# Project2

## Relational Model:

Midwife(practitioner id, hemail, phone number, name, email)

* Foreign key hemail references Health Institution. Not null.

MainMidwife(pregnancy id, practitioner id)

* Foreign key pregnancy id references Pregnancy.
* Foreign key practitioner id references Midwife.
* Note: participation constraint can’t be enforced.

BackupMidwife(pregnancy id, practitioner id)

* Foreign key pregnancy id references Pregnancy.
* Foreign key practitioner id references Midwife.
* Note: participation constraint can’t be enforced.

Health Institution(**email**, address, phonenum, name, website)

Clinic(email)

* Foreign key email references Health Institution

BirthingCenters(email)

* Foreign key email references Health Insitution (2)

Father (RAMQ id, blood type, phone number, current profession, email, birthday, address, name)

Mother(RAMQ id, blood type, phone number, current profession, email, birthday, address, name)

CoupleMother(RAMQ id, couple id)

* Foreign key RAMQ id references Mother
* Foreign key couple id references Couple
* Note: participation constraint can’t be enforced.

CoupleFather(RAMQ id, couple id)

* Foreign key RAMQ id references Father
* Foreign key couple id references Couple

Couple(couple id, motherRAMQId)

* Foreign key motherRAMQId references Mother

OnlineInfoSessionAttendance(couple id, session id)

* Foreign key couple id references Couple
* Foreign key session id references Online Info Session.

Pregnancy(pregnancy id, couple id, last menstrual period due date, ultrasound due date, bcemail, birthloc, expected due date)

* Foreign key couple id references Couple. Not Null.
* Foreign key bcemail references BirthingCenter.

Online Info Session(session id, midwifePracId, language, date, time)

* Foreign key midwifePracId references Midwife. Not Null.

Appointment(appointment id, midwifePracId, pregnancy id, date, time)

* Foreign key pregnancy id references Pregnancy. Not Null.
* Foreign key midwifePracId references Midwife. Not Null.

Observation notes(note id, appointment id, date, time)

* Foreign key appointment id references Appointment. Not Null.

Medical test(test id, appointment id, forBaby, individualID, prescribed date, sampled date, location, lab date, test result, test type)

* Foreign key appointment id references Appointment. Not Null.

Technician(techid, name, phone number)

TechnicianInCharge(techid, test id)

* Foreign key techid references Technician NOT NULL
* Foreign key test id references Medical Test NOT NULL
* Note: participation constraint can’t be enforced.

Baby(baby id, pregnancy id, gender, blood type, date of birth, name)

* Foreign key pregnancy id references Pregnancy. Not Null.

## Pending Constraints

* Participation constraint for Mainmidwife can’t be enforced.
* Participation constraint for Backupmidwife can’t be enforced.
* Participation constraint for couple mother can’t be enforced.
* Participation constraint for for TechnicianInCharge can’t be enforced.

## SQL Queries

Q5 A)

CONNECT to cs421;

SELECT a.appointmenttime, m.ramqID, m.name, m.phonenum

FROM APPOINTMENT a, MOTHER m

WHERE a.appointmenttime >= '2022-03-21 00:00:00' AND a.appointmenttime < '2022-03-26 00:00:00' AND

a.midwifeID = (SELECT practitionerID FROM MIDWIFE WHERE MIDWIFE.name = 'Marion Girard') AND

m.ramqID = (SELECT motherramqID FROM COUPLE WHERE coupleID = (SELECT coupleID FROM PREGNANCY WHERE pregnancyID = (a.pregnancyID)));

A picture containing graphical user interface

Description automatically generated

Q5 B)

SELECT labdate, testresult

FROM MEDICALTEST

WHERE forbaby = false AND individualID = (SELECT coupleID FROM COUPLE WHERE motherramqID = (SELECT ramqID FROM MOTHER WHERE name = 'Victoria Gutierrez'))

AND appointmentID = (SELECT appointmentID FROM APPOINTMENT WHERE pregnancyID = (SELECT pregnancyID FROM PREGNANCY WHERE coupleID = individualID ORDER BY expecteddd DESC LIMIT 1,2));

Graphical user interface, application

Description automatically generated

5 C)

CONNECT to cs421;

SELECT HEALTHINSTITUTION.name, (SELECT COUNT(\*)  FROM PREGNANCY pg, MIDWIFE mw WHERE pg.midwifeID = mw.practitionerID

AND mw.hemail = HEALTHINSTITUTION.email AND pg.expecteddd >= '2022-07-01' AND pg.expecteddd <= '2022-07-31')

AS pregnancynum FROM HEALTHINSTITUTION;

A computer screen capture

Description automatically generated with medium confidence

5 D)

SELECT m.ramqID, m.name, m.phonenum

FROM MOTHER m, COUPLE c, PREGNANCY pg

WHERE m.ramqID = c.motherramqID AND c.coupleID = pg.coupleID

AND pg.MIDWIFEid = (SELECT practitionerID FROM MIDWIFE WHERE MIDWIFE.name = 'Lac-Saint-Louis')

AND pg.expecteddd > '2022-02-21';

A screenshot of a computer

Description automatically generated with medium confidence

5 E)

SELECT DISTINCT ramqID, MOTHER.name

FROM MOTHER

INNER JOIN COUPLE ON MOTHER.ramqID = COUPLE.motherramqID

INNER JOIN PREGNANCY ON PREGNANCY.coupleID = COUPLE.coupleID

INNER JOIN BABY ON BABY.pregnancyID = PREGNANCY.pregnancyID

WHERE (SELECT COUNT(\*) FROM BABY WHERE BABY.pregnancyID = PREGNANCY.pregnancyID) > 1;

A picture containing graphical user interface

Description automatically generated

## Midwife Information

6 A)

CONNECT TO cs421;

CREATE VIEW MIDWIFEINFO (mpracID, mname, mphone, memail, hname, haddress) AS

(SELECT MIDWIFE.practitionerID, MIDWIFE.name, MIDWIFE.phonenum, MIDWIFE.email, HEALTHINSTITUTION.name, HEALTHINSTITUTION.address FROM MIDWIFE

JOIN HEALTHINSTITUTION ON MIDWIFE.hemail = HEALTHINSTITUTION.email);

6 B)

A picture containing text

Description automatically generated

6 C)

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Description automatically generated with medium confidence

6 D)

A screenshot of a computer screen

Description automatically generated with medium confidence