NAUREEN IMRAN

2021-2022

*Computer Fundamentals Assignment*

PORTFOLIO 1

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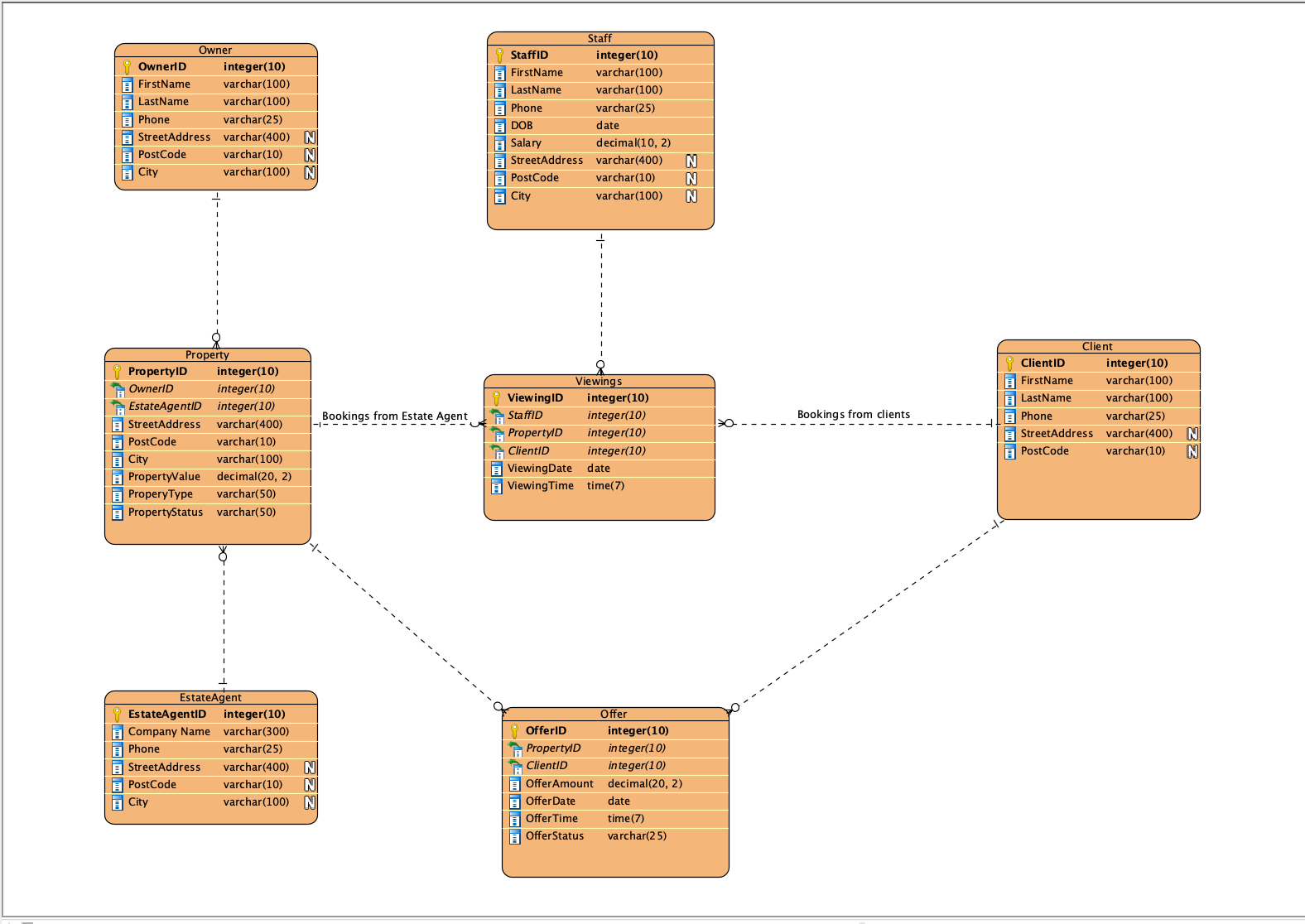
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# Entity Relationship Diagram



**Assumptions:**

There are few assumptions have been made in Entity Relation Diagram to design the database, which are as following:

There can be more than one property for one owner.

A estate agent may have more than one property for sale.

The viewing company may have more than one booking for one property .

One or more staff members may facilitate the viewing of one property.

One client can have more than one viewing bookings for one or many properties.

One client can make none or more than one offers.

# SQL Code

PART :B

--Delete Tables

PRAGMA foreign\_keys = OFF;

Drop TABLE if exists demo;

Drop TABLE if EXISTS owner;

Drop TABLE if EXISTS client;

Drop TABLE if EXISTS staff;

drop TABLE if EXISTS property;

drop TABLE if EXISTS estate\_agent;

drop TABLE if EXISTS offer;

drop TABLE if EXISTS viewings;

PRAGMA foreign\_keys = ON;

CREATE TABLE owner(

owner\_id int(10) PRIMARY KEY

,first\_name varchar(100),

last\_name varchar(100),

phone varchar(25),

street\_address varchar(400),

postcode varchar(10),

city varchar(100)

);

CREATE TABLE estate\_agent(

estateagent\_id int(10) PRIMARY KEY

,company\_name varchar(300),

phone varchar(25),

street\_address varchar(400),

postcode varchar(10),

city varchar(100)

);

CREATE TABLE client(

client\_id int(10) PRIMARY KEY

,first\_name varchar(100),

lastname varchar(100),

phone varchar(25),

street\_address varchar(400),

postcode varchar(10),

city varchar(100)

);

CREATE TABLE staff(

staff\_id int(10) PRIMARY KEY

,first\_name varchar(100),

last\_name varchar(100),

phone varchar(25),

dob date ,

salaray decimal(10,2),

street\_address varchar(400),

postcode varchar(10),

city varchar(100)

);

create TABLE property(

property\_id int(10) PRIMARY key,

street\_address varchar(400),

postcode varchar(10),

city varchar(100),

property\_value decimal(20,2),

property\_type varchar(50),

property\_status varchar(50),

owner\_id int(10),

estateagent\_id int(10),

FOREIGN KEY (owner\_id) REFERENCES owner(owner\_id)

FOREIGN KEY (estateagent\_id) REFERENCES estate\_agent(estateagent\_id)

);

Create table offer(

offer\_id int(10) primary key ,

offer\_amount decimal(20,2),

offer\_date date,

offer\_time time,

offer\_status varchar(25),

property\_id int(10),

client\_id int(10),

FOREIGN KEY (property\_id) REFERENCES property(property\_id),

FOREIGN KEY (client\_id) REFERENCES client(client\_id)

);

CREATE table viewings(

viewing\_id integer PRIMARY KEY AUTOINCREMENT,

viewing\_date date,

viewing\_time time,

staff\_id int(10),

property\_id int(10),

client\_id int(10),

FOREIGN KEY (staff\_id) REFERENCES staff(staff\_id),

FOREIGN KEY (client\_id) REFERENCES client(client\_id),

FOREIGN KEY (property\_id) REFERENCES property(property\_id)

);

-- Data Entry

Insert INTO owner

VALUES(1, 'Bibi', 'Treversh' , '0391856306', '140 Hallows Park', 'Manchester', 'M17 3SA'),

(2 ,'Katina', 'Priestland', '0179520034', '32 Brown Plaza', 'Manchester', 'M12 3BQ'),

(3 ,'Karee', 'Drain', '0855444631', '83 Elgar Way', 'Leeds','LS21 4GH'),

(4, 'Emmeline', 'Andrysiak' , '0452895298', '58 Sheridan Court' , 'Bradford' ,'B29 4YJ'),

(5 ,'Micky', 'Josephs' , '0278642281','43 Scott Place', 'Manchester' ,'M21 5SD');

INSERT INTO staff(staff\_id,first\_name,last\_name,dob,phone,street\_address,city,postcode,salaray)

VALUES(1, 'Amity', 'Grewe', '2001-11-28', '07591633241', '65 Ramsey Plaza', 'Manchester', 'M18 7BA', 24680.62),

(2 ,'Darsie', 'Dance', '2001-03-28' ,'07558969414', '17 Haas Point', 'Manchester', 'M25 3GH', 27453.25),

(3, 'Heywood', 'Westcot', '2002-01-09','07412563258', '63 Carpenter Parkway', 'Salford', 'M6 7JK', 21500.33),

(4, 'Deanna', 'Eborn', '1995-07-22', '07963852741', '3 Northwestern Junction', 'Stockport', 'SK6 7NF', 26356.33),

(5, 'Ced', 'Yetton', '1993-07-10' ,'07365214895', '6 Browning Road', 'Knutsofrd', 'WA14 4XA', 34121.91);

INSERt into client(client\_id,first\_name, lastname, phone, street\_address,city, postcode)

VALUES(1, 'Carissa', 'Cawdery', '07528639417', '66 Monterey Centre', 'London', 'SE11 1DR'),

(2, 'Giselle', 'Hollindale', '07412356956', '58 Tennyson Street', 'Newcastle', 'N4 9PU'),

(3, 'Nevsa', 'Dutnell', '07951753852', '31 Banding Trail', 'Manchester', 'M1 2WC'),

(4, 'Amii', 'Grenkov', '07489156723', '79 Clove Street', 'Manchester', 'M20 4BG'),

(5, 'Hiram', 'Dunford', '07935716284', '19 Charing Cross Place', 'Leeds' , 'LS6 6FF');

Insert into estate\_agent(estateagent\_id, company\_name, phone, street\_address, city, postcode)

VALUES (1, 'Hills-Beatty' ,'0161252658', '19 Algoma Street', 'Manchester', 'M23 4BN'),

(2, 'Christiansen-Heaney', '0161231415', '533 Sage Circle', 'Cardiff', 'CF24 4XA'),

(3, 'Buckridge-Bartoletti', '0161251365', '1 Caliangt Avenue', 'Leeds', 'L49 4LK'),

(4, 'Boyer LLC', '0161897654', '28 Express Point', 'Manchester', 'M18 4VC'),

(5, 'Swaniawski Inc', '0161235478', '6 Merchant Avenue', 'Manchester', 'M5 3GR');

INSERT into property(property\_id,street\_address,city,postcode,property\_type,property\_value,property\_status,owner\_id,estateagent\_id)

VALUES(1,'28 Kinsman Hill', 'Manchester', 'M20 9WR', 'house', 272867.00 ,'sold', 2, 1);

INSERT into property(property\_id,street\_address,city,postcode,property\_type,property\_value,property\_status,owner\_id,estateagent\_id)

VALUES(2, '77 Nobel Parkway', 'London', 'SE15 2RP', 'commercial', 175780.00, 'not sold', 3, 1);

;

INSERT into property(property\_id,street\_address,city,postcode,property\_type,property\_value,property\_status,owner\_id,estateagent\_id)

VALUES(3, '4 Rockefeller Crossing', 'Manchester', 'M12 6BN', 'house', 287429.00, 'not sold', 5 ,2) ;

INSERT into property(property\_id,street\_address,city,postcode,property\_type,property\_value,property\_status,owner\_id,estateagent\_id)

VALUES(4, '2 Junction', 'Leeds', 'LS9 5KL', 'house', 268249.00 , 'not sold', 1, 3);

INSERT into property(property\_id,street\_address,city,postcode,property\_type,property\_value,property\_status,owner\_id,estateagent\_id)

VALUES(5, '7 Basil Hill', 'Manchester', 'M1 1PS', 'commercial', 204854.00, 'sold', 1, 3);

INSERT into property(property\_id,street\_address,city,postcode,property\_type,property\_value,property\_status,owner\_id,estateagent\_id)

VALUES(6, '6 Mitchell Court', 'Manchester', 'M50 9AH', 'house', 231120.00, 'not sold', 2, 5);

INSERT into property(property\_id,street\_address,city,postcode,property\_type,property\_value,property\_status,owner\_id,estateagent\_id)

VALUES(7, '64 Crescent Oaks Alley', 'Liverpool', 'L3 3ZA', 'house', 300000.00, 'not sold', 3 ,5 );

INSERT into property(property\_id,street\_address,city,postcode,property\_type,property\_value,property\_status,owner\_id,estateagent\_id)

VALUES(8, '8 Logan Pass', 'Liverpool','L4 8DF', 'house', 160756.00, 'sold' ,4 ,3 );

INSERT into property(property\_id,street\_address,city,postcode,property\_type,property\_value,property\_status,owner\_id,estateagent\_id)

VALUES(9, '83 Service Court', 'Manchester', 'M25 9BM', 'house', 194358.00, 'sold', 1, 4);

INSERT into property(property\_id,street\_address,city,postcode,property\_type,property\_value,property\_status,owner\_id,estateagent\_id)

VALUES

(10

,'9 Golf Pass'

, 'Manchester'

, 'M17 4QE'

,'house'

,274822.00

,'not sold'

,2,

3);

INSERT into offer(offer\_id, offer\_amount, offer\_status, offer\_date, offer\_time,property\_id, client\_id)

VALUES(1,237350.09, "Accepted", '2020-10-07', '20:51:30',1,5),

(2, 167667.27, "Not Accepted", '2020-10-08', '23:27:40',2,2),

(3, 174990.51, 'Not Accepted', '2020-10-08', '10:32:12',2,3),

(4, 231261.71, 'Accepted', '2020-10-09', '12:06:28',5,1),

(5, 215716.17, 'Accepted', '2020-10-08', '22:38:33',4,4),

(6, 171437.58, 'Not Accepted', '2020-10-08', '7:29:20',2,1),

(7, 240183.82, 'Accepted', '2020-10-08', '11:32:29',3,2),

(8, 269592.57, 'Accepted', '2020-10-07', '10:22:43',2,2),

(9, 177028.21, 'Not Accepted', '2020-10-07', '10:48:50',3,5),

(10, 247666.22, 'Accepted', '2020-10-07', '8:13:59', 4,3);

INSERT into viewings(viewing\_date, viewing\_time,property\_id,staff\_id,client\_id)

VALUES

('2020-07-09', '20:13:06', 1,1,5),

('2020-10-07', '14:36:41',2,3,1),

('2020-10-07', '15:01:06',2,3,2),

('2020-08-09', '14:21:19',3,4,4),

('2020-12-07', '14:36:50', 4,5,1),

('2020-12-08', '14:25:37', 4,5 ,3),

('2020-07-09', '21:41:14', 5,2,4 ),

('2020-10-09', '17:55:42', 5,3,4 ),

('2020-10-07', '13:20:09', 1,3,4),

('2020-11-08', '13:22:21', 2,4,2);

Database Queries

**Part C**

**List all properties located in the city of Manchester with a list price of over £200,000.**

Select\*from property WHERE city='Manchester' and property\_value>200000

**List all viewings that took place in August or September 2020 and the clients who requested the viewings.**

select viewing\_id, viewing\_date,viewing\_time,first\_name,lastname,phone,property\_id,staff\_id

from viewings INNER join client USING (client\_id)

WHERE viewing\_date >='2020-08-01' AND viewing\_date<= '2020-09-30' ;

**For each owner, list their total portfolio value (i.e. the total of all their properties’ prices) but only for properties which are houses.**

Select owner\_id, first\_name,last\_name,phone,property\_type, sum(property\_value)"Total property Value"

from property INNER join owner USING (owner\_id)

WHERE property\_type="house"

group by (owner\_id)

**For each property, list the smallest offer made by clients and which client made the offer, but only for properties which have not been sold**

Select offer\_id, first\_name, lastname,offer\_amount FROM offer INNER join property USING (property\_id) INNER join client USING (client\_id)

WHERE property\_status="not sold"

ORDER by offer\_amount asc

limit 1