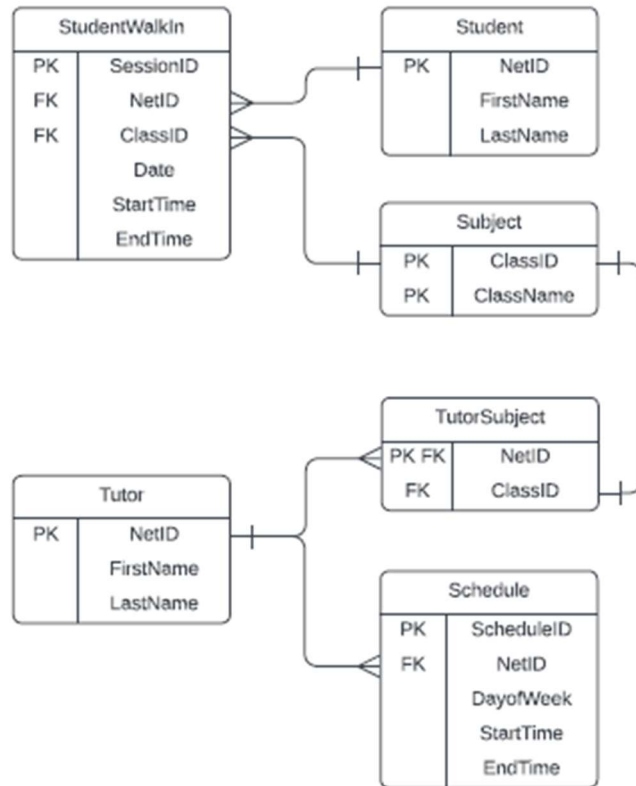


Ethan West
CS 4332.001
Project 8

PART I:

a)



** Changed the Subject table to have a composite primary key **

PART II:

c) Finalized UI

Check in/out

The STUDY Check-in

* Required

1. NetID *

Enter your answer

2. Class ID (ex: MATH 1315) *

Enter your answer

Submit

The STUDY Check-out

* Required

1. NetID *

Enter your answer

Submit

Schedule Log / Tutor Creation


Name: Content Area:

Number of hours you prefer to work each week:

Instructions for how to complete: Complete the availability form below with all times you are able to work in the STUDY. The STUDY hours of operation are subject to change. You must list at least 5 more hours of availability than the actual number of hours you wish to work each week (EX: If you want to work 10 hours/week, you must list 15 hours of availability). Your schedule will be developed based on the hours of availability you provide. You will receive your spring schedule before the start of the semester. Availabilities are due by 11/21, and the deadline for schedule changes is January 31st, 2024.


	Monday	Tuesday	Wednesday	Thursday	Friday	Sunday
10-10:30am	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10:30-11am	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11-11:30am	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11:30-12pm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12-12:30pm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12:30-1pm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1-1:30pm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
1:30-2pm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2-2:30pm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2:30-3pm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
3-3:30pm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
3:30-4pm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
4-4:30pm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
4:30-5pm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
5-5:30pm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
5:30-6pm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
6-6:30pm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>

Tutor Subject Declaration:


...

The STUDY: Tutor Subject

* Required

1. NetID * 


Enter your answer

2. What is your subject area? * 

☐ Math

☐ Science

☐ Business

3. What math classes can you tutor? * 

☐ CS 1428

☐ CS 2308

☐ MATH 1315

☐ MATH 1316

☐ MATH 1319


☐ MATH 1329

☐ MATH 2328

☐ MATH 2417

☐ MATH 2471

☐ MATH 2472

4. What science classes can you tutor? * 


☐ BIO 1330

☐ BIO 1331

☐ CHEM 1341

☐ CHEM 1342

☐ CHEM 2341

5. What business classes can you tutor? * 

☐ ACC 2362

☐ ACC 3305

☐ ACC 3308

☐ ACC 3313

d) Queries:

1. What is the average session time for a walk in who was being tutored in a math class

Database91 : Database- C:\Users\ethan\OneDrive\Documents\Database91.mdb (Access 2002 - 2003 file format) - Access

File Home Create External Data Database Tools Help Query Design Tell me what you want to do

Tables

Search...

Schedule

Query1 Query2 StudentWalkIn

```
1 SELECT Avg(DateDiff('n', StartTime, EndTime)) AS AVERAGE_SESSION_TIME
2 FROM StudentWalkIn
3 WHERE ClassID LIKE 'MATH*'
```

AVERAGE_SESSION_TIME

56.2604166666667

2. What are the names and IDs of the top 3 tutors who work the most

```
SELECT TOP 3
    t.FirstName,
    t.LastName,
    t.NetID,
    SUM(DateDiff('n', s.StartTime, s.EndTime)) AS Total_Min_Worked
FROM Tutor AS t INNER JOIN Schedule AS s
ON t.NetID = s.NetID
GROUP BY t.NetID, t.FirstName, t.LastName
ORDER BY SUM(DateDiff('n', s.StartTime, s.EndTime)) DESC;
```

FirstName	LastName	NetID	Total_Min_Worked
Jaxon	Long	bkf67	960
Megan	Carter	asd874	900
Ethan	Price	gfw192	870

3. What class has the most walk-in's

```
1 SELECT TOP 1 s.ClassID, ClassName, COUNT(*) AS Number_Of_Sessions
2 FROM Subject AS s INNER JOIN StudentWalkIn AS w
3 ON s.ClassID = w.ClassID
4 GROUP BY s.ClassID, s.ClassName
5 ORDER BY COUNT(*) DESC;
```

ClassID	ClassName	Number_Of_Sessions
MATH 1315	College Algebra	41

4. What tutor can tutor the most classes

Query1	Query2	StudentWalkIn	Tutor
<pre> 1 SELECT TOP 1 t.FirstName, t.LastName, COUNT(*) AS Class_Count 2 FROM TutorSubject AS ts INNER JOIN Tutor AS t ON ts.NetID = t.NetID 3 GROUP BY ts.NetID, t.FirstName, t.LastName 4 ORDER BY COUNT(*) DESC; </pre>			
FirstName	LastName	Class_Count	
Oliver	Henderson	4	

5. Who is working on Monday and can tutor more than three math classes

```
Query1  Query2  X
1  SELECT t.FirstName, t.LastName, COUNT(ts.ClassID) AS math_classes
2  FROM ((Tutor AS t
3       INNER JOIN TutorSubject AS ts ON t.NetID = ts.NetID)
4       INNER JOIN Schedule AS s ON t.NetID = s.NetID)
5  WHERE s.DayofWeek = 'Monday' AND ts.ClassID LIKE 'MATH*'
6  GROUP BY t.NetID, t.FirstName, t.LastName
7  HAVING COUNT(ts.ClassID) > 3
8
```

FirstName ▾	LastName ▾	math_class ▾	
Megan	Carter	4	
Jaxon	Long	6	

6. What were the top 3 longest walk-in's sessions and what classes where they for

Query1	Query2
<pre> 1 SELECT TOP 3 s.ClassName, DateDiff('n', sw.StartTime, sw.EndTime) AS SessionLength 2 FROM StudentWalkIn AS sw INNER JOIN Subject AS s ON sw.ClassID = s.ClassID 3 GROUP BY ClassName, DateDiff('n', sw.StartTime, sw.EndTime) 4 ORDER BY DateDiff('n', sw.StartTime, sw.EndTime) DESC </pre>	
ClassName	SessionLeng
Survey of Income Tax	60
Survey of Contemporary Mathem	60
Pre-Calculus Mathematics	60

7. Who is working on Fridays at 10AM and what can they tutor

```

1 SELECT t.FirstName, t.LastName, sub.ClassName
2 FROM ((Tutor AS t
3         INNER JOIN TutorSubject AS ts ON t.NetID = ts.NetID)
4         INNER JOIN Schedule AS sch ON t.NetID = sch.NetID)
5         INNER JOIN Subject AS sub ON ts.ClassID = sub.ClassID)
6 WHERE sch.DayOfWeek = 'Friday' AND sch.StartTime = #10:00:00#

```

FirstName	LastName	ClassName
Megan	Carter	College Algebra
Megan	Carter	Calculus I
Jaxon	Long	Survey of Cont
Jaxon	Long	Mathematics fo
Jaxon	Long	Mathematics fo
Addison	Bailey	Foundations of
Addison	Bailey	Mathematics fo
Aubrey	Stewart	General Chemi
Aubrey	Stewart	General Chemi
Aubrey	Stewart	Organic Chemi
Caleb	Nguyen	Business Finan
Caleb	Nguyen	Financial Mana
Ethan	Price	Mathematics fo
Ethan	Price	Pre-Calculus M
Ellie	Baker	Functional Biol
Ellie	Baker	Organismal Bic
Joseph	West	General Chemi
Joseph	West	General Chemi

8. What students visited the most, and what was the primary class they were getting tutored in

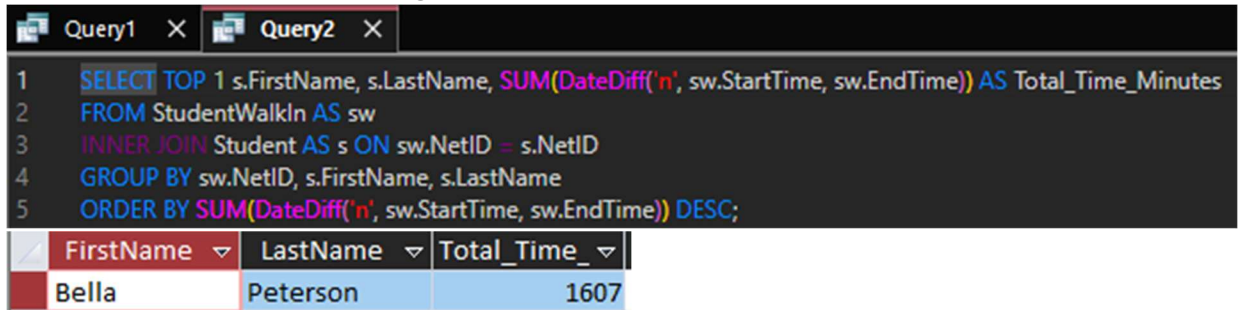
```

1 SELECT TOP 1 st.FirstName, st.LastName, sw.ClassID, COUNT(*) AS Visits
2 FROM StudentWalkIn AS sw INNER JOIN Student st ON sw.NetID = st.NetID
3 GROUP BY sw.ClassID, st.FirstName, st.LastName
4 ORDER BY COUNT(*) DESC;

```

FirstName	LastName	ClassID	Visits
Ellie	Baker	MATH 1319	14

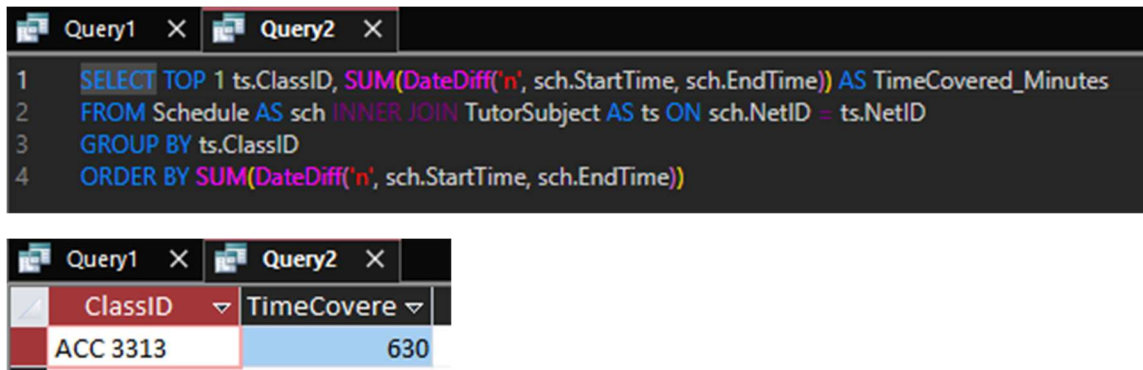
9. What students visited for the longest time



```
1 SELECT TOP 1 s.FirstName, s.LastName, SUM(DateDiff('n', sw.StartTime, sw.EndTime)) AS Total_Time_Minutes
2 FROM StudentWalkIn AS sw
3 INNER JOIN Student AS s ON sw.NetID = s.NetID
4 GROUP BY sw.NetID, s.FirstName, s.LastName
5 ORDER BY SUM(DateDiff('n', sw.StartTime, sw.EndTime)) DESC;
```

FirstName	LastName	Total_Time_Minutes
Bella	Peterson	1607

10. What is the total number of hours the least tutored class is covered for.



```
1 SELECT TOP 1 ts.ClassID, SUM(DateDiff('n', sch.StartTime, sch.EndTime)) AS TimeCovered_Minutes
2 FROM Schedule AS sch INNER JOIN TutorSubject AS ts ON sch.NetID = ts.NetID
3 GROUP BY ts.ClassID
4 ORDER BY SUM(DateDiff('n', sch.StartTime, sch.EndTime))
```

ClassID	TimeCovered_Minutes
ACC 3313	630

e) The second DBMS I used was Microsoft Access which can be seen in the first query screenshot.