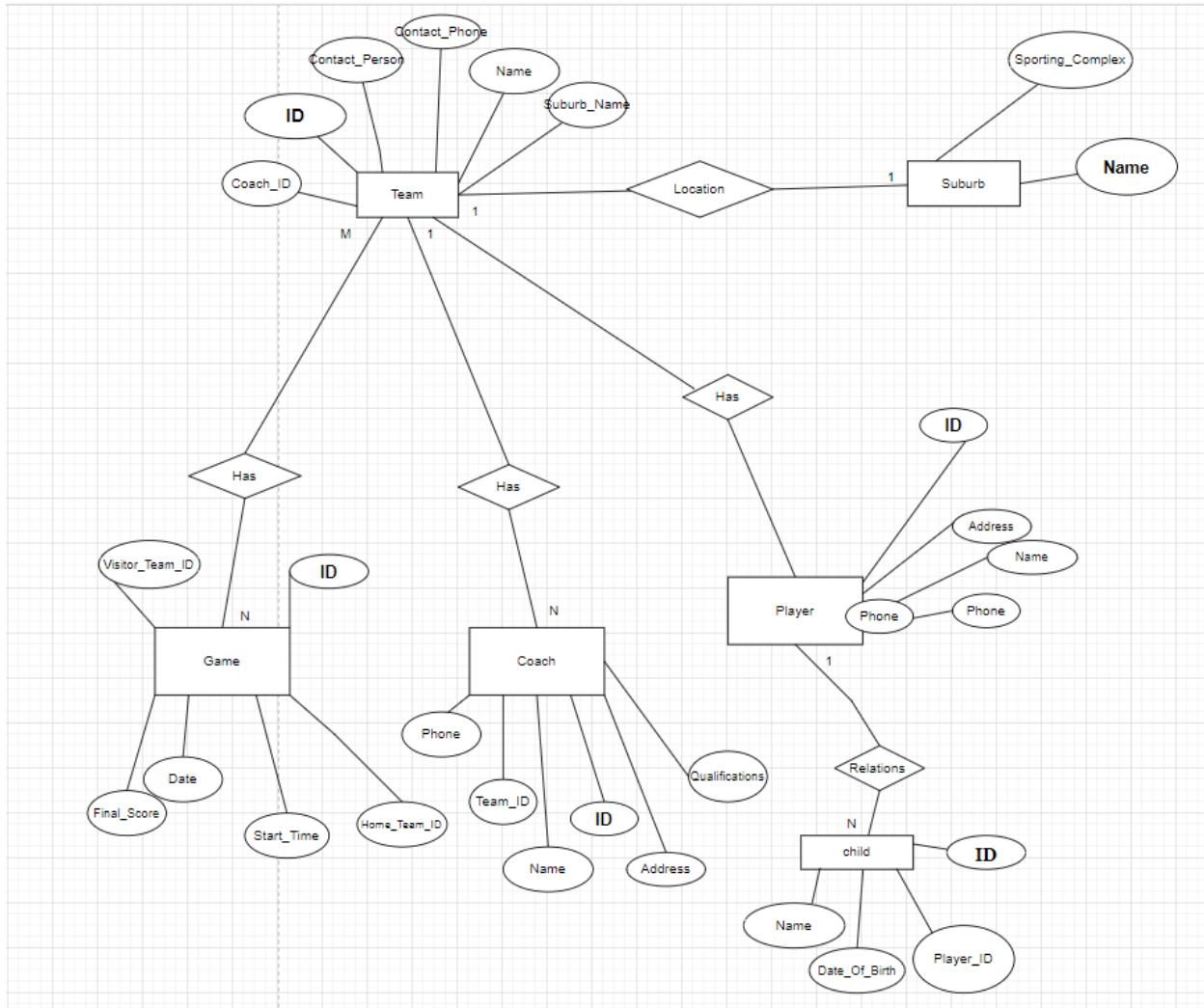


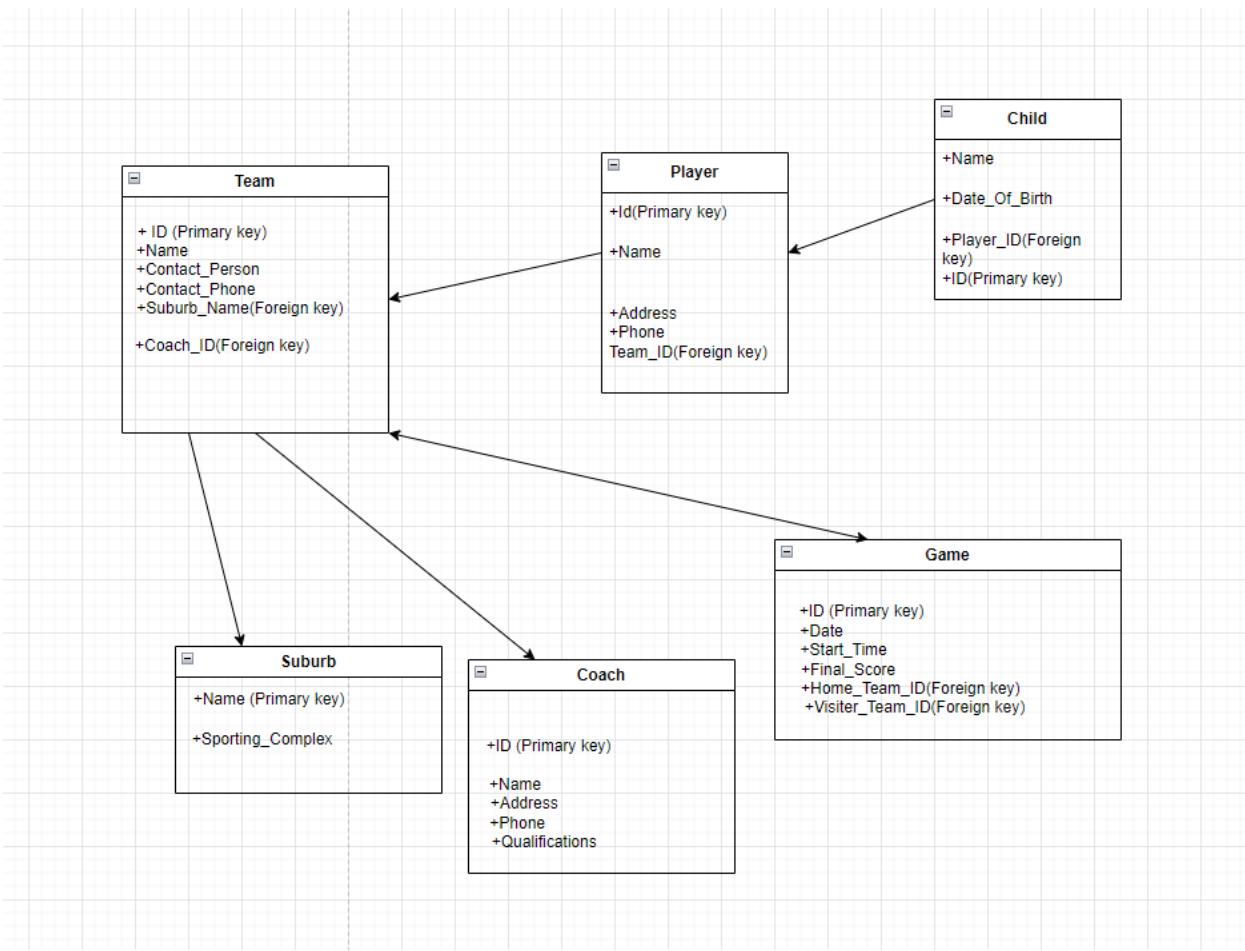
--Trịnh Tuấn Anh-HE176749-SE1742--

--PartA

--Task1



--Task2



--PartB
--Task1

```
/*1*/
select Top 1 Name , COUNT(ResNo) as NumberOfReservation
from Client c join Reservation r
on r.ClientNo = c.ClientNo
group by r.ClientNo, Name
order by NumberOfReservation DESC
```

	Name	NumberOfReservation
1	Robin Williams	5

```
/*2*/
select Top 1 c.Name, DATEDIFF(hh, r.StartDate, r.EndDate) as NumberTime
from Reservation r join Client c
on c.ClientNo = r.ClientNo
order by NumberTime DESC
```

	Name	NumberTime
1	Janice Freeman	240

/*3*/

```
select a.RoomNo, ac.AccTypeName, ac.AccTypeRate, NoOfGuests
from Accommodation a join Accommodation_type ac
on ac.AccTypeID = ac.AccTypeID
join Reservation_accommodation re
on re.RoomNo = a.RoomNo
join Reservation r
on r.ResNo = re.ResNo
join dbo.Client c
on c.ClientNo = r.ClientNo
where name like '%Perez'
```

	RoomNo	AccTypeName	AccTypeRate	NoOfGuests
1	102	Deluxe Cottage	120.00	1
2	102	Honeymoon Cottage	100.00	1
3	102	Deluxe Double	75.00	1
4	102	Deluxe Single	55.00	1
5	301	Deluxe Cottage	120.00	2
6	301	Honeymoon Cottage	100.00	2
7	301	Deluxe Double	75.00	2
8	301	Deluxe Single	55.00	2

/*4*/

```
select e.EquipName, BusinessName, RiskLevel
from Equipment e left join Supplies s
on s.EquipmentID = e.EquipmentID
left join Supplier su
on su.BillerCode = s.BillerCode
left join Uses_equipment us
on us.EquipmentID = e.EquipmentID
left join Outdoor_activity ou
on ou.ActivityID = us.ActivityID
left join Activity ac
on ac.ActivityID = ou.ActivityID
where RiskLevel = 'High'
```

	EquipName	BusinessName	RiskLevel
1	Mounteneering gear set	David and Sons	High
2	Mounteneering Rope	Gears	High
3	Bunjee Goggles	NULL	High
4	Bunjee Rope	Gears	High
5	Bunjee Helmet	Gears	High

/*5*/

```
select TOP 1 InstrName, COUNT(Supervision.SupervisorID) as NumberOfSupervision
from dbo.Supervision JOIN dbo.Activity_supervisor
on Activity_supervisor.SupervisorID = Supervision.SupervisorID
join dbo.Outdoor_instructor
```

```

on Outdoor_instructor.SupervisorID = Activity_supervisor.SupervisorID
group by ActivityID , InstrName
order by NumberOfSupervision DESC

```

	InstrName	NumberOfSupervision
1	Aaron Spencer	5

```

/*6*/
with t as(
select AVG(DATEDIFF(hh,StartDate,EndDate)) as Test
from dbo.Reservation
)
select ResNo,StartDate,EndDate
from dbo.Reservation, t where DATEDIFF(hh,StartDate,EndDate) >t.Test

```

	ResNo	StartDate	EndDate
1	1	2016-02-01	2016-02-05
2	10	2016-03-15	2016-03-20
3	11	2016-03-15	2016-03-20
4	13	2016-05-15	2016-05-20
5	14	2016-05-17	2016-05-21
6	18	2016-08-25	2016-08-29
7	2	2016-01-05	2016-01-10
8	20	2016-08-01	2016-08-06
9	3	2016-01-05	2016-01-15
10	8	2016-02-28	2016-03-03
11	9	2016-03-10	2016-03-15

```

/*7*/
select Reservation.ResNo, SUM(AccTypeRate) as totalofCom , SUM(ActRate) as TotalofAct
from dbo.Reservation
left join dbo.Reservation_accommodation
on Reservation_accommodation.ResNo = Reservation.ResNo
left join dbo.Accommodation
on Accommodation.RoomNo = Reservation_accommodation.RoomNo
left join dbo.Accommodation_type
on Accommodation_type.AccTypeID = Accommodation.AccTypeID
left join dbo.Supervision
on Supervision.ResNo = Reservation.ResNo
left join dbo.Activity
on Activity.ActivityID = Supervision.ActivityID
group by Reservation.ResNo

```

	ResNo	totalOfCom	TotalofAct
1	1	300.00	1000.00
2	10	480.00	1000.00
3	11	55.00	NULL
4	12	NULL	200.00
5	13	75.00	NULL
6	14	520.00	950.00
7	15	120.00	NULL
8	16	75.00	50.00
9	17	260.00	900.00
10	18	75.00	50.00
11	19	450.00	800.00
12	2	200.00	150.00
13	20	150.00	500.00
14	3	120.00	NULL
15	4	100.00	200.00
16	5	260.00	900.00
17	6	120.00	50.00
18	7	120.00	NULL
19	8	100.00	NULL
20	9	1440.00	1275.00

--Task2

```
/*a*/
CREATE PROC Proc1
AS
SELECT CCondition.ClientNo,Name,Address,Phone,Email
FROM dbo.Client JOIN dbo.CCondition
ON CCondition.ClientNo = Client.ClientNo
WHERE Client.ClientNo NOT IN (SELECT ClientNo
FROM dbo.CCondition WHERE Condition = 'Heart Condition'
OR Condition = 'Acrophobia')

/*b*/
CREATE FUNCTION Fun1(@Reservation_Number INT , @ActID INT, @Date DATE)
RETURNS VARCHAR(50)
AS
BEGIN
    DECLARE @Name NVARCHAR(50), @supervisorId INT
    set @supervisorId = (SELECT SupervisorID FROM Supervision WHERE ResNo =
@reservation_Number AND ActivityID = @ActID AND Day = @Date)

    IF(@supervisorId IN (SELECT SupervisorID FROM Outdoor_instructor))
        SET @name = (SELECT InstrName FROM dbo.Outdoor_instructor WHERE
SupervisorID = @supervisorId)
    ELSE IF (@supervisorId IN (SELECT SupervisorID FROM dbo.Swimming_instructor))
        SET @name = (SELECT SwimName FROM dbo.Swimming_instructor where
SupervisorID = @supervisorId)
    ELSE
        SET @name = (SELECT MassName FROM dbo.Masseuse WHERE SupervisorID =
@supervisorId)
```

```
        RETURN @name
END

--Task3
CREATE TRIGGER Tri1 ON dbo.Client_preference
INSTEAD OF INSERT
AS
BEGIN
    DECLARE @Con NVARCHAR(50)
    SET @Con = (SELECT Condition FROM Inserted JOIN dbo.CCondition
                ON Inserted.ClientNo
                = dbo.CCondition.ClientNo)
    DECLARE @Act NVARCHAR(20)
    SET @Act = (SELECT ActName FROM Inserted JOIN dbo.Activity
                ON Activity.ActivityID = Inserted.ActivityID)
    IF(@Act = 'Rafting' AND @Con = 'AquaPhobia')
        BEGIN
            RAISERROR('The client can not choose Rafting because they are
AquaPhobia ', 16, 1)
        END
    END
END
```