueue

ADD CONSTRAINT Dept\_FK FOREIGN KEY (DeptCode)

REFERENCES Department (DeptCode);

-- Insert records for testing.

insert into Department values (1, 'Sales', null);

insert into Department values (2, 'Helpdesk', null);

insert into Department values (3, 'Technician', null);

insert into Department values (4, 'Training', null);

insert into EMPLOYEE values (123456789, 'John', 'W', 'Smith', 'john.smith@fitness.com', 2);

insert into EMPLOYEE values (111550000, 'Daniela', 'K', 'Webb', 'daniela.webb@fitness.com', 4);

insert into EMPLOYEE values (345098867, 'Milan', 'J', 'Cox', 'milan.cox@fitness.com', 3);

insert into EMPLOYEE values (111346658, 'Emily', 'M', 'Ryan', 'emily.ryan@fitness.com', 1);

insert into Roles values ('100', 'First level Support', 'R-W');

insert into Roles values ('110', 'Second level Support', 'R-W');

insert into Roles values ('120', 'Head/Manager', 'R');

insert into SLA values (1, 120);

insert into SLA values (2, 360);

insert into SLA values (3, 720);

insert into SLA values (4, 1440);

insert into TicketType values ('INC', 'Incident Ticket');

insert into TicketType values ('SRT', 'Service Request');

insert into TicketType values ('PRT', 'Problem ticket');

insert into TktQueue values ('Cus\_HD1', 'Helpdesk - level 1', 2);

insert into TktQueue values ('Cus\_HD2', 'Helpdesk - level 2', 2);

insert into TktQueue values ('Equip\_Tech', 'Equipment Tehcnician', 3);

insert into TktQueue values ('Gym\_Train', 'Gym Trainer', 4);

insert into UserLogin values ('JohnSmith', 'Qmol@09', '100', 'Cus\_HD1', 123456789);

insert into UserLogin values ('MilanCox1', 'Ol09cv#', '110', 'Equip\_Tech', 345098867);

insert into TICKETS values

('INC0001234', 'INC', 'Equipment Installation', 'Need an assitance to install home gym', '05-26-2022 17:26:00', 2, 'JohnSmith', null, 'Assigned', null, 'Equip\_Tech');

insert into TICKETS values

('SRT9856320', 'SRT', 'Address Change', 'Request from customer to change their Address', '05-26-2022 17:50:00', 3, 'JohnSmith', 'JohnSmith', 'Closed', '05-26-2022 18:05:20', 'Cus\_HD1');

-- queries to retrieve data.

select \* from department;

select \* from EMPLOYEE;

select \* from TktQueue;

select \* from Roles;

select \* from UserLogin;

select \* from TicketType;

select \* from SLA;

select \* from TICKETS;

-- to retrieve department name of each employee.

select concat(e.EmpFName, ' ', e.EmpInitial, ' ', e.EmpLName) as EmpName, d.DeptName

from employee e

left join Department d on (d.DeptCode = e.DeptCode);

-- to retrieve userid, type of access and queue name for each employee.

select concat(e.EmpFName, ' ', e.EmpInitial, ' ', e.EmpLName) as EmpName, u.UserID, r.RoleDesc, r.Access, u.QueueID, q.QueueName

from EMPLOYEE e

left join UserLogin u on (u.EmpNum = e.EmpNum)

left join Roles r on (r.RoleID = u.RoleID)

left join TktQueue q on (q.QueueID = u.QueueID);

* **Shila**

CREATE TABLE CUSTOMER (

CusID int not null,

CusFName varchar(20) not null,

CusLName varchar(15) not null,

CusInitial varchar(3),

CusDOB date,

CusSex varchar(2) not null,

CusAddID int not null,

CusHeight decimal default 0,

CusWeight decimal default 0,

CusInterest varchar(8),

primary key (CusID));

CREATE TABLE CusAddress(

CusAddID int not null,

CusAptNo int not null,

CusBldgNo int not null,

CusStrName varchar(20),

CusCity varchar(20) not null,

CusState varchar(20) not null,

CusZip int not null,

primary key (CusAddID));

ALTER TABLE CUSTOMER

ADD CONSTRAINT CusAddID\_fk FOREIGN KEY (CusAddID)

REFERENCES CUSADDRESS (CusAddID);

INSERT INTO CUSADDRESS VALUES(201, 5,5,'Access Rd.','Cupertino','CA',95111);

INSERT INTO CUSADDRESS VALUES(202, 5,5,'Adriana Ave.', 'Cupertino','CA',95111);

INSERT INTO CUSADDRESS VALUES(203, 25,15,null, 'Memphis','TN',38111);

INSERT INTO CUSADDRESS VALUES(204, 65,51,'Milaw Court','San Ramon','CA',94583);

INSERT INTO CUSADDRESS VALUES(205, 10,16,null, 'Houston','Tx',95111);

INSERT INTO CUSADDRESS VALUES(206, 20,1,null, 'Fremont','CA',95111);

INSERT INTO CUSADDRESS VALUES(207, 35,2,'Black Mountain', 'San Diego','CA',92126);

INSERT INTO CUSADDRESS VALUES(208, 75,44,'Columbus Avenue', 'San Fransisco','CA',95111);

INSERT INTO CUSADDRESS VALUES(209, 34,75, 'Aldea St.', 'Dublin','CA',95111);

INSERT INTO CUSADDRESS VALUES(210, 22,52,'7th Street', 'Danville','CA',95111);

INSERT INTO CUSADDRESS VALUES(211, 55,99,'12 Oaks Dr.', 'Pleasanton','CA',95111);

INSERT INTO CUSADDRESS VALUES(212, 85,21,'12 Oaks Dr.', 'Los Angeles','CA',95111);

INSERT INTO CUSTOMER VALUES(12, 'Krishna','Hada', null, '09-JAN-1965', 'M', 201, 5.6, 150, 'cycling');

INSERT INTO CUSTOMER VALUES(13, 'John','Kennedy', null, '10-FEB-1975', 'M', 202, 6.0, 140, 'hiking');

INSERT INTO CUSTOMER VALUES(14, 'Ben','Sterling', null, '20-JAN-1980', 'M', 203, 5.8, 130, 'coding');

INSERT INTO CUSTOMER VALUES(15, 'Raimonds','Turainds', null, '09-JAN-1965', 'M', 204, 6.5, 150, 'painting');

INSERT INTO CUSTOMER VALUES(16, 'Sara','Singh', null, '09-JAN-1965', 'F', 205, 6.5, 145, 'reading');

INSERT INTO CUSTOMER VALUES(17, 'Sukjit','Singh', null, '09-JAN-1965', 'M', 206, 5.9, 150, 'cooking');

INSERT INTO CUSTOMER VALUES(18, 'Shital','Rai', null, '09-JAN-1965', 'F', 207, 6.1, 158, 'hiking');

INSERT INTO CUSTOMER VALUES(19, 'Shreya','Ghosal', null, '09-JAN-1965', 'F', 208, 5.6, 125, 'painting');

INSERT INTO CUSTOMER VALUES(20, 'Sophie','Rao', null, '09-JAN-1965', 'F', 209, 5.6, 130, 'running');

INSERT INTO CUSTOMER VALUES(21, 'Ram','Pandit', null, '09-JAN-1965', 'M', 210, 6.5, 165, 'reading');

INSERT INTO CUSTOMER VALUES(22, 'Rosy','Ghimire', null, '09-JAN-1965', 'F', 211, 5.5, 150, 'cycling');

INSERT INTO CUSTOMER VALUES(23, 'Sony','Bhatt',null, '09-JAN-1965', 'F', 212, 6.0, 140, 'hiking');

select \* from CUSTOMER;

SELECT \* from CUSADDRESS;

* **Jennifer**

CREATE Table Payment (

PymID varchar(10)

PymAmt decimal (10,2),

PymDt date,

PymStat var(10),

Primary key(PymID));

CREATE Order (

OrdID varchar (10) not null,

CusID int not null,

OrdDt date,

PymID varchar(10)

OrdStatus varchar(10),

OrdStatChgDt date,

Primary key(OrdID));

CREATE WareHouse (

WhCode varchar(10) not null,

ProdCode varchar(10) not null,

AvailableUnits int,

Primary key (WhCode));

CREATE Purchase (

OrdID varchar (10) not null,

ProdCode varchar(10) not null,

Primary key (OrdID, ProdCode));

ALTER TABLE Order

ADD CONSTRAINT CusID\_FK FOREIGN KEY (CusID)

REFERENCES Customer (CusID);

ALTER TABLE Order

ADD CONSTRAINT PymID\_FK FOREIGN KEY (PymID)

REFERENCES Payment (PymID);

ALTER TABLE WareHouse

ADD CONTRAINT ProdCode\_FK FOREIGN KEY (ProdCode)

REFERENCES Product (ProdCode);

ALTER TABLE Purchase

ADD CONSTRAINT OrdID\_FK FOREIGN KEY (OrdID)

REFERENCES Order (OrdID);

ALTER TABLE Purchase

ADD CONSTRAINT ProdCode\_FK FOREIGN KEY (ProdCode)

REFERENCES Product (ProdCode);

Insert into Payment values ('Credit', 100.00, '05-02-2022', 'Paid');

Insert into Payment values ('Paypal', 259.95, '04-29-2022', 'Pending');

Insert into Payment values ('Debit', 51.99, '05-12-2022', 'Paid');

Insert into CusOrder values ('A9373020', 12, '05-02-2022', 'Credit', 'Shipped', '05-03-2022');

Insert into CusOrder values ('A9373022', 13, '04-29-2022', 'Paypal', 'Shipped', '05-03-2022');

Insert into CusOrder values ('A9373024', 14, '05-12-2022', 'Debit', 'Shipped', '05-13-2022');

Insert into WareHouse values ('1', 'A123', 327);

Insert into WareHouse values ('2', 'B123', 53);

Insert into WareHouse values ('3', 'C123', 5287);

Insert into Purchase values ('A9373020', 'A123');

Insert into Purchase values ('A9373022', 'B123');

Insert into Purchase values ('A9373024', 'C123');