A PROJECT REPORT

ON

COLLEGE PROJECT MANAGEMENT SYSTEM

COURSE : DATABASE MANAGEMENT SYSTEM (CSE1401)

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PROJECT DECRIPTION

In college management system there are various work are work are include like student examination data, student admission process, various department information, student project data, etc.

Here we select a one of them project management system. It is a part of a college management system. The college project management system is designed to manage the information of department, student and also manage the details of project in which students are work.

In college various department teach various subject and they give a various project on each subject. And also manage the details about the student and project.

The benefit of college management system is numerous. It can help to retrieve the information of a students and project in which they work.

➢ ASSUMPTION :

- Student can make a group of 2 or 5 to do project.
- Here we assume that students study various subject and do only one project in each subject.
- Student can not work on multiple project in one subject.
- A mentor can guide multiple project.
- Project should not repeat by other group of students.

NORMALIZED TABLES

DEPT	
CONSTRAINT	**COLUMN**
PK	DID
	DNAME

SUBJECT	
CONSTRAINT	**COLUMN**
PK	SUBID
FK	DID
	SNAME

STUDENT	
CONSTRAINT	**COLUMN**
PK	PRN
FK	DID
	SNAME
	DOB
	PHONE_NO

PROJECT	
CONSTRAINT	**COLUMN**
PK	PID
FK	SUBID
	PNAME
	MENTOR
	PASS_MRK
	MAX_MRK
	SUB_DATE

PROJECT INFO	
CONSTRAINT	**COLUMN**
PK,FK	PRN
PK,FK	SUBID
	PID
	MRKS_OBT

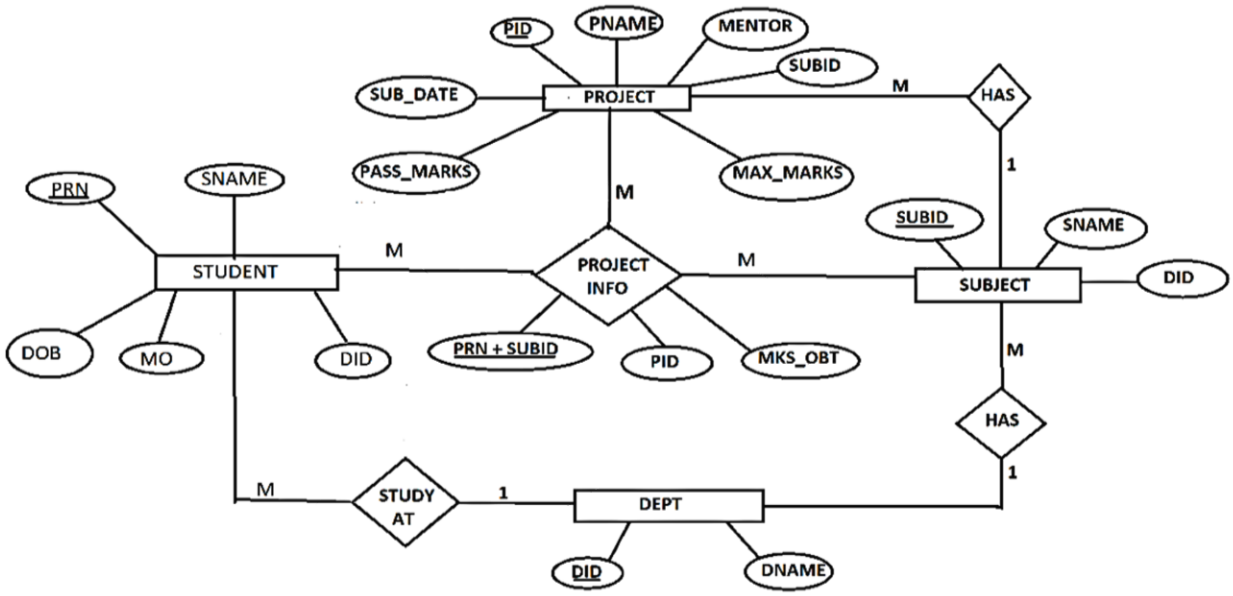
Notation : PK – PRIMARY KEY

FK – FOREIGN KEY

CARDINALITY

DEPT – STUDENT	**1 : M**
DEPT - SUBJECT	**1 : M**
STUDENT - PROJECT	**M : N**
STUDENT - SUBJECT	**M : N**
SUBJECT - PROJECT	**1 : M**

E-R DIAGRAM



NOTATION :

ENTITY

PRIMARY KEY

ATTRIBUTES

RELATION

FUNCTION

- display the details about student and project in which it is work :

```
create or replace function create_result
(prn1 student.prn%type)
return boolean
as
   proname project.pname%type;
   tutor project.mentor%type;
   maxmarks project.max_marks%type;
   passmarks project.pass_marks%type;
   subdate project.sub_date%type;
   sub_id project.subid%type;
   subjectname subject.subname%type;
   m project_info.marks_obtained%type;
   name student.sname%type;
   mobile student.mo%type;
   dob student.birthdate%type;
   deptid student.did%type;
   deptname dept.dname%type;

      cursor c1 is select * from project_info where prn = prn1;
      row1 project_info%rowtype;
      space1 varchar2(10) := '      ';
      space2 varchar2(100) := '----------------------------------‘;
begin
      select sname,mo,birthdate,student.did
into name,mobile,dob,deptid from student
 where student.prn = prn1;
      select dname into deptname from dept where did = deptid;
dbms_output.put_line(space1);
dbms_output.put_line(space2);
```

```
dbms_output.put_line(space1);
dbms_output.put_line('Student Details:');
dbms_output.put_line(space1);
dbms_output.put_line('Name : ' || name);
dbms_output.put_line('PRN : ' || prn1);
dbms_output.put_line('Department : ' || deptname);
dbms_output.put_line('DOB : ' || dob);
dbms_output.put_line('MO : ' || mobile);
dbms_output.put_line(space1);
dbms_output.put_line(space2);
dbms_output.put_line(space1);
dbms_output.put_line('Project Details :');
      open c1;
      loop
      fetch c1 into row1 ;
      if c1%notfound then exit; end if;
select    pname,mentor,max_marks,pass_marks,sub_date,subid
into  proname,tutor,maxmarks,passmarks,subdate,sub_id  from
project where pid = row1.pid;
      select subname into subjectname from subject where
subid = sub_id;
      -- select marks_obtained into m from project_info where
prn = row1.prn;dbms_output.put_line(space1);
      dbms_output.put_line('Project Name : ' || proname);
      dbms_output.put_line('Subject : ' || subjectname);
      dbms_output.put_line('Mentor : ' || tutor);
      dbms_output.put_line('Max Marks : ' || maxmarks);
      dbms_output.put_line('Passing Marks : ' || passmarks);
 dbms_output.put_line('Marks Obt'|| row1.marks_obtained );
      dbms_output.put_line('Sub_date : ' || subdate);
end loop;
return true;
end;
```

- display the details about project and all the student who work in this project :

```
create or replace function project_details(pid1
project.pid%type)
return boolean
as
proname project.pname%type;
tutor project.mentor%type;
maxmarks project.max_marks%type;
passmarks project.pass_marks%type;
subdate project.sub_date%type;
sub_id project.subid%type;

cursor c1 is select * from student where PRN in (select PRN from
project_info where pid=pid1);
row1 student%rowtype;

space1 varchar2(10) := '      ';
space2 varchar2(100) := '-------------------------‘;
begin
select     pname,mentor,max_marks,pass_marks,sub_date,subid
into  proname,tutor,maxmarks,passmarks,subdate,sub_id  from
project where pid=pid1;
dbms_output.put_line(space1);
dbms_output.put_line(space2);
dbms_output.put_line(space1);
dbms_output.put_line('Project Details:');
dbms_output.put_line(space1);
dbms_output.put_line('Project ID : ' || pid1);
dbms_output.put_line('Project Name : ' || proname);
dbms_output.put_line('Mentor : ' || tutor);
dbms_output.put_line('Maximum Marks : ' || maxmarks);
```

```
dbms_output.put_line('Passing Marks : ' || passmarks);
dbms_output.put_line('Submission Date : ' || subdate);
dbms_output.put_line('Subject ID : ' || sub_id);
dbms_output.put_line(space1);
dbms_output.put_line(space2);
dbms_output.put_line(space1);
dbms_output.put_line('Student Details :');
open c1;
loop
fetch c1 into row1 ;
if c1%notfound then exit;
end if;

dbms_output.put_line(space1);
dbms_output.put_line('Student Name : ' || row1.sname);
dbms_output.put_line('PRN : ' || row1.PRN);
dbms_output.put_line('Department : ' || row1.did);
dbms_output.put_line('DOB : ' || row1.birthdate);
dbms_output.put_line('MO : ' || row1.mo);
end loop;
return true;
end project_details;
/
```

PROCEDURE

- Add data in project info table :

```
create or replace procedure Add_data(
   prn IN student.prn%type,
   pid IN project.pid%type,
   subid IN subject.subid%type, mark IN
  project_info.marks_obtained%type)
AS
begin
        INSERT INTO PROJECT_INFO VALUES (prn, subid, pid,
mark);
   commit;
end;
/
```

- Display the details about subject and all its project:

```
create or replace procedure subject_details
(subjectid subject.subid%type)
as
   proname project.pname%type;
   tutor project.mentor%type;
   maxmarks project.max_marks%type;
   passmarks project.pass_marks%type;
   subdate project.sub_date%type;
   subjectname subject.subname%type;
   deptname dept.dname%type;
   cursor c1 is select * from project where subid = subjectid;
   row1 project%rowtype;
   space1 varchar2(10) := '      ';
```

```
   space2 varchar2(100) := '---------';
begin
        select subname into subjectname from subject where
        subid = subjectid;
        select dname into deptname from dept where did
        in(select did from subject where subid = subjectid);

        dbms_output.put_line(space1);
        dbms_output.put_line(space2);
        dbms_output.put_line(space1);
        dbms_output.put_line('Subject Details : ');
        dbms_output.put_line(space1);
        dbms_output.put_line('Subject Name : ' || subjectname);
        dbms_output.put_line('Subject ID : ' || subjectid);
        dbms_output.put_line('Dept Name : ' || deptname);
        dbms_output.put_line(space1);
        dbms_output.put_line(space2);
        dbms_output.put_line(space1);
        dbms_output.put_line('Project Details :');

        open c1;
        loop
        fetch c1 into row1;
        exit when c1%notfound;

        select pname,mentor,max_marks,pass_marks,sub_date
        into proname,tutor,maxmarks,passmarks,subdate from
        project where pid = row1.pid;

        dbms_output.put_line(space1);
        dbms_output.put_line('Project Name : ' || proname);
        dbms_output.put_line('Project ID : ' || row1.pid);
        dbms_output.put_line('Mentor : ' || tutor);
        dbms_output.put_line('Max Marks : ' || maxmarks);
        dbms_output.put_line('Passing Marks : ' || passmarks);
```

```
dbms_output.put_line('Sub_date : ' || subdate);
end loop;
end;
```

- Get student pass or fail status :

```
create or replace procedure student_status
(prn1 in student.prn%type, pid1 in project.pid%type, subid1 in
subject.subid%type, P_F_status out varchar)
as
   m project_info.marks_obtained%type;
   pm project.pass_marks %type;
begin
   select marks_obtained into m from project_info where prn =
   prn1 and pid = pid1 and subid = subid1;
   select pass_marks into pm from project where pid = pid1;
    if m >= pm then P_F_status := 'P';
    else P_F_status := 'F';
    end if;
    end;
```

TRIGGERS

- Check the primary condition at insert time :

```
create or replace trigger check1
before insert on project_info
for each row
declare
        m project_info.marks_obtained%type;
        t number(1);
begin
        select max_marks into m from project where pid =
        :new.pid;
        select count(*) into t from project_info where pid =
        :new.pid;
        if t >= 5 then
        raise_application_error(-20000,'More then 5 student are
        not allowed in one project');
        end if;
        if :new.marks_obtained not between 0 and m then
        raise_application_error(-20001,'marks must lies between 0
        and ' || m );
        end if;
end check1;
```

- Check the primary condition at update time :

```
create or replace trigger check2
before update of marks_obtained on project_info
for each row
declare      m project_info.marks_obtained%type;
begin
   select max_marks into m from project where pid = :new.pid;
   if :new.marks_obtained not between 0 and m then
   raise_application_error(-20001,'marks must lies between 0
   and ' || m );
   end if;
end check2;
```