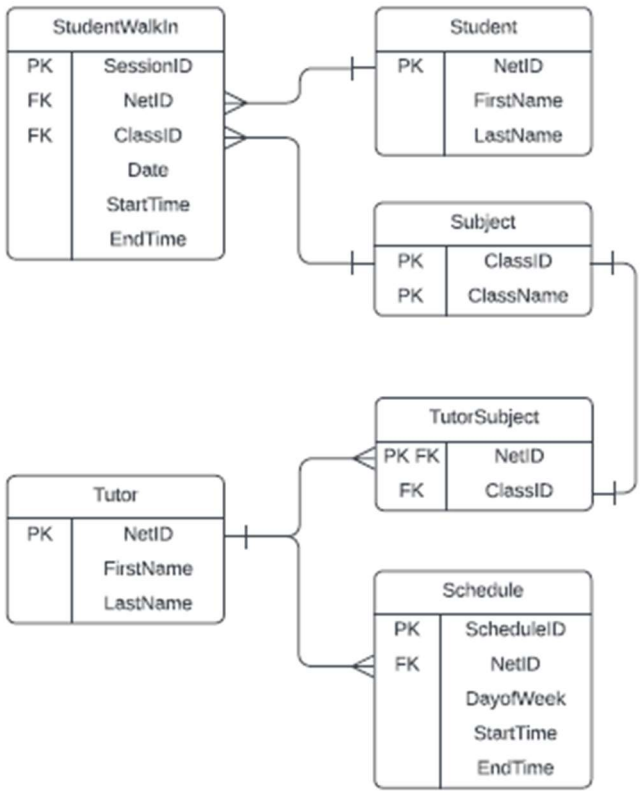
Ethan West
CS 4332.001
Project 7

PART I:

a)

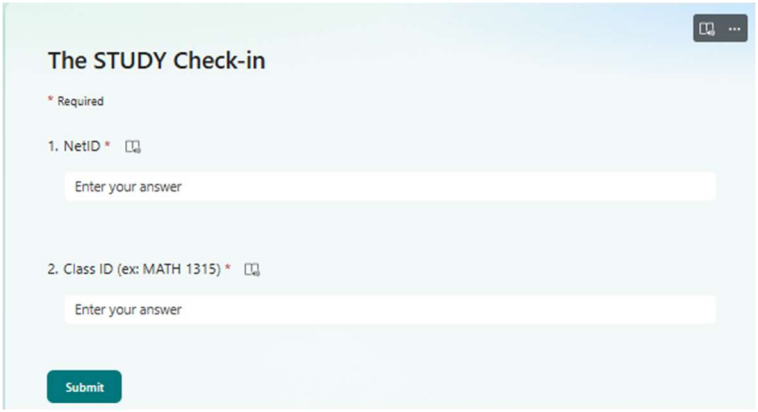


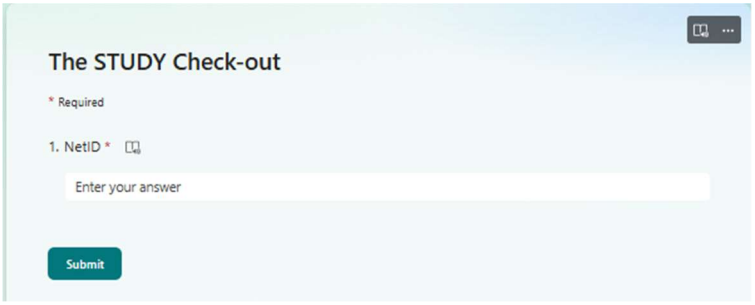
** Changed the Subject table to have a composite primary key **

PART II:

c) Finalized UI

Check in/out





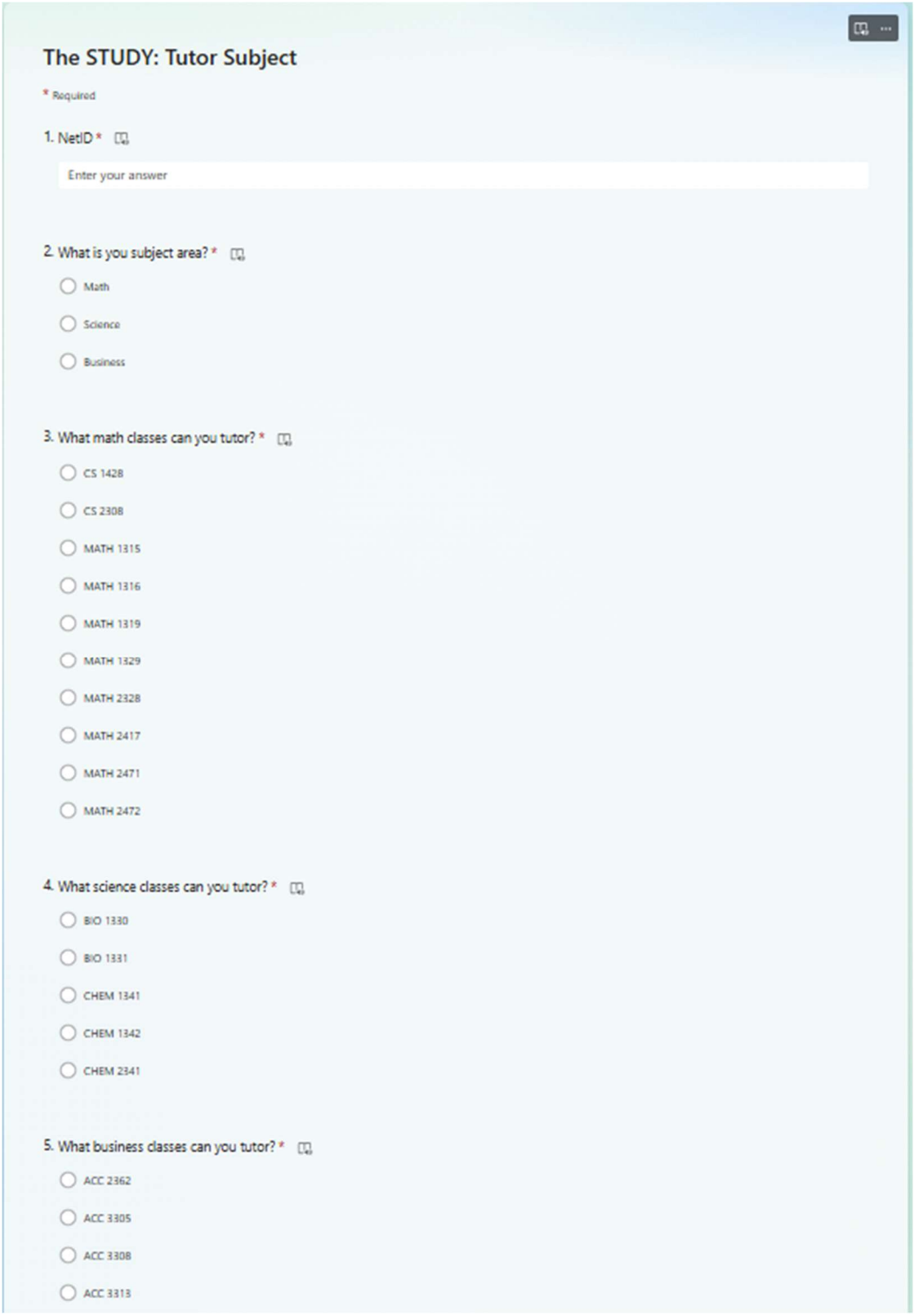
Schedule Log / Tutor Creation

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 you 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	☐	☐	☐	☐	☐	
10:30-11am	☐	☐	☐	☐	☐	
11-11:30am	☐	☐	☐	☐	☐	
11:30-12pm	☐	☐	☐	☐	☐	
12-12:30pm	☐	☐	☐	☐	☐	
12:30-1pm	☐	☐	☐	☐	☐	
1-1:30pm	☐	☐	☐	☐		
1:30-2pm	☐	☐	☐	☐		
2-2:30pm	☐	☐	☐	☐		
2:30-3pm	☐	☐	☐	☐		
3-3:30pm	☐	☐	☐	☐		
3:30-4pm	☐	☐	☐	☐		
4-4:30pm	☐	☐	☐	☐		☐
4:30-5pm	☐	☐	☐	☐		☐
5-5:30pm	☐	☐	☐	☐		☐
5:30-6pm	☐	☐	☐	☐		☐
6-6:30pm	☐	☐	☐	☐		☐

Tutor Subject Declaration:



The STUDY: Tutor Subject

* Required

1. NetID *

Enter your answer

2. What is you 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? *

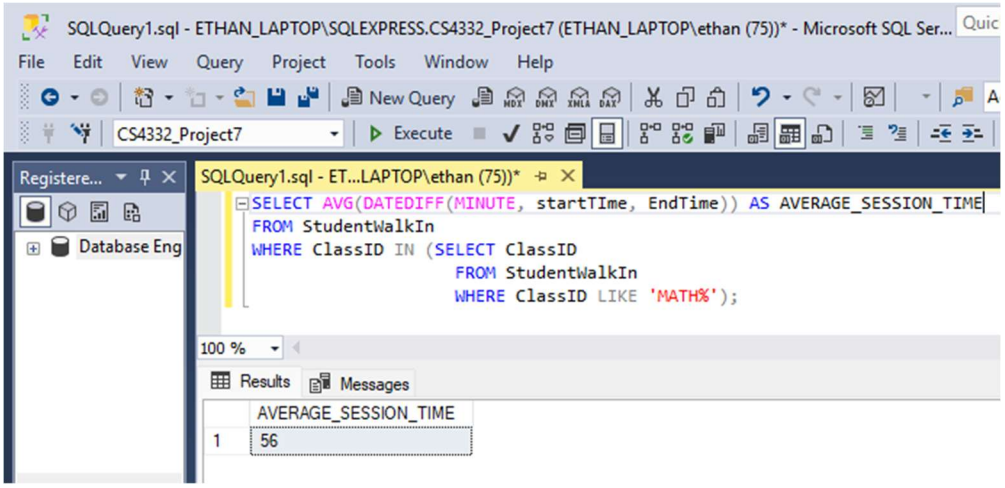
- BIO 1330
- BIO 1331
- CHEM 1341
- CHEM 1342
- CHEM 2341

5. What business classes can you tutor? *

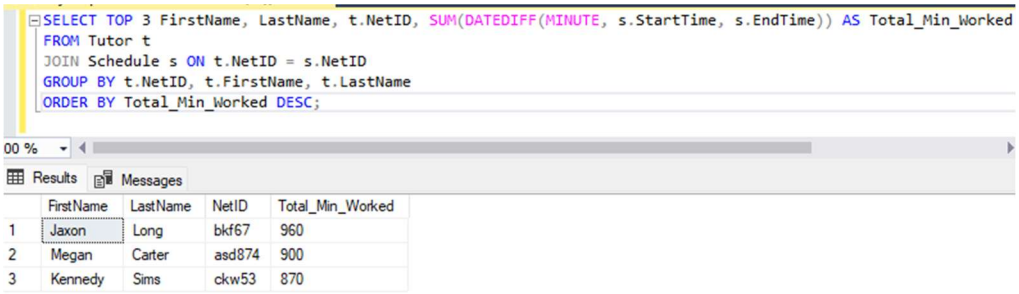
- ACC 2362
- ACC 3305
- ACC 3308
- ACC 3313

d) Queries:

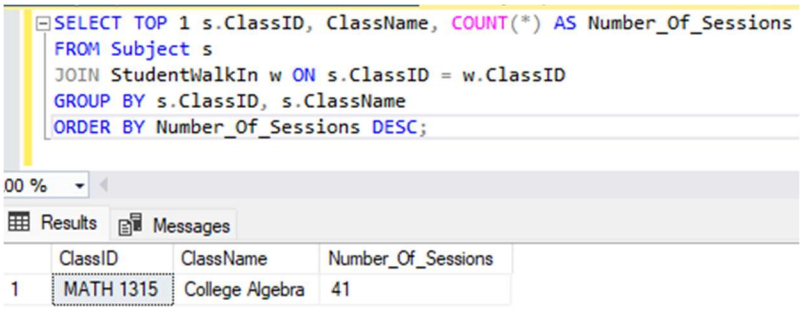
1. What is the average session time for a walk in who was being tutored in a math class



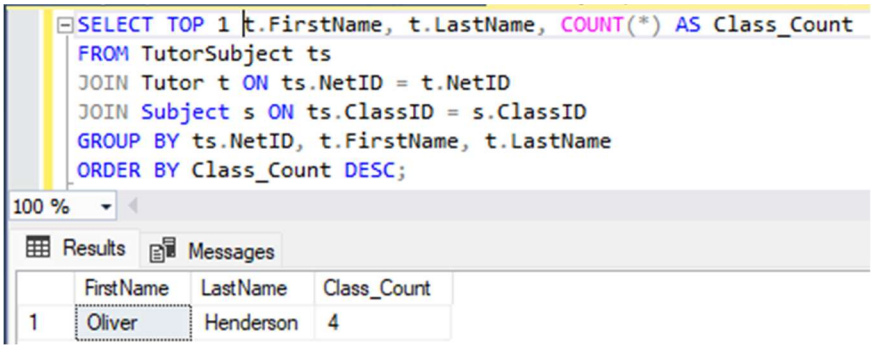
2. What are the names and IDs of the top 3 tutors who work the most



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



4. What tutor can tutor the most classes



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

```
SELECT t.FirstName, t.LastName, COUNT(ts.ClassID) AS math_classes
FROM Tutor t
JOIN TutorSubject ts ON t.NetID = ts.NetID
JOIN Schedule s ON t.NetID = s.NetID
WHERE
    s.DayofWeek = 'Monday'
    AND ts.ClassID LIKE 'MATH%'
GROUP BY t.NetID, t.FirstName, t.LastName
HAVING COUNT(ts.ClassID) > 3;
```

100 %

Results | Messages

	FirstName	LastName	math_classes
1	Megan	Carter	4
2	Jaxon	Long	6

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

```
SELECT TOP 3 s.ClassName, DATEDIFF(MINUTE, sw.StartTime, sw.EndTime) AS SessionLength
FROM StudentWalkIn sw
JOIN Subject s ON sw.ClassID = s.ClassID
ORDER BY SessionLength DESC
```

100 %

Results | Messages

	ClassName	SessionLength
1	Mathematics for Business and Economics I	60
2	Intermediate Accounting I	60
3	Financial Management	60

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

```
SELECT t.FirstName, t.LastName, sub.ClassName
FROM Tutor t
JOIN TutorSubject ts ON t.NetID = ts.NetID
JOIN Schedule sch ON t.NetID = sch.NetID
JOIN Subject sub ON ts.ClassID = sub.ClassID
WHERE
    sch.DayofWeek = 'Friday' AND sch.StartTime = '10:00:00'
```

00 %

Results | Messages

	FirstName	LastName	ClassName
1	Megan	Carter	College Algebra
2	Megan	Carter	Calculus I
3	Jaxon	Long	Survey of Contemporary Mathematics
4	Jaxon	Long	Mathematics for Business and Economics I
5	Jaxon	Long	Mathematics for Business and Economics II
6	Addison	Bailey	Foundations of Computer Science I
7	Addison	Bailey	Mathematics for Business and Economics II
8	Aubrey	Stewart	General Chemistry I
9	Aubrey	Stewart	General Chemistry II
10	Aubrey	Stewart	Organic Chemistry I
11	Caleb	Nguyen	Business Finance
12	Caleb	Nguyen	Financial Management
13	Ethan	Price	Mathematics for Business and Economics II
14	Ethan	Price	Pre-Calculus Mathematics
15	Ellie	Baker	Functional Biology
16	Ellie	Baker	Organismal Biology
17	Joseph	West	General Chemistry I
18	Joseph	West	General Chemistry II

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

```
SELECT TOP 1 st.FirstName, st.LastName, sw.ClassID, COUNT(*) AS VISITS
FROM StudentWalkIn sw
JOIN Student st ON sw.NetID = st.NetID
GROUP BY sw.ClassID, st.FirstName, st.LastName
ORDER BY VISITS DESC
```

100 %

Results | Messages

	FirstName	LastName	ClassID	VISITS
1	Ellie	Baker	MATH 1319	14

9. What students visited for the longest time

```
SELECT TOP 1 s.FirstName, s.LastName, SUM(DATEDIFF(MINUTE, sw.StartTime, sw.EndTime)) AS Total_Time_Minutes
FROM StudentWalkIn sw
JOIN Student s ON sw.NetID = s.NetID
GROUP BY sw.NetID, s.FirstName, s.LastName
ORDER BY Total_Time_Minutes DESC
```

100 %

Results | Messages

	FirstName	LastName	Total_Time_Minutes
1	Bella	Peterson	1607

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

```
SELECT TOP 1 ts.ClassID, SUM(DATEDIFF(MINUTE, sch.StartTime, sch.EndTime)) AS TimeCovered_Minutes
FROM Schedule sch
JOIN TutorSubject ts ON sch.NetID = ts.NetID
GROUP BY ts.ClassID
ORDER BY TimeCovered_Minutes;
```

100 %

Results | Messages

	ClassID	TimeCovered_Minutes
1	ACC 3313	630

e) The first DBMS I used was SQL Server which can be seen in the first query screenshot.