

FALL SEMESTER 2020-21

CSE2004

**DATABASE MANAGEMENT
SYSTEMS**

J-COMPONENT PROJECT

REVIEW 3

FACULTY:PRADEEPA M

MEMBERS:

GANESH RAJAN(19BCE0131)

RIYA GUPTA(19BCE2072)

MAHANKALI SAI SHARATH
CHANDRA(19BCE0316)

TOPIC:ONLINE MATRIMONIAL SYSTEM

CHAPTER CONTENTS

- 1. INTRODUCTION**
- 2. LITERATURE REVIEW AND ANALYSIS**
- 3. SOFTWARE REQUIREMENTS**
- 4. NORMALIZATION OF TABLES**
- 5. IMPLEMENTATION AND RESULTS**
- 6. CONCLUSION AND REFERENCES**

CHAPTER 1:INTRODUCTION:

Abstract

The main objective of an online Matrimonial System is to connect potential grooms and brides with a high level of compatibility.

The details and criteria a family expects can be given, and these will be used to ensure only the most probably matches are presented to the customers.

There are several drawback to the traditional way of going about this process, as will be seen in the following slide.

Online matrimonial system is used to overcome these drawbacks, by providing a much wider pool to pick from, and drastically simplifying the process of filtering out suitable matches.

- 1)Matrimony website will refer to a database which contains all the information of the user, and create a unique profile
- 2)Details such as caste, education, hobbies and occupation will be added to the profile.
- 3)Attributes of the profile will be use to search for and find matches
- 4)Users can search for profiles based on their preferences

PROBLEM DESCRIPTION:

- 1)Provide a wide set of options for potential brides and grooms.
- 2)Clearly display all relevant details of other candidates.
- 3)Create profiles for each user, with relevant details.
- 4)Store login details of user and link to profile.

- 5)Accept preferences of user.
- 6)Create search option for profiles.
- 7)Organize all user details in a database.

ADVANTAGES OF ONLINE MATRIMONIAL SYSTEM:

Online matrimonial system is helps to search life partners according to one's expectations. There is a wide range of choice among which the bride or the groom can select the best one. Online matrimonial system is user friendly and safe. The bride or the groom can know about their partners by seeing the profile and further messaging. The system is convenient as well as economic. There is a lot of privacy which most of the people wish to have.

PROPOSED METHODOLOGY:

- 1)We intend to use a database of potential candidates, which stores information about them, related to the marriage criteria.
- 2)Clients will be able to view potential matches, selected based on common interests, or other traits.
- 3)Users can also search for matches using certain conditions or criteria.
- 4)The database will be able to search and recommend these matches, using SQL commands.

PROBLEMS WE FIX(LIMITATIONS OF TRADITIONAL METHODS):

- 1)There is access to only a very small pool of potential matches, reached by word of mouth through friends and relatives.
- 2)There is no way to view the profile of a person, with all details included.
- 3)Saves the trouble of having to visit multiple families in person.
- 4)Is much more cost effective.
- 5)Reduces amount of effort required.
- 6)Gives a higher chance of a successful match.

CHAPTER 2: MODULES AND ANALYSIS:

MODULES:

ADMIN MODULE:

- 1)The main functions of admin are Login,Manage user's account,logout
- 2)which include deactivate account,delete account,add groom,bride stuff.
- 3) change password

USER MODULES:

- 1)User registration module:
- 2)in this module when user fill-ups first three registration from user will get a email id an will also get conformation message on his/her Email Id
- 3)After getting member id user will use his/her member id to login ,and user can modify his/her profile ,fill up remaining form of registration ,upload their images
- 4)image uploading
- 5)sending personal messages
- 6)searching

ENTITIES

- 1)Profile
- 2)User login
- 3)Search profile
- 4)Image gallery
- 5)Success story

ATTRIBUTES

#PROFILE:

- 1)Pro_id
- 2)Name
- 3)Email_id
- 4)Education
- 5)Caste
- 6)Country
- 7)Height
- 8)Occupation
- 9)Weight
- 10)Star

#USER LOGIN:

- 1)User_id
- 2)User_password
- 3)User_name

#SEARCH PROFILE

- 1)Profile_id
- 2)Search_pro_id

3)Marital status

4)Caste

#IMAGE GALLERY

1)Pro_id

2)Img_id.

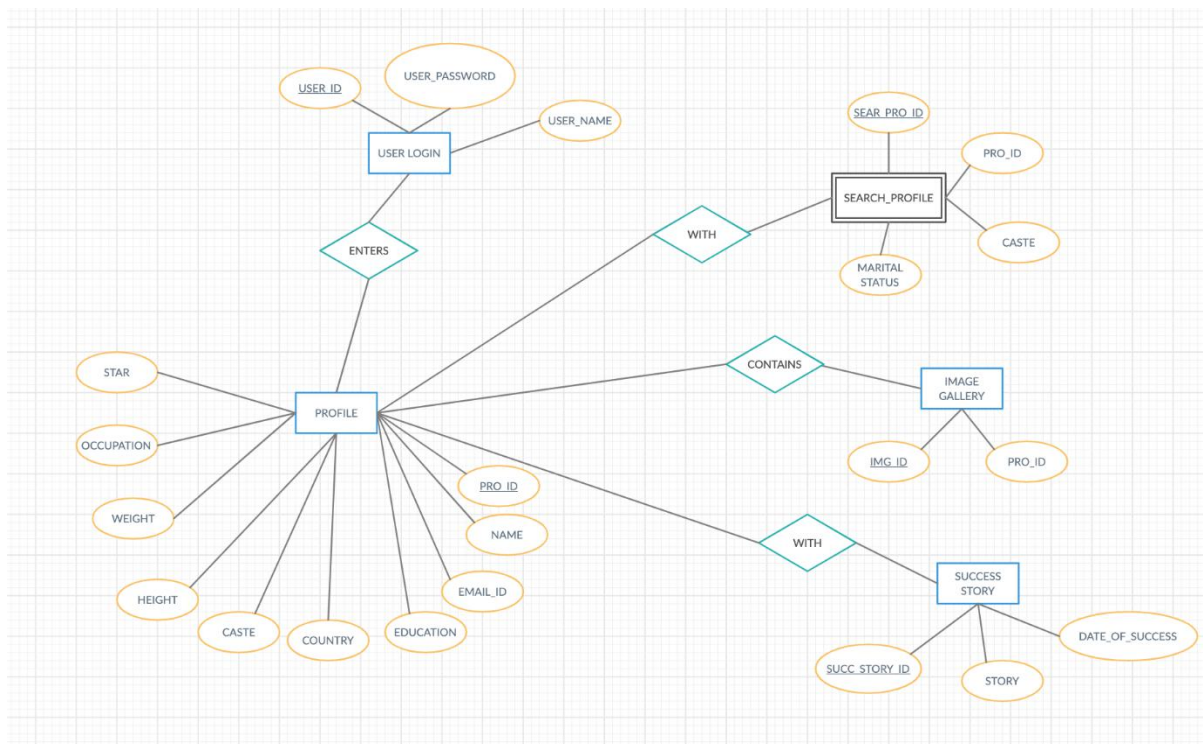
#SUCCESS STORY

1)Story

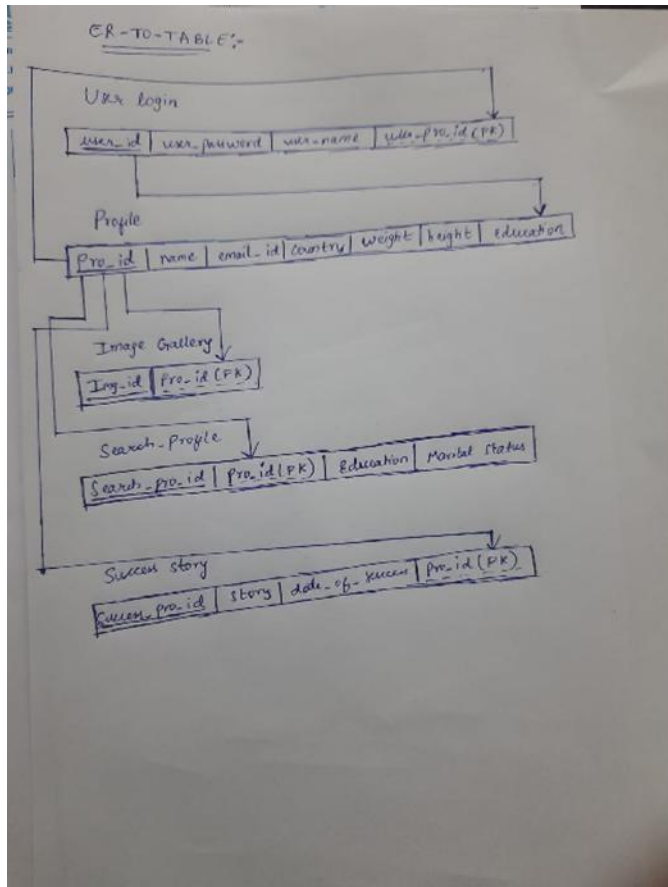
2)succ_story_id

3)Date_of_success

ER RELATIONSHIP DIAGRAM:



MAPPING ER TO RELATIONAL TABLE:



TOOLS USED:

- 1)The PHP languages is used to create the webpages.
- 2)MariaDB (a variation of MySQL) is used to store the details in a database.
The webpage accesses this data through a driver.
- 3)Xampp is a software bundle which consists of the above software, among others. It is used as a package to run the program and create the website.
- 4)The website can be accessed through a browser; Internet Explorer is used here.

MARIADB(a variation of MYSQL) CODE TO STORE THE DTAILS IN A DATABASE IN ORDER TO ACCESS FRONTEND WEBPAGE ACCESS THIS DATA THROUG A DRIVER:

LINK:

<https://docs.google.com/spreadsheets/d/1PNctfesuk8Y8NAT-t82pUwxwgRKX8rLJAixpPXbi5c8/edit?usp=drivesdk>

DATABASE CONDITIONS USED:

- 1)Primary key is given as profile id and user id for each user, and these are used to uniquely identify a profile as well.
- 2)For other tables, foreign keys which reference profile id are used.
- 3)Constraints are added to the table to keep the data consistent.

CHAPTER 3:SOFTWARE REQUIREMENTS:(FRONTEND AND WEBSITE SCREENSHOTS)

Online Matrimonial website helps to start match making website like shaadi or Bharatmatrimony. Matrimonial scripts are developed in PHP to create websites for planned marriages. HeavenRelations Online Matrimonial website script provides all features required for matrimonial website. The features include searching registered members, profile information, etc. User will be able to search, update, add/remove, and edit their profiles from database. In addition, users can also add/delete/change descriptions, upload images/photos.

FRONT END AND WEBSITE:

Software used:

- 1)HTML
- 2)JavaScript

WEBSITE SCREENSHOTS:

SNAP SHOTS FOR REGISTER:

Register

Username *

Password *

Email *

SUBMIT

SNAP SHOT FOR PROFILE:



Create Your Profile

First Name *

Last Name *

Sex *

Male

Email *

Date Of Birth *

Day



Month



Year

Age*



Height *

Weight *

Address *

Country



State



District

Education *

Primary



Occupation*

Diet*

Veg



Languages*

Hindi



Religion*

Not Applicable



About Me*

Write about you

SUBMIT

SNAP SHOT FOR VIEWING PROFILE:

 | [View Profile](#)

Profile Id : 15



Name : Ganesh Rajan
Age / Height : 19 Years/170 Cm
Religion : Hindu
Country : India
Education : Degree



About Myself

Partner Preference

About Me.

SNAP SHOT FOR PREFERENCES:

 | [Partner Preference](#)

Partner Preference

My Ideal Partner would be

Legendary

Age :

20 to 30

Height

168

Cm

Diet :

Veg

Religion :

Not Applicable

Languages :

Malayalam

Education :

Primary

Occupation :

Country Of Residence :

Country

[Update Preferences](#)

File | C:/Users/Abhi%20Gupta/Desktop/profile.html

Not Applicable

Address *

Country *

State *

Age *

Marital status *

Single

Education *

Primary

Mother Tongue *

Malayalam

Blood Group *

O +ve

Weight

Height

Colour *

Dark

Dist *

Veg

Occupation

Fathers Occupation

Mothers Occupation

No. Of sisters *

1

No. Of brothers *

1

Write about you

About Me *

1 else [Submit]

File | C:/Users/Abhi%20Gupta/Desktop/profile.html

First Name *

Last Name *

Sex *

Male

Email *

Date Of Birth *

Month

Year

Religion *

Not Applicable

Address *

Country *

State *

Age *

Marital status *

Single

Education *

Primary

Mother Tongue *

Malayalam

Blood Group *

O +ve

Weight

Height

Colour *

Dark

Dist *

Veg

Occupation

Fathers Occupation

Mothers Occupation

VIEW PREFERNCES:



Religion : hindu
Country : India
Education : Degree



About Myself Partner Preference

Age : 20 To 30
Height : 168 Cm
Diet : Veg
Religion : Hindu
Languages : English
Education : Degree
Occupation : Engineer
Country Of Residence : Hindu
State : Karnataka

SEARCH BY PROFILE ID:

 Search By Profile ID

Profile ID :

Profiles

REGULAR SEARCH FUNCTION:

Regular Search

Gender :

☒ Groom

☐ Bride

Marital Status :

☒ Single

☐ Divorced

☐ Widowed

☐ Separated

☐ Any

Country :

District / City :

State :

Religion :

Languages:


Age :

Search

Profiles

80x80

Awin Kuttrappi
18Yrs Hindu
Profile ID: 12



Rahul Rahul
18Yrs Hindu
Profile ID: 14

FUNCTIONALITY:

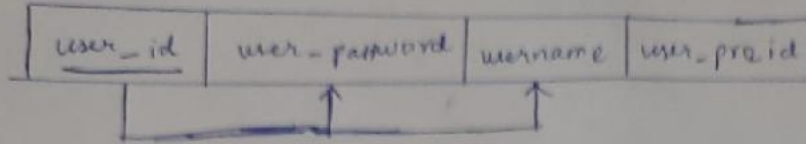
- 1) Program accepts registrations from new users, and creates profile for them.
 - 2) Returning users may log in with their username and password.
 - 3) Users can upload photographs, and enter details to complete their profile.
 - 4) Users can enter preferences in their future bride or groom.
 - 5) Search function enables users to search for profile matching their criteria, or matching a profile number.
- Stores photographs attached to all profiles, and displays to potential matches.

CHAPTER 4:

NORMALIZATION OF TABLES:

Normalization

1) User Login :-



The table is in 1NF

In this table there is no partial dependencies and transitive relations. and left side we have key

Therefore, this is in BCNF form.

PRACTICALLY:

Normalize to 2NF

Attributes

user_id

user_password

user_name

Functional Dependencies

user_id → user_password user_name

Normalize to BCNF

Attributes

user_id

user_password

user_name

Functional Dependencies

user_id \rightarrow user_password user_name

2) Profile

Pro_id	name	email_id	country	height	weight	education

this table is in 1NF

since, there is partial dependency, we can normalize in 2NF

Pro_id	name	height	weight

Pro_id	name	email

Now, these tables are in 2NF & there is also no transitive relation they are in 3NF, therefore this is in BCNF.

normalize to BCNF

2) Profile :-

pro_id	name	email_id	country	height	weight	education
--------	------	----------	---------	--------	--------	-----------

this table is in 1NF

since, there is partial dependency, we can normalize in 2NF

pro_id	name	height	weight
--------	------	--------	--------

pro_id	name	email
--------	------	-------

Now, these tables are in 2NF & there is also no transitive relation they are in 3NF, therefore this is in BCNF.

normalize to BCNF

PRATICALLY:

Attributes

name height weight education

Functional Dependencies

name → height weight education

Attributes

pro_id name

Functional Dependencies

pro_id → name

3) SEARCH-PROFILE

attributes:-
& relation

search_pro_id	pro_id	education	Marital status
---------------	--------	-----------	----------------

↑ ↑ ↑

this table is in 1NF, in this table there are no functional dependencies and transitive relations and has left side key, therefore it is a BCNF.

BCNF dependencies:-

search_pro_id	pro_id	education	Marital status
---------------	--------	-----------	----------------

↑ ↑

PRATICALLY:

Attributes

search_pro_id

pro_id

education

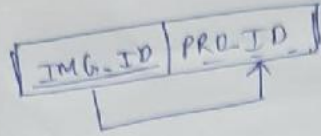
Marital_status

Functional Dependencies

search_pro_id → pro_id education Marital_status

4) Image-Gallery:-

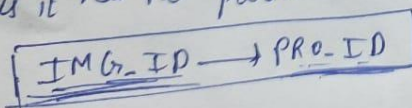
Attributes: IMG-ID, PRO-ID



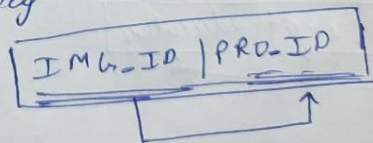
this table is in 1NF and no partial and transitive relations and left side is a key, Therefore it is in BCNF.

BCNF:-

as it has no partial dependency



(or)



PRATICALLY:

Normalize to BCNF

Attributes

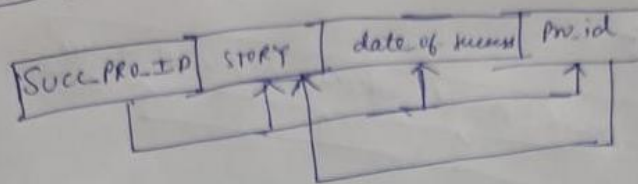
img_id pro_id

Functional Dependencies

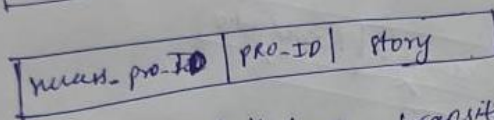
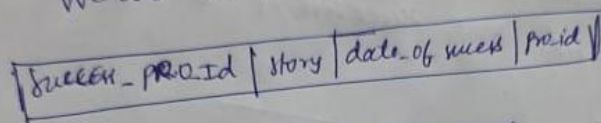
img_id \rightarrow pro_id

5) Success story

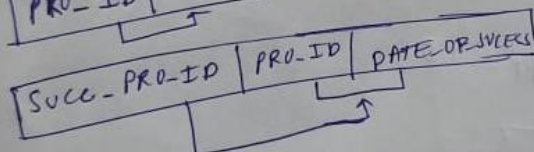
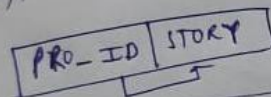
Attributes: ~~Succ-PRO-ID~~, STORY, DATE-OF-NEWS, PRO-ID

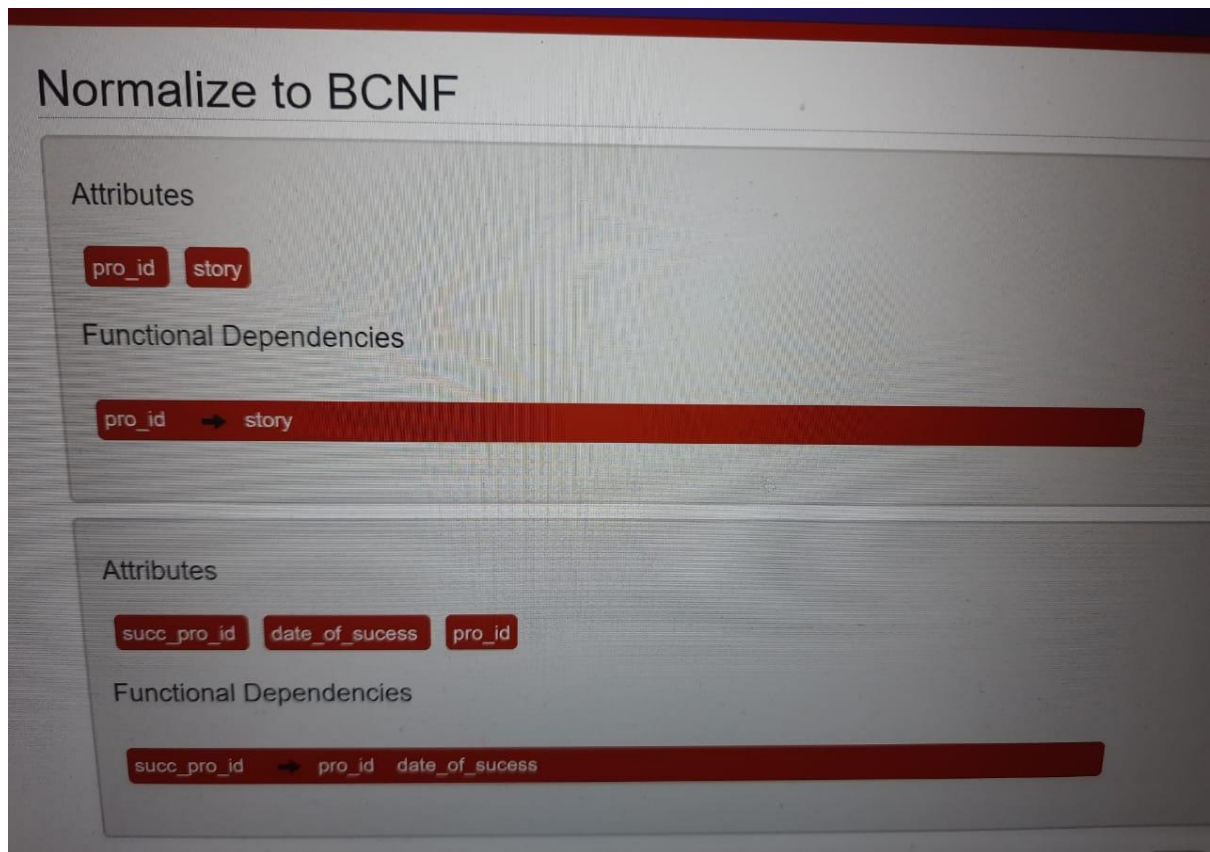


⊗ this table is in 1NF, since there is partial dependency
We are normalizing tables into 2NF



Now, these tables don't have transitivity hence it is in 2NF.





CHAPTER 5:

IMPLEMENTATION AND RESULTS:(SQL OUTPUT SCREENSHOTS BY TAKING SAMPLE INPUTS)

- 1)SQL software used to create databases of information 2)Tables are created for user login details, user profiles, images, preferences, etc. 3)User profile table consists of columns such as age, height, weight, caste, etc. 4)User preferences table contains criteria through which user would like to filter out potential matches 5)Images table stores the image links, associated to a profile via foreign key.

4.1 CREATE WITH CONSTRAINTS

create tables for entities ,user login, profile, image gallery, search profile, success story in SQL

```
SQL> create table user_login(
  2  user_id number(5) primary key,
  3  user_password varchar(10),
  4  user_name varchar(10));

Table created.
```

```
SQL> create table profile(  
  2  pro_id number(5) primary key,  
  3  name varchar(20),  
  4  email_id varchar(50),  
  5  caste varchar(10),  
  6  country varchar(20),  
  7  height varchar(30),  
  8  weight varchar(30),  
  9  education varchar(30),  
10  salary number(30),  
11  occupation varchar(10),  
12  gothram varchar(30),  
13  star varchar(30));
```

Table created.

```
SQL> create table image_gallery(  
  2  img_id number(5) primary key,  
  3  pro_id number(5),  
  4  foreign key(pro_id) references profile(pro_id));
```

Table created.

```
SQL> create table search_profile(  
  2  sear_pro_id number(5) primary key,  
  3  pro_id number(5),  
  4  education varchar(30),  
  5  martial_status varchar(20),  
  6  foreign key(pro_id) references profile(pro_id));
```

Table created.


```
SQL> create table success_story(
  2  succ_pro_id number(5) primary key,
  3  story varchar(30),
  4  date_of_success date);

Table created.
```

Performing insert, delete ,alter,modify, group by,select,update,join select operations on tables

1)INSERT

Insert into user_login values(&user_id,'&user_password','&user_name');

Insert into profile

values(&pro_id,'&name','&email_id','&caste','&country','&height','&weight','&education','&salary','&occupation','&star');

Insert into image_gallery values(&img_id,&pro_id);

Insert into search_profile values(&sear_pro_id,&pro_id,'&education','&marital_status');

Insert into success_story values(&succ_pro_id,'&story','&date_of_success');

```
SQL> select * from user_login;

  USER_ID USER_PASSW USER_NAME
-----
12345 29sne      sneha
67890 06rithu     rithu
```

```
SQL> select * from profile;
```

PRO_ID	NAME	EMAIL_ID	COUNTRY	HEIGHT	CASTE	WEIGHT	EDUCATION	SALARY	OCCUPATION	GOTHRAM	STAR
295	sneha	sne.kum@gmail.com	india	5.5	gandla						

PRO_ID	NAME	EMAIL_ID	COUNTRY	HEIGHT	CASTE	WEIGHT	EDUCATION	SALARY	OCCUPATION	GOTHRAM	STAR
49	software	irupudimaharshi					btech	100000			gemi

```
SQL> select * from success_story;
```

SUCC_PRO_ID	STORY	DATE_OF_S
295	gotmarried to id 172 lastmonth	11-OCT-18

2) **ALTER**: removes duplicates elements

```
SQL> alter table profile
2 modify email_id varchar(50) Unique;

Table altered.
```

3) DELETE

Deleting a row from search_profile using where clause and delete command:

```
SQL> delete from search_profile where pro_id=166;

1 row deleted.

SQL> select * from search_profile;
```

SEAR_PRO_ID	PRO_ID	EDUCATION	MARTIAL_STATUS
169	295	btechcivil	waiting

4) UPDATE

Updating the search_profile to change the marital status of a profile user using their sear_pro_id:

```
SQL> update search_profile set martial_status='married' where sear_pro_id=169;
```

```
1 row updated.
```

```
SQL> select * from search_profile;
```

SEAR_PRO_ID	PRO_ID	EDUCATION	MARTIAL_STATUS
169	295	btechcivil	married

5)SELECT:

```
SQL> select * from profile where caste='gandla';
```

PRO_ID	NAME	EMAIL_ID	CASTE	COUNTRY	HEIGHT	WEIGHT	EDUCATION	SALARY	OCCUPATION	GOTHRAM	STAR
295	sneha	sne.kum@gmail.com	gandla	india	5.5						

PRO_ID	NAME	EMAIL_ID	CASTE	COUNTRY	HEIGHT	WEIGHT	EDUCATION	SALARY	OCCUPATION	GOTHRAM	STAR
49	irupudimaharshi						btech	100000	software		gemini

```
SQL> select * from user_login where user_name IS NOT NULL;
```

USER_ID	USER_PASSW	USER_NAME
12345	29sne	sneha
67890	06rithu	rithu

```
SQL> insert into user_login values(13579,'21roop',NULL);
```

```
1 row created.
```

```
SQL> select * from user_login where user_name IS NULL;
```

USER_ID	USER_PASSW	USER_NAME
13579	21roop	

6)ORDER BY

Arrange all the users according to their user name in ascending and descending order:

```
SQL> select * from user_login order by user_name;
```

USER_ID	USER_PASSW	USER_NAME
67890	06rithu	rithu
12345	29sne	sneha

```
SQL> select * from user_login order by user_name desc;
```

USER_ID	USER_PASSW	USER_NAME
12345	29sne	sneha
67890	06rithu	rithu

7)JOIN:


```
SQL> select name,email_id,sear_pro_id from profile,search_profile where profile.pro_id=search_profile.pro_id;
```

NAME	EMAIL_ID	SEAR_PRO_ID
sneha	sne.kum@gmail.com	169
sneha	sne.kum@gmail.com	179
rithu	rith.moh@gmail.com	189
rithu	rith.moh@gmail.com	205
sneha	sne.kum@gmail.com	233
sneha	sne.kum@gmail.com	235

6 rows selected.

```
SQL> select profile.name,image_gallery.img_id from profile,image_gallery,search_profile where profile.pro_id=search_profile.pro_id and image_gallery.pro_id=search_profile.pro_id and profile.caste='gandla';
```

NAME	IMG_ID
sneha	9
sneha	9
sneha	9
sneha	9

```
SQL> select distinct profile.name,image_gallery.img_id from profile,image_gallery,search_profile where profile.pro_id=search_profile.pro_id and image_gallery.pro_id=search_profile.pro_id and profile.caste='gandla';
```

NAME	IMG_ID
sneha	9

```
SQL> select distinct profile.name,image_gallery.img_id from profile,image_gallery,search_profile where profile.pro_id=search_profile.pro_id and image_gallery.pro_id=search_profile.pro_id and profile.country='india';
```

NAME	IMG_ID
sneha	9
rithu	6

8)SUBQUERIES:

```
SQL> select name,caste from profile
2  where pro_id=(select pro_id from image_gallery
3  where img_id=5);
```

NAME	CASTE
nitima	chowdary

9)AGGREGATE FUNCTIONS:

```
SQL> select count(*) from search_profile where martial_status='married';

COUNT(*)
-----
1

SQL> select avg(height) from profile where country='india';

AVG(HEIGHT)
-----
5.6

SQL> select min(user_id) from user_login where user_id between 12343 and 67895;

MIN(USER_ID)
-----
12345
```

```
SQL> select max(user_id) from user_login where user_id between 12000 and 77000;

MAX(USER_ID)
-----
67890

SQL> select length(user_id) from user_login where user_password='29sne';

LENGTH(USER_ID)
-----
5
```

10) GROUP BY....HAVING:

```
SQL> select count(sear_pro_id) from search_profile group by martial_status having martial_status='waiting';

COUNT(SEAR_PRO_ID)
-----
3

SQL> select count(sear_pro_id) from search_profile group by martial_status having martial_status='divorced';

COUNT(SEAR_PRO_ID)
-----
1

SQL> select count(sear_pro_id) from search_profile group by martial_status having martial_status='married';

COUNT(SEAR_PRO_ID)
-----
2
```

11) STRING FUNCTION:

```
SQL> select concat(user_name,user_password) from user_login;

CONCAT(USER_NAME,USE
-----
sneha29sne
rithu06rithu
21roop
```

```
SQL> select replace (user_password,'o','O') from user_login;
```

```
REPLACE(US
```

```
-----
```

```
29sne
```

```
06rithu
```

```
21r00p
```

```
SQL> select reverse(user_name) from user_login where user_password='29sne';
```

```
REVERSE(US
```

```
-----
```

```
ahens
```

CHAPTER 6:

CONCLUSION AND FUTURE WORK:

The matrimonial application provides a platform for the millions of families looking for a suitable marriage. As there are many factors involved in such an important decision, an application like this will be very helpful to a lot of people. Over time, the database can be improved and expanded, to contain more and more details, for an even better experience.

Finding a suitable bride or groom can be a very stressful experience. We aim to turn this around, and make it more fun and exciting.

Indian online wedding websites offers today's youngsters the freedom to search a soul mate from a million of wedding profiles, also a platform to communicate beyond geographical boundaries, and an opportunity to understand each other well before marriage. But, how the marriage actually fares depends completely on one's destiny. There have already been millions of people already on online matrimonial sites and this is mostly going to persist in the future too. As far as internet is concerned, in this fast moving world, this is going to be the future for centuries.

REFERENCES:

- 1). (<http://knowledge.wharton.upenn.edu/india/article.cfm?articleid=4331>Nov 13, 2008-accessed on25-01-2013 and 03-02-2013)
- 2). (http://export.gov/india/build/groups/public/@eg_in/documents/webcontent/eg_in_049379.pdf "Doing Business in India: 2012 Country Commercial Guide for U.S. Companies." Accessed on 25-02-2013 and 08-02-2013)
- 3). (<http://coursewebsites.ebsglobal.net/>.Services Marketing by "Christopher H. Lovelock, Sandra Vandermerwe, Barbara Lewis, Suzanne Fernie")
- 4). (http://www.oup.com/uk/orc/bin/9780199265855/gay_ch01.pdf-accessed on 04-02-2013 &06-02-

2013)

5). (http://fds.oup.com/www.oup.com/pdf/13/9780199265855_chapter1.pdf accessed on 4-02-2013&06-02-2013)

6). (http://anzmac.org/conference/1998/Cd_rom/Walker205.pdf “Technology-Enabled Service Delivery: At Risk of Compromising the Customer-Service Provider Connection?”:Dr Rhett H Walker, Dr Margaret Craig-Lees (-accessed on 25-01-2013)

7). (http://export.gov/india/build/groups/public/@eg_in/documents/webcontent/eg_in_049379.pdf “Doing Business in India: 2012 Country Commercial Guide for U.S. Companies.” accessed on 25-02 2013 and 08-02-2013)

8). “Advanced Intelligent Technique for Personalization and Customization of Marital Website: Anand Singh Rajawat¹, Upendra Dwivedi² & Akhilesh R. Upadhyay^{31&2}Institute of Engineering, International Journal of Internet Computing (IJIC), ISSN No: 2231 – 6965, Volume-1, Issue-2, 2011 page47-52)

9). (http://www.acrwebsite.org/volumes/eacr/vol8/eacr_vol8_127.pdf- “ The Computer as ‘Middle Agent’: Negotiating the Meanings of Marriage on a Sikh Online Dating Site”-Pauline Maclaran, Anne Broderick, Amandeep Takhar, Elizabeth Parsons, -Advances in consumer Research Volume8,2008 page60-65 accessed on 26-01-2013))

10). (http://en.wikipedia.org/wiki/Self_service_technologies) “Zeithaml, V et al., Services Marketing, 5th edition, 2009, p. 56”-accessed on 08-02-2013)

11). (http://www.hospitalityupgrade.com/_files/File_Articles/hspr08_theconvergenceofselfservicetechnology_Kasavana.pdf accessed on 11-02 -2013)

12). (www.itif.org/files/2010-self-service-economy.pdf Castro, Daniel, Robert Atkinson and Stephen Ezell (2010), Embracing the Self-Service Economy, Washington, DC: The Information Technology & Innovation Foundation page1-40 accessed on 02-02-2013)

JOURNALS LINK:

<https://academicjournals.org/journal/IJLIS/article-full-text-pdf/30623701041>

