Waiting List Database

CSE 4503 – Database Management Systems

By:

Kiran Thapa (kt1397)

Kundan Rupakheti (kr1637)

Prajjwol Timilsina (pt439)

Project Checkpoint 3

April 12, 2019

SECTION 2: SQL QUERIES

1. What classrooms are available across all of the campus? The result should sorted in decreasing order of room size. List the building name, room number, and capacity of each room.

```
SELECT      L.building, L.room, L.capacity
FROM        location L
ORDER BY  L.capacity DESC;
```

2. Which courses are required for Computer Science if the student is following the 2011 curriculum? List the symbol, number, and name for each of the courses in the results.

```
SELECT  C.major, C.year, C.symbol, C.number, Co.Cname

FROM    Consists C, Course Co

WHERE    C.symbol= Co.symbol AND C.number = Co.number AND


         C.year=2014 AND C.major = "Computer Science" ;
```

3. Which students are majoring in Computer Science? For each student in the results, list their name, netid, and classification.

```
SELECT S.netId,S.firstname, S.lastname, S.classification

FROM    Student S, Choose C

WHERE S.netID=C.netID AND C.major= "Computer Science" ;
```

4. Which students are graduating seniors? Order the results by student last name. For each student in the results, list their netid, first name, last name, and major.

SELECT DISTINCT S.netID, S.lastname, S.firstname, C.major

FROM   Choose C, students S

WHERE   C.netID=S.netid AND S.Classification= "grad_senior"

ORDER BY   S.lastname

5. Which course offerings are currently full (the number of students enrolled equals the capacity of the room it is held in)? For each of the course offerings in the results, list its symbol, number, section number, building, room number, and capacity.

SELECT DISTINCT COUNT (*) as numenrolled,
                Courseoffering_of.Symbol,
                Courseoffering_of.number,
                Courseoffering_of.sectionNumber,
                Courseoffering_of.building,
                Courseoffering_of.room,
                Location.capacity

FROM   Courseoffering_of, location, enrolled

WHERE   Courseoffering_of.building=location.building AND
                Courseoffering_of.room = location.room AND
                enrolled.symbol=courseoffering_of.symbol AND
                enrolled.number=courseoffering_of.number AND
                enrolled.SectionNumber=couseoffering_of.sectionNumber

GROUP BY   enrolled.symbol,enrolled.number,enrolled.sectionNumber

HAVING   location.Capacity=numenrolled;

6. Which students are enrolled in CSE 3324 01? List the results in order of student last name. For each student, list their netid, first name, last name, and major.

SELECT   enrolled.netID ,student.firstname, student.lastname,choose.major

FROM   enrolled,student,choose

WHERE   enrolled.netID=student.netID AND
               student.netID=choose.netID AND
               enrolled.symbol= "CSE" AND
               enrolled.number= "3324" AND
               enrolled.SectionNumber= "01"

ORDER BY   student.lastname ASC;

7. Are there any students that are on both the enrolled list and waiting list for the same course section? If so, list their netid and the course (course symbol, number, and section number)

SELECT   enrolled.netID,enrolled.symbol,enrolled.number,enrolled.sectionnumber

FROM   enrolled, waitinglist

WHERE   enrolled.netID=waitinglist.netID AND
               enrolled.symbol=waitinglist.symbol AND
               enrolled.number=waitinglist.number AND
               enrolled.SectionNumber=waitinglist.SectionNumber;

8. Who are the graduating seniors on the waiting list of CSE 4503 01? For each student, list their netid, last name, first name, and date/time added to the waiting list. Order the list in decreasing order of how long the student has been on the waiting list

SELECT   waitinglist.netID, student.lastname, student.firstname,
              Waitinglist.since

FROM   waitinglist,student

WHERE   waitinglist.netID=student.netID AND
              waitinglist.symbol= "CSE" AND
              waitinglist.number= "4503" AND
              waitinglist.SectionNumber= "01"AND
              student.classification = "grad_senior"

ORDER BY   waitinglist.since ASC;

SECTION 3: REFERENCES

https://stackoverflow.com