Group 27 CRN-46992-202002

Assignee's:

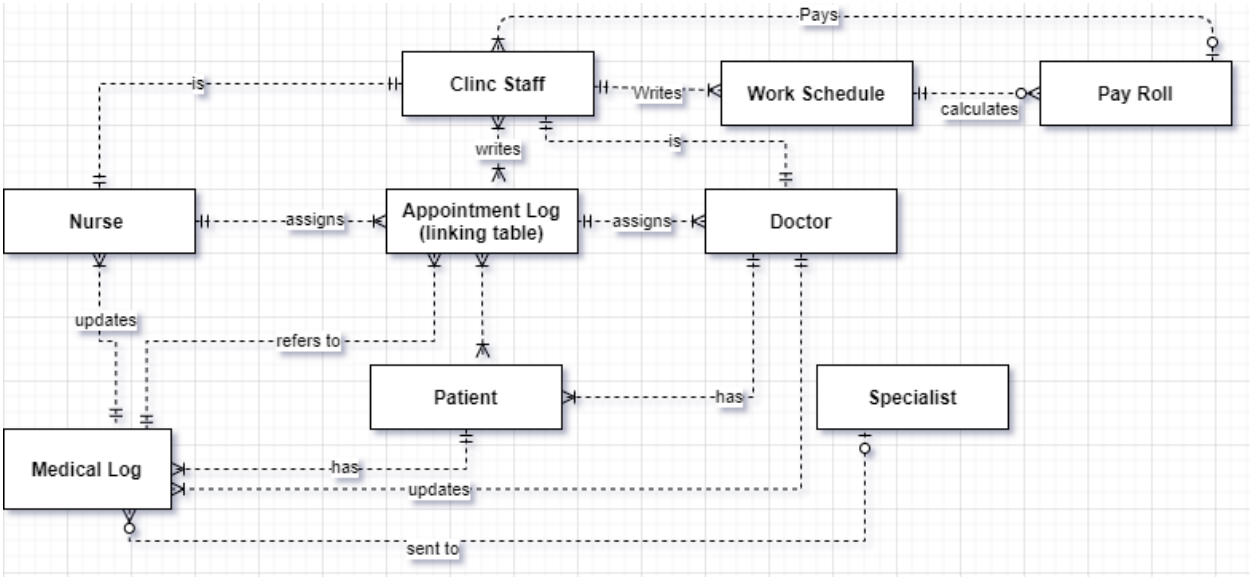
Connor Delaney – 101325077

Jordon Jensen – 100740151

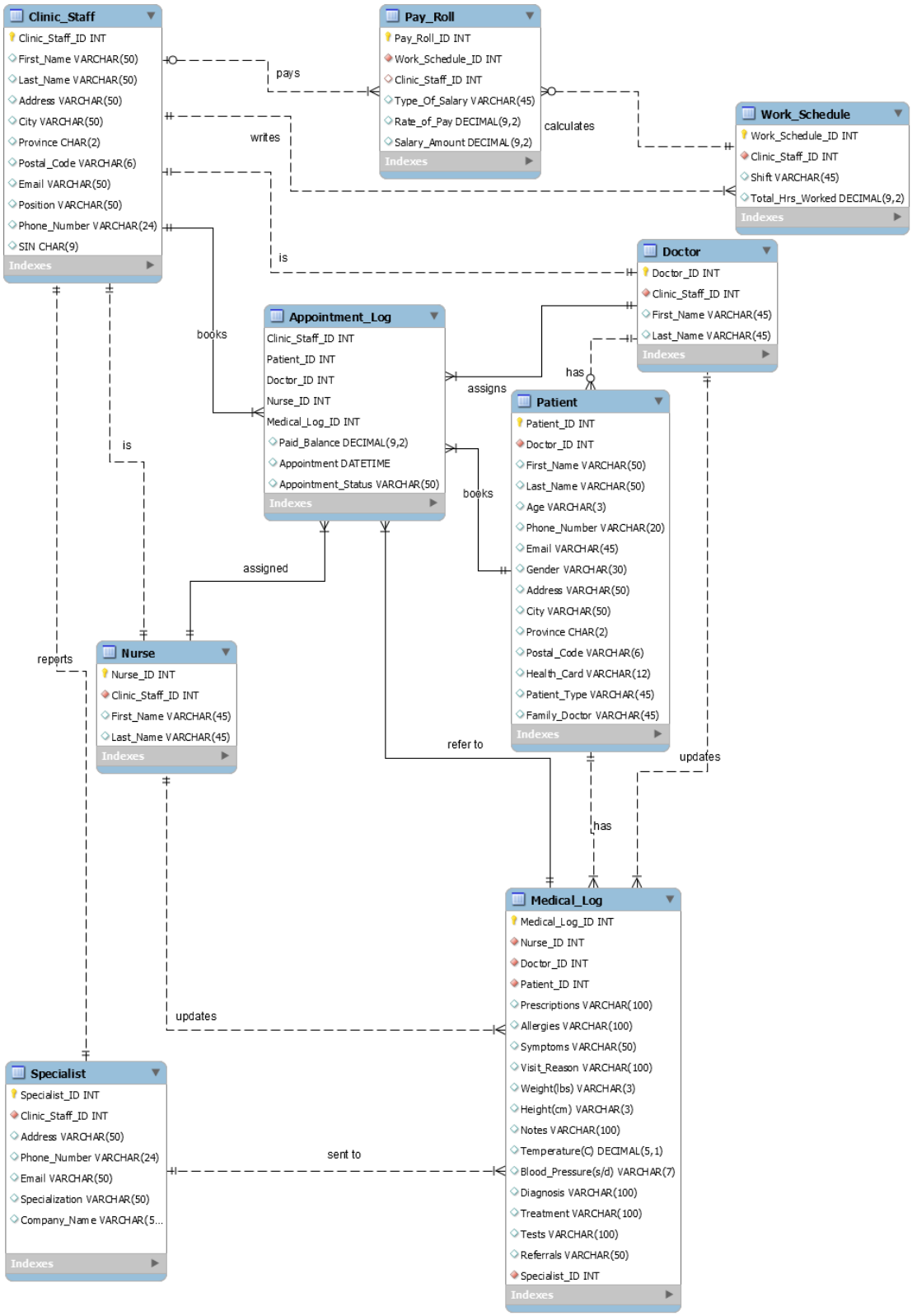
Julio Renaldi De Castro - 101295616

Michael Noseworthy – 101027533

Conceptual Data Model



Logical/Physical EER



Create the following **TEN queries**

a. Create a query that returns Patients' full names, addresses, phone numbers and email addresses. (Ten results minimum).

```
select concat(First_Name , ' ' , Last_Name) Full_Name, Address, Phone_Number, Email
from patient;
```

Full_Name	Address	Phone_Number	Email
Chris Marino	90 Niagara Ave	(416)-771-0981	marino245@fake.com
Jennifer White	7501 Dovercourt Rd	(416)-091-8991	jwhite@fake.com
Kent Clark	1111 Pine St	(647)-111-0912	kentman@fake.com
Ralph Wiggum	963 Agincourt St	(905)-447-0236	ralwiggs@fake.com
Lisa McMann	14-B Dupont Ave	(416)-201-3331	lmmann@fake.com
Nancy Marino	87 Blake Rd	(416)-556-7416	n.marino@fake.com
Jake Trapper	123 Johson Crt	(647)-007-8391	trapjake@fake.com
Maurice Johnson	1111 Rally rd	(416)-121-0101	johnsonmaur@fake.com
Anna Mars	652 Queen St E	(647)-900-1782	amarsa@fake.com
Julien Dillon	2002 Car Rd	(416)-513-3452	juldil@fake.com
Mark Dillon	2002 Car Rd	(416)-512-3452	mdillon@fake.com
Martin Michealson	19 Rose Ln	(416)-911-1119	mmicheals@fake.com
Mana Mune	2136 Spadina Ave	(905)-501-9910	mmune@fake.com
Dan Wiggum	963 Agincourt St	(416)-888-3322	dwiggum@fake.com
Courtney Callum	933 Kelp Rd	(647)-543-2201	corcallum@fake.com

b. Create a query that lists all patients who have not had any appointment in the clinic in the last 2 years (at least one patient)

```
select Patient_ID, Appointment
from appointment_log
where Appointment < '2019-12-31';
```

Patient_ID	Appointment
1110	2019-07-14 07:25:00
1111	2019-07-14 02:30:00
1109	2018-12-31 04:30:00

c. Create a query that returns the all appointment by a particular patient in the year of 2020 (should return 5 appointments at least) the result set would include patient names, examining doctors' and nurses' names, dates and times of the appointments, any tests ordered by the doctors for the patient.

```
Select concat(p.First_Name, ' ', p.Last_Name)Patient_Name, concat(d.First_Name, ' ', d.Last_Name) Doctor_Name,
    concat(n.First_Name, ' ', n.Last_Name) Nurse_Name, al.Appointment, ml.Tests
from appointment_log al, patient p, clinic_staff cs, doctor d, nurse n, medical_log ml
where appointment  between '2020-01-01' and '2020-12-31'
and al.Doctor_ID = d.Doctor_ID
and al.Nurse_ID = n.Nurse_ID
and al.Patient_ID = p.Patient_ID
and al.Medical_Log_ID = ml.Medical_Log_ID
and p.Patient_ID like "1102"
group by al.Appointment;
```

Patient_Name	Doctor_Name	Nurse_Name	Appointment	Tests
Jennifer White	John Smith	Amy Xan	2020-01-31 12:30:00	X-ray
Jennifer White	John Smith	Jake Rende	2020-02-09 08:33:00	Blood work and dialysis
Jennifer White	John Smith	Whitney Houston	2020-02-05 07:00:00	Blood Pressure check, and tonsil check
Jennifer White	John Smith	Kindra Bennet	2020-12-03 01:00:00	Blood pressure, and lung check
Jennifer White	John Smith	Janette Henning	2020-02-03 10:25:00	X-ray

d. Create a query that returns all appointments that were either cancelled, or patients were No Show in the month of December 2020. (five results minimum)

```
Select Appointment, Appointment_Status from appointment_log
where Appointment_Status like '%No%'
or appointment_Status like '%canceled%';
```

Appointment	Appointment_Status
2020-12-20 00:00:00	No Show
2020-12-03 01:00:00	Canceled
2020-12-01 08:00:00	Canceled
2021-12-14 01:25:00	No Show
2020-12-20 06:30:00	No Show

e. Create a query that that returns staff members' names (excluding doctors), their hourly rates, number of hours worked and Salary (calculated column; there are 13 employees in the clinic) for the two weeks period (

```
select concat(cs.First_Name,' ',cs.Last_Name) Full_Name,p.Rate_of_Pay, ws.Total_Hrs_Worked,
format((p.Rate_of_Pay * ws.Total_Hrs_Worked) * 2, 2) Bi_Weekly_Payroll
from pay_roll p, clinic_staff cs, work_schedule ws
where p.Pay_Roll_ID > '4010'
and cs.Clinic_Staff_ID = ws.Clinic_Staff_ID
and ws.Work_Schedule_ID = p.Work_Schedule_ID;
```

Full_Name	Rate_of_Pay	Total_Hrs_Worked	Bi_Weekly_Payroll
Janette Hemming	40.00	30.00	2,400.00
Amy Xan	40.00	28.00	2,240.00
Kevin Man	34.00	29.00	1,972.00
Jake Rende	34.00	30.00	2,040.00
Kindra Bennet	34.00	30.00	2,040.00
Whitney Houston	29.00	30.00	1,740.00
Jeff Frank	25.00	30.00	1,500.00
Emily Carr	25.00	30.00	1,500.00
Rachel Wood	22.50	30.00	1,350.00
Francine Dryer	22.50	25.00	1,125.00
Maxine Randall	21.60	25.00	1,080.00
Jack Jensen	26.00	30.00	1,560.00
Arch Benn	23.45	30.00	1,407.00
Ryan Reynolds	48.00	30.00	2,880.00

f. The Clinic Manager has decided to send “Happy holidays” greeting cards in December and needs the full names and complete addresses (street address, city, province, Postal Code) for all the staff at the clinic (Doctors, nurses, patients, secretaries) so create a query that returns this information (usually called a mailing label)

```
select
concat(cs.First_Name, ' ', cs.Last_Name)Full_Name, cs.Address, cs.City, cs.Province, cs.Postal_Code
from clinic_staff cs
union
select
concat(p.First_Name,' ', p.Last_Name)Full_Name, p.Address, p.City, p.Province, p.Postal_Code
from  patient p;
```

Full_Name	Address	City	Province	Postal_Code
John Smith	443 Watson Ave	Toronto	ON	M1N7C7
Jan Smithe	2356 John St	Toronto	ON	L1W2R5
Raplh Phines	104 Weather Rd	Scaboroguh	ON	M2C9L1
Zack Jameson	7458 Hampton Blvd	Markham	ON	C4R3M2
Kelly April	345 Runningman Rd	Toronto	ON	L1C5B9
Juanita Stinson	1291 Commerse St	Scarborough	ON	L1W4C7
Jamal Stevens	987 Willowbrook Ave	Scarboroguh	ON	M4O9V0
Jim Halpert	7421 Bay St	Toronto	ON	R5C8Z9
Pam Scott	45 Lacelle Blvd	Toronto	ON	C3V9B9
Juan Rodrigo	100 Peter St	Toronto	ON	L5V9B1
Janette Hemm...	987 Pickel Ave	Scarborough	ON	M1W7V3
Amy Xan	4111 Randell Rd	Markham	ON	W1M6Q2
Kevin Man	75 Dovercourt Ave	Toronto	ON	B3C6J9
Jake Rende	541 John Street	Toronto	ON	M4N6N6
Kindra Bennet	961 Roseway Crt	Scarborough	ON	L0V4T1
Whitney Hous...	14 Texas Rd	Etobicoke	ON	T6T9N0
Jeff Frank	778 Baldwin Ave	Scarborough	ON	M1N3E2
Emily Carr	9123 Rex Road	Toronto	ON	L0V3M3
Rachel Wood	11-B Montana Crt	Toronto	ON	R4L4N4
Francine Dryer	78966 Round Rd	Scarborough	ON	O1O0I0
Maxine Randall	1-A Lexington Blvd	Markham	ON	7B0J1L
Jack Jensen	3123 Brailey Ln	Etobicoke	ON	L1W1C7
Arch Benn	216 Balsam Rd	Toronto	ON	M4V9H1

g. Create a query that returns all patients enrolled permanently with one of the doctors

```
select concat(first_name, ' ', last_name) Full_Name, Patient_Type, family_doctor, Doctor_ID
from patient
where Family_Doctor like 'Dr. Smithe';
```

Full_Name	Patient_Type	family_doctor	Doctor_ID
Chris Marino	Enrolled	Dr. Smithe	2
Kent Clark	Enrolled	Dr. Smithe	2
Dan Wiggum	Enrolled	Dr. Smithe	2

h. Create a query that returns a list of all patients and their family member (add a column primary member id in the patient table; make one patient as the primary member and then create another column called relationship and add husband, wife, son, daughter etc.)

```
alter table patient
add primary_member_id int;

alter table patient
add relationship varchar(30);

update patient
set primary_member_id = 1
where patient_id = 1101;

update patient
set relationship = '(1) Mom'
where patient_id = 1106;

select patient_id, First_Name, Last_Name, primary_member_id, relationship
from patient
where Last_Name = 'marino';
```

patient_id	First_Name	Last_Name	primary_member_id	relationship
1101	Chris	Marino	1	NULL
1106	Nancy	Marino	NULL	(1) Mom

i. Create a query that would create a list of all patients that were seen by a particular doctor on a given date (i.e. 12 December, 2020)

```
select concat(p.first_Name,' ',p.last_name) Patient_Name, al.Appointment, concat(d.first_name,' ',d.last_name) Doctor_Name,
    al.Patient_ID, al.doctor_id
from appointment_log al, patient p, doctor d
where al.Appointment like '%2019-07-14%'
and al.Doctor_ID = d.Doctor_ID
and al.Patient_ID = p.Patient_ID
group by patient_name;
```

Patient_Name	Appointment	Doctor_Name	Patient_ID	doctor_id
Julien Dillon	2019-07-14 07:25:00	Ralph Phines	1110	3
Mark Dillon	2019-07-14 02:30:00	Ralph Phines	1111	3

j. Create a query that would return name of a patient who paid some sort of a fee to the clinic, also retrieve the service for which he paid and the doctor's name (for example Dr Smith, Sick Note)

```
select concat(p.first_name, ' ' , p.last_name)Patient_Name,al.Paid_Balance,al.Appointment_Status,
    ml.Visit_Reason, al.appointment, concat(d.first_name,' ',d.last_name) Doctor_Name
from appointment_log al, patient p, medical_log ml, doctor d
where al.paid_balance > 0.00
and al.patient_id = ml.patient_id
and d.Doctor_ID = ml.Doctor_ID
and visit_reason like '%doctor%'
group by visit_reason;
```

Patient_Name	Paid_Balance	Appointment_Status	Visit_Reason	appointment	Doctor_Name
Chris Marino	15.00	Checked-in	Doctor's note	2020-02-05 07:00:00	John Smith

Assumptions or Clarifications

-(Not a table but an attribute of table payroll)Vacation days for salary (base rate for salary, amount saved for hourly), this should be a parameter because it can be used later on to calculate a staff members vacation pay when they take a vacation, otherwise when they don't show up to work they won't be paid.

- Table for the specialists they send patients out too, this keeps a detailed record of who was sent there, by which doctor, why and when it happened. Also handy to keep track of when a result has come back and gives staff an easy way to keep track of this data. This was added in as it was something we had discussed.

- Insurance Info, would hold the company name, type of coverage, address of the place, would be useful to help track and pay balances for patients.

- The project outline never specified if there should be a clock-in, clock-out with dates in order to keep adequate tracking of hours. This would need to be implemented in order to know precisely what an hourly workers hours would ultimately be to give them an accurate pay check.

- For the mailing list the project requirements said it had to be staff, but inside of the parenthesis it mentioned clients, so we used a union in order to show the mailing addresses of all data available from patients and clinic staff. Was not too sure what do so we decided it was safer to have everything put in.

- Clinic_staff_ID was made optional in the pay roll table, because sometimes people are away for prolonged periods of times(Mat leave, etc.) and therefore would not be collecting a pay check from the company.