

TITLE

UNIVERSITY MANAGEMENT SYSTEM

ABSTRACT

UMS is University Management System, it is process of handling number of colleges and 'n' number of students maintain and managing with the respective colleges. Which is used to perform some (CRUD) Create, Read, Update, Delete Operations. This University Management System contains three tables namely University, College, and Student tables. This project is used to store some respective data and implement university board system. A UMS is an education ERP product that helps teachers, students, parents, external vendors, learning suppliers etc. come together via a platform and exchange information. University Database Management Project Focuses on managing the data associated with the Academic and Research department of the University. Overall, when compared to the manual process, an effective University Management System makes managing university operations easier and more reliable. The university management system aids in the creation of a platform for all stakeholders including Admin, faculty, and students to collaborate.

OBJECTIVES

- To Implement Database for University Management System.
- Store Data to Database with respective tables and perform some CRUD operations.
- This project Implementing University Board System.

DATA FLOW DIAGRAM

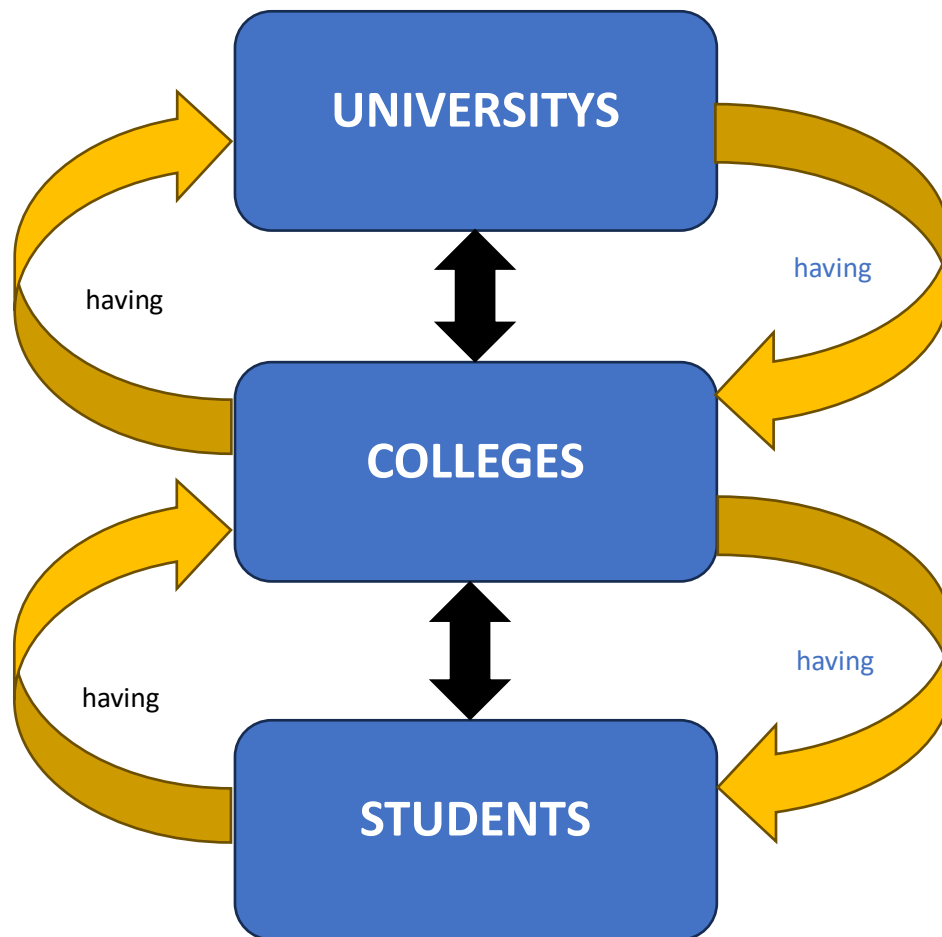


Fig. UMS data flow diagram

TABLES

University Table Entity

<u>U_CODE</u>	U_NAME	U_PHNO	U_EMAIL
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College Table Entity

<u>C_CODE</u>	C_NAME	C_PHNO	C_EMAIL	<u>U_CODE</u>
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Student Table Entity

<u>S_USN</u>	S_NAME	S_PHNO	S_EMAIL	S_COURSE	S_GENDER	<u>C_CODE</u>
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SNAPSHOTS

Step1: Check how many tables are exist in database.

```
SQL> SELECT *  
      2 FROM TAB;
```

TNAME	TABTYPE	CLUSTERID
DEPT	TABLE	
EMP	TABLE	
BONUS	TABLE	
SALGRADE	TABLE	
EMPLOYEE	TABLE	
PRODUCT	TABLE	
BIN\$7HTqm3UKTF6Ewvw2THG0FA==\$0	TABLE	
BIN\$qoIyksGdTpSbXZbFKDMFIg==\$0	TABLE	
BIN\$YUX12ec2TTCDFU2vPNRToQ==\$0	TABLE	
BIN\$L3/ADMSIQC6T7URL84cH0g==\$0	TABLE	

10 rows selected.

TABLE CREATION

Step2: Create UMS Database and Tables.

1) University Table

```
--  
SQL>  
SQL> CREATE TABLE UNIVERSITY(U_CODE NUMBER PRIMARY KEY, U_NAME VARCHAR(75), U_PHNO NUMBER, U_EMAIL V  
ARCHAR2(50));
```

Table created.

```
SQL> DESCRIBE UNIVERSITY;
```

Name	Null?	Type
U_CODE	NOT NULL	NUMBER
U_NAME		VARCHAR2(75)
U_PHNO		NUMBER
U_EMAIL		VARCHAR2(50)

```
SQL>
```

```
SQL>
```

2) College Table

```
SQL>
SQL> CREATE TABLE COLLEGE(C_CODE NUMBER PRIMARY KEY, C_NAME VARCHAR(70), C_PHNO NUMBER, C_EMAIL VARCHAR2(40), U_CODE NUMBER, FOREIGN KEY(U_CODE) REFERENCES UNIVERSITY(U_CODE));
```

Table created.

```
SQL> DESCRIBE COLLEGE;
```

Name	Null?	Type
C_CODE	NOT NULL	NUMBER
C_NAME		VARCHAR2(70)
C_PHNO		NUMBER
C_EMAIL		VARCHAR2(40)
U_CODE		NUMBER

```
SQL>
```

```
SQL>
```

3) Student Table

```
SQL>
```

```
SQL>
```

```
SQL> CREATE TABLE STUDENT(S_USN VARCHAR2(11) PRIMARY KEY, S_NAME VARCHAR(50), S_PHNO NUMBER, S_EMAIL VARCHAR2(40), S_COURSE VARCHAR(50), S_GENDER VARCHAR(10), C_CODE NUMBER, FOREIGN KEY(C_CODE) REFERENCES COLLEGE(C_CODE));
```

Table created.

```
SQL> DESCRIBE STUDENT;
```

Name	Null?	Type
S_USN	NOT NULL	VARCHAR2(11)
S_NAME		VARCHAR2(50)
S_PHNO		NUMBER
S_EMAIL		VARCHAR2(40)
S_COURSE		VARCHAR2(50)
S_GENDER		VARCHAR2(10)
C_CODE		NUMBER

Step2: Tables are created next step is insert some data to respective tables.

Before we need to check the values are exist or not, of course once we created tables, we need to insert some values.

Checking all tables values exist or not.

```
SQL>
SQL>
SQL> SELECT *
      2 FROM UNIVERSITY;

no rows selected

SQL> SELECT *
      2 FROM COLLEGE;

no rows selected

SQL> SELECT * FROM STUDENT;

no rows selected

SQL>
SQL>
```

Now row selected, we need insert some values.

DATA INSERTION

University Table Insertion

```
SQL>
SQL> INSERT INTO UNIVERSITY VALUES(001, 'VISHVESVARAYA TECHNOLOGICAL UNIVERSITY (UTU)', 08022961242,
're@vtu.ac.in');

1 row created.

SQL> /
INSERT INTO UNIVERSITY VALUES(001, 'VISHVESVARAYA TECHNOLOGICAL UNIVERSITY (UTU)', 08022961242, 're@u
*
ERROR at line 1:
ORA-00001: unique constraint (SCOTT.SYS_C005965) violated

SQL> INSERT INTO UNIVERSITY VALUES(002, 'BANGALORE UNIVERSITY', 08022961242, 'bu2register@gmail.com
');

1 row created.

SQL> INSERT INTO UNIVERSITY VALUES(003, 'PEOPLE EDUCATIONAL SOCIETY (PES) BANGALORE', 09019109891, '
pesuniversity@gmail.com');

1 row created.

SQL> INSERT INTO UNIVERSITY VALUES(004, 'JAIN UNIVERSITY', 0801235242, 'jain@gmail.com');

1 row created.

SQL> INSERT INTO UNIVERSITY VALUES(005, 'REVA UNIVERSITY', 08063532468, 'reva@gmail.com');

1 row created.
```

```
SQL>
SQL> SELECT * FROM UNIVERSITY;
```

U_CODE	U_NAME	U_PHNO	U_EMAIL
1	VISHVESVARAYA TECHNOLOGICAL UNIVERSITY (UTU)	8022961242	re@vtu.ac.in
2	BANGALORE UNIVERSITY	8022961242	bu2register@gmail.com
3	PEOPLE EDUCATIONAL SOCIETY (PES) BANGALORE	9019109891	pesuniversity@gmail.com
4	JAIN UNIVERSITY	801235242	jain@gmail.com
5	REVA UNIVERSITY	8063532468	reva@gmail.com

```
SQL> |
```

College Table Insertion

```
SQL> DESC COLLEGE;  
Name
```

```
-----  
C_CODE  
C_NAME  
C_PHNO  
C_EMAIL  
U_CODE
```

```
SQL> INSERT INTO COLLEGE VALUES(0045, 'BAPUJI INSTITUTE OF ENGINEERING AND TECHNOLOGY DAVANAGERE', 9  
18192222245, 'bietdvg@gmail.com', 001);
```

```
1 row created.
```

```
SQL> INSERT INTO COLLEGE VALUES(0046, 'DAYANANDA SAGAR COLLEGE OF ENGINEERING BANGALORE', 0804216175  
0, 'dayanands@gmail.com', 002);
```

```
1 row created.
```

```
SQL> INSERT INTO COLLEGE VALUES(0047, 'PEOPLE EDUCATIONAL SOCIETY BANGALORE', 0974222212, 'pes@gmai  
l.com', 003);
```

```
1 row created.
```

```
SQL> INSERT INTO COLLEGE VALUES(0048, 'JAIN INSTITUTE OF ENGINEERING', 08043430400, 'jaincollege@gma  
il.com', 004);
```

```
1 row created.
```

```
SQL> INSERT INTO COLLEGE VALUES(0049, 'REVA INSTITUTE OF ENGINEERING AND TECHNOLOGY BANGALORE', 0741  
1469018, 'revacollege@gmail.com', 005);
```

```
1 row created.
```

```
SQL> SELECT *  
2 FROM COLLEGE;
```

C_CODE	C_NAME	C_PHNO	C_EMAIL	U_CODE
45	BAPUJI INSTITUTE OF ENGINEERING AND TECHNOLOGY DAVANAGERE	9.1819E+11	bietdvg@gmail.com	
46	DAYANANDA SAGAR COLLEGE OF ENGINEERING BANGALORE	8042161750	dayanands@gmail.com	2
47	PEOPLE EDUCATIONAL SOCIETY BANGALORE	9742222212	pes@gmail.com	3
48	JAIN INSTITUTE OF ENGINEERING	8043430400	jaincollege@gmail.com	4
49	REVA INSTITUTE OF ENGINEERING AND TECHNOLOGY BANGALORE	7411469018	revacollege@gmail.com	

Student Table Insertion

```
SQL>
SQL> INSERT INTO STUDENT VALUES('4BD19CS402', 'NAGARAJA SHIVAPPA ARALIKATTI', 6361153251, 'nagarajsa
ralikatti2022@gmail.com', 'BE in CSE', 'MALE', 0045);
```

1 row created.

```
SQL> INSERT INTO STUDENT VALUES('5DSA19ME120', 'NAVEEN BOGUM', 8722116959, 'naveen@gmail.com', 'BE i
n MECH', 'MALE', 0046);
```

1 row created.

```
SQL> INSERT INTO STUDENT VALUES('6PES18CV450', 'KEERTHY S', 819763285, 'keerthys@gmail.com', 'BE in CIVIL',
'FEMALE', 0047);
```

ERROR:

ORA-01756: quoted string not properly terminated

```
SQL> INSERT INTO STUDENT VALUES('6PES18CV450', 'KEERTHY S', 819763285, 'keerthys@gmail.com', 'BE i
n CIVIL', 'FEMALE', 0047);
```

ERROR:

ORA-01756: quoted string not properly terminated

```
SQL> INSERT INTO STUDENT VALUES('6PES18CV450', 'KEERTHY S', 819763285, 'keerthys@gmail.com', 'BE i
2 n CIVIL', 'FEMALE', 0047);
```

1 row created.

```
SQL> INSERT INTO STUDENT VALUES('7JNC00480', 'RAJU S', 8899778810, 'raju@gmail.com', 'MCA in CSE', '
MALE', 0048);
```

1 row created.

```
SQL> INSERT INTO STUDENT VALUES('8REVA00489', 'RAKSHITHA N', 6361153251, 'rn@gmail.com', 'B.TECH in
CSE', 'FEMALE', 0049);
```

1 row created.

```
SQL> SELECT * FROM STUDENT;
```

S_USN	S_NAME	S_PHNO	S_EMAIL	S_COURSE	S_GENDER	C_CODE
4BD19CS402	NAGARAJA SHIVAPPA ARALIKATTI	6361153251	nagarajsaralिकatti2022@gmail.com	BE i		
5DSA19ME120	NAVEEN BOGUM	8722116959	naveen@gmail.com	BE in MECH	MALE	46
6PES18CV450	KEERTHY S	819763285	keerthys@gmail.com	BE i n CIVIL	FEMALE	47
7JNC00480	RAJU S	8899778810	raju@gmail.com	MCA in CSE	MALE	48
8REVA00489	RAKSHITHA N	6361153251	rn@gmail.com	B.TECH in CSE	FEMALE	49

DATA UPDATING

University Table in University phone number Updating

```
SQL>
SQL> SELECT * FROM UNIVERSITY;
```

U_CODE	U_NAME	U_PHNO	U_EMAIL
1	VISVESVARAYA TECHNOLOGICAL UNIVERSITY (VTU)	8022961242	re@vtu.ac.in
2	BANGALORE UNIVERSITY	8022961242	bu2register@gmail.com
3	PEOPLE EDUCATIONAL SOCIETY (PES) BANGALORE	9019109891	pesuniversity@gmail.com
4	JAIN UNIVERSITY	801235242	jain@gmail.com
5	REVA UNIVERSITY	8063532468	reva@gmail.com

```
SQL> |
```

```
SQL> UPDATE UNIVERSITY SET U_PHNO=1234567891 WHERE U_CODE=001;
```

```
1 row updated.
```

```
SQL> SELECT *
2 FROM UNIVERSITY;
```

U_CODE	U_NAME	U_PHNO	U_EMAIL
1	VISVESVARAYA TECHNOLOGICAL UNIVERSITY (VTU)	1234567891	re@vtu.ac.in
2	BANGALORE UNIVERSITY	8022961242	bu2register@gmail.com
3	PEOPLE EDUCATIONAL SOCIETY (PES) BANGALORE	9019109891	pesuniversity@gmail.com
4	JAIN UNIVERSITY	801235242	jain@gmail.com
5	REVA UNIVERSITY	8063532468	reva@gmail.com

PHONE NUMBER
UPDATED



College Table in College email Updating

```
SQL> SELECT * FROM COLLEGE;
```

C_CODE	C_NAME	C_PHNO	C_EMAIL	U_CODE
45	BAPUJI INSTITUTE OF ENGINEERING AND TECHNOLOGY DAVANAGERE	9.1819E+11	bietdvg@gmail.com	1
46	DAYANANDA SAGAR COLLEGE OF ENGINEERING BANGALORE	8042161750	dayanands@gmail.com	2
47	PEOPLE EDUCATIONAL SOCIETY BANGALORE	9742222212	pes@gmail.com	3
48	JAIN INSTITUTE OF ENGINEERING	8043430400	jaincollege@gmail.com	4
49	REVA INSTITUTE OF ENGINEERING AND TECHNOLOGY BANGALORE	7411469018	revacollege@gmail.com	

```
SQL> UPDATE COLLEGE SET C_EMAIL='pescollege@gmail.com' WHERE C_CODE=0047;
```

```
1 row updated.
```

```
SQL> SELECT *
2 FROM COLLEGE;
```

C_CODE	C_NAME	C_PHNO	C_EMAIL	U_CODE
45	BAPUJI INSTITUTE OF ENGINEERING AND TECHNOLOGY DAVANAGERE	9.1819E+11	bietdvg@gmail.com	1
46	DAYANANDA SAGAR COLLEGE OF ENGINEERING BANGALORE	8042161750	dayanands@gmail.com	2
47	PEOPLE EDUCATIONAL SOCIETY BANGALORE	9742222212	pescollege@gmail.com	3
48	JAIN INSTITUTE OF ENGINEERING	8043430400	jaincollege@gmail.com	4
49	REVA INSTITUTE OF ENGINEERING AND TECHNOLOGY BANGALORE	7411469018	revacollege@gmail.com	

EMAIL UPDATED



Student Table Student course Updating

```
SQL> SELECT *  
2 FROM STUDENT;
```

S_USN	S_NAME	S_PHNO S_EMAIL	S_COURSE	S_GENDER	C_CODE
4BD19CS402	NAGARAJA SHIVAPPA ARALIKATTI	6361153251 nagarajsaralikatti2022@gmail.com	BE in CSE		46
5DSA19ME120	NAVEEN BOGUM	8722116959 naveen@gmail.com	BE in MECH	MALE	47
6PES18CV450	KEERTHY S	819763285 keerthys@gmail.com	BE in CIVIL	FEMALE	48
7JNC00480	RAJU S	8899778810 rajugmail.com	MCA in CSE	MALE	49
8REVA00489	RAKSHITHA N	6361153251 rn@gmail.com	B.TECH in CSE	FEMALE	49

```
SQL>  
SQL>  
SQL> UPDATE STUDENT SET S_COURSE='MCA in CSE' WHERE S_USN='6PES18CV450';  
  
1 row updated.
```

```
SQL> SELECT *  
2 FROM STUDENT;
```

S_USN	S_NAME	S_PHNO S_EMAIL	S_COURSE	S_GENDER	C_CODE
4BD19CS402	NAGARAJA SHIVAPPA ARALIKATTI	6361153251 nagarajsaralikatti2022@gmail.com	BE in CSE		46
5DSA19ME120	NAVEEN BOGUM	8722116959 naveen@gmail.com	BE in MECH	FEMALE	47
6PES18CV450	KEERTHY S	819763285 keerthys@gmail.com	MCA in CSE	MALE	48
7JNC00480	RAJU S	8899778810 rajugmail.com	MCA in CSE	MALE	48
8REVA00489	RAKSHITHA N	6361153251 rn@gmail.com	B.TECH in CSE	FEMALE	49

STUDENT COURSE
UPDATED.

DATA DELETION

If you want to delete particular record from table, use below syntax.

DELETE FROM TABLE_NAME

WHERE ID=VALUE;

```
SQL> CREATE TABLE DATA (SINO NUMBER PRIMARY KEY, NAME VARCHAR(20), EMAIL VARCHAR2(35), PHNO NUMBER);
```

Table created.

```
SQL>
```

```
SQL> DROP TABLE DATA;
```

Table dropped.