Assignment – DMS

Devindu Samarasinghe

IT21003332

Topic Selection – Project

* 1. **select sg. groupNo, count(s.studentNo)  
     from student s left outer join studentGroup sg on s.studentNo = sg.studentNo   
     group by sg.groupNo**
  2. This query returns the total number of students in each group and the count of students with no group as well, which is beneficial when handling a large batch of students
  3. Lecturer Stakeholder would benefit from this query
  4. **Select s.studentNo, s.StudentName**

**From student s**

**Where s.studentNo not in (select sg.studentNo**

**From studentGroup sg**

**Where s.studentNo = sg.studentNo)**

* 1. This query returns the Student Id and Student Name of those who are not part of any group which is ideal to find out when having to warn them for not having a group.
  2. Lecturer stakeholder / Staff benefits from this query
  3. **Procedure Creation**

create procedure leaderDetails(@projectNo varchar(10), @leadName varchar(50) output, @leadId int output)

as

begin

select @leadName = s.studentName, @leadId = s.studentNo

from student s, project p

where s.studentNo = p.leader and p.projectNo = @projectNo

end

**Procedure execution**

declare @leaderName varchar(30), @leaderId int

exec leaderDetails ‘P001’, @leaderName output, @leaderId output

print concat(‘Leader Name: ‘, @leaderName)

print concat(‘Leader ID: ‘,@leaderId)

* 1. This procedure can return the leader name and id of a particular project, this is highly beneficial when the lecturers have to communicate to the next best subordinate with regards to the project
  2. Lecturer Stakeholder can benefit from this procedure
  3. **–-Trigger Creation**

create trigger studentGroupCheck

on studentGroup

as

begin

declare @studentNo int

declare @groupCount int

select @studentNo = studentNo from inserted

select @groupCount = count(groupNo) from studentGroup where studentNo = @studentNo

if @groupCount > 1

begin

print ‘Student can only be in one group at a time’

rollback transaction

end

end

**--Trigger**

Insert into studentGroup values(‘3001’,2008)

* 1. Trigger notifies and restrict users from assigning students to more than one group
  2. This way students are not allowed to illegally or unintentionally get into other groups, which will help prevent information plagiarism and on default maintain the fundamental group working process and relevant count per group.