HOSTEL MANAGEMENT SYSTEM

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FINAL REVIEW DOCUMENT

SUBMITTED TO-:

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ACKNOWLEDGEMENT

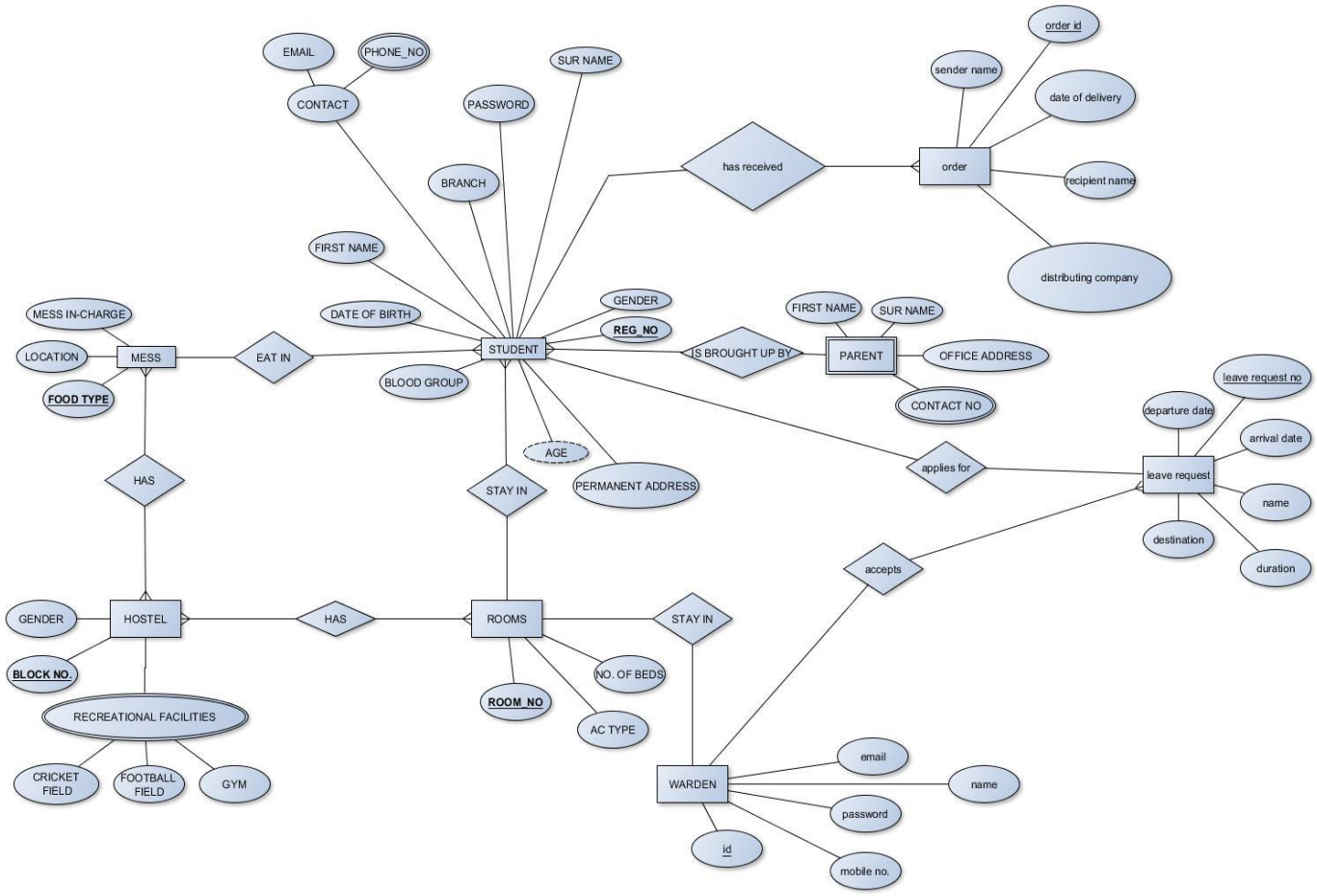
We would like to express our special thanks of gratitude to our teacher Graceline Jasmine Ma'am as well as our program chair Dr R Ganesan sir who gave us the golden opportunity to do this wonderful project on the topic Hostel Management System for college events which also helped us in doing a lot of Research and we came to know about so many new things. We are really thankful to them.
Secondly we would also like to thank our parents and friends who helped us a lot in finalizing this project within the limited time frame.

ABSTRACT

The online hostel management system works on the backbone of database and tables. The website has been developed to do away with old and obsolete system of website and bring a new website with new, better and up-to date functionalities such as search by clause, leave form acceptance, online order receiving, dashboard for messages etc.

The website uses the back end and database to fetch results.

ER – MODEL



The ER-model has been included for the understanding of the tables and their dependencies. The relations have been clearly mentioned and the dependencies and relations are given.

The student as an entity does the following-:

Eats in MESS

Stays in ROOM

Receives ORDER

Applies for LEAVE REQUEST

Similarly, all the functionalities of each entity have been mentioned in the E-R diagram.

The various attributes of the entities has also been mentioned clearly to understand each table and their column in the actual database.

The other entities that are included are-:

- Mess
- Room
- Order
- Hostel

For each of the given entity the attributes and relations have been mentioned.

MODULES/FUNCTIONALITIES

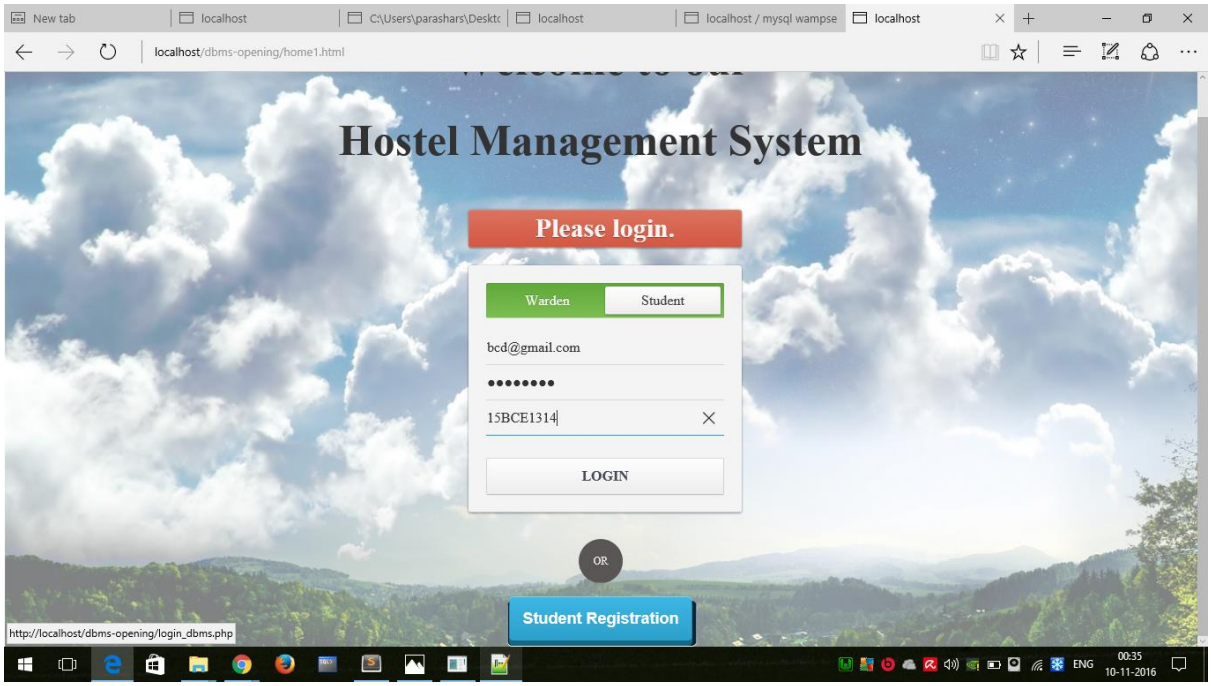
Module-1

The first module of our website comprises of Welcome page user sign-up and login. The user sign-up and login have been validated using JavaScript. The sign-up enables a user to be a member of the website and from then onwards the user can login and access the various functionalities of the website.

The sign-up and login form have been styled using CSS.

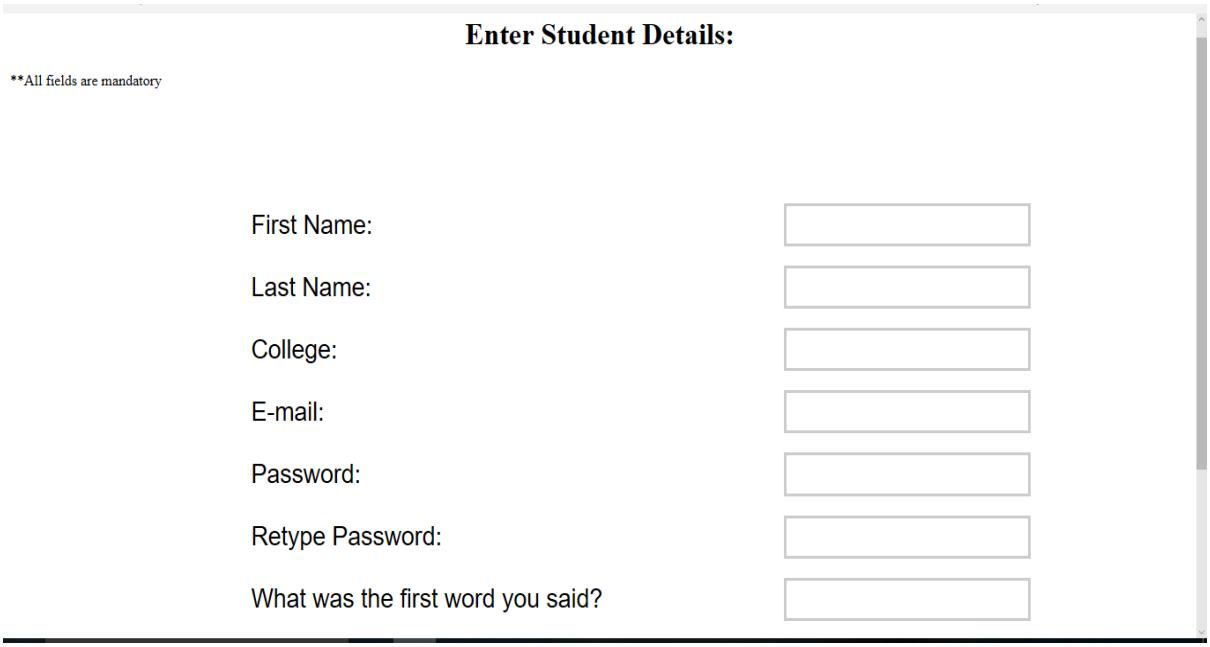
Welcome Page and Login

The home page has been styled using CSS and allows the user to login and register for the website.



Sign Up Page

The sign-up page has been dynamically designed using HTML and CSS and has user validation with it. The sign-up is available for user as well as admin.



Module-2

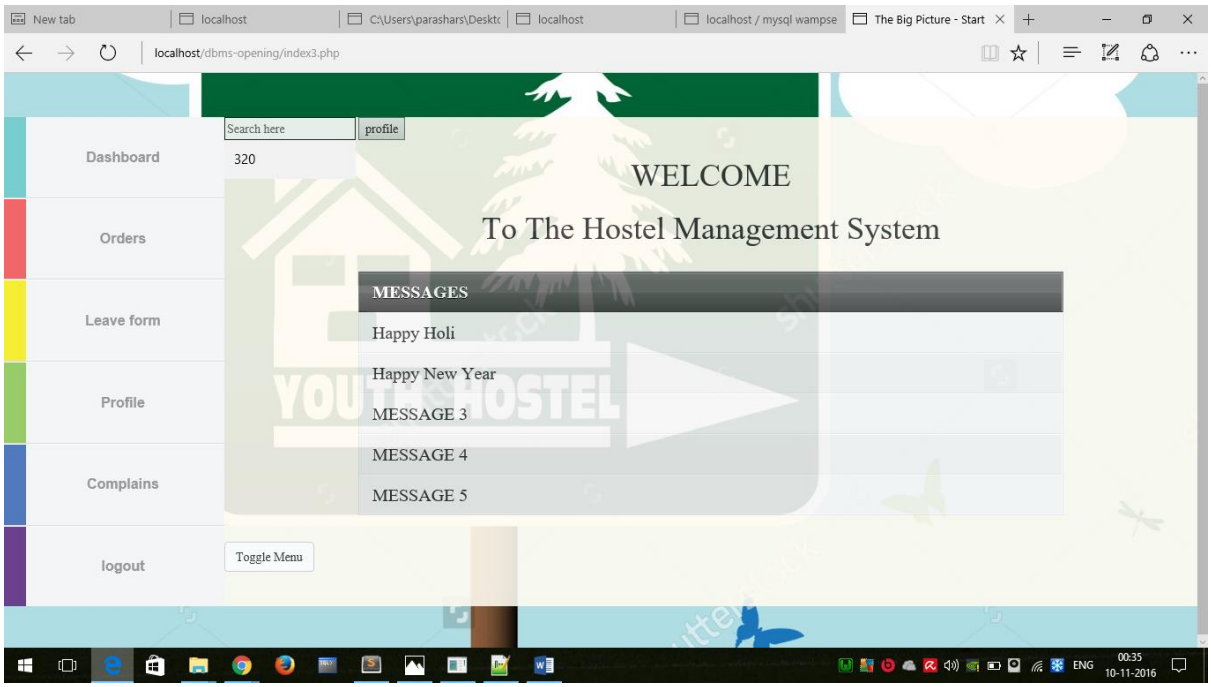
The module comprises of the inner part of the website which is the home page, admin homepage, the overall functionality, the menu bar and user profile.

The user gets to interact with the website through this module and can view the functionalities of the website. It allows the user to view events by college or date and also lets the user rate them and know about them.

The users can also view their profile.

Home page

The home page comprises of a dynamically designed filter and a dashboard featuring all the major events of the hostel that have been covered in the website. The filter can change the dashboard according to the college selected. The user can also click on the event button to view the desired thing.



User Profile

- Users can view their profile by clicking on the view profile button and in his profile they can view the following things-

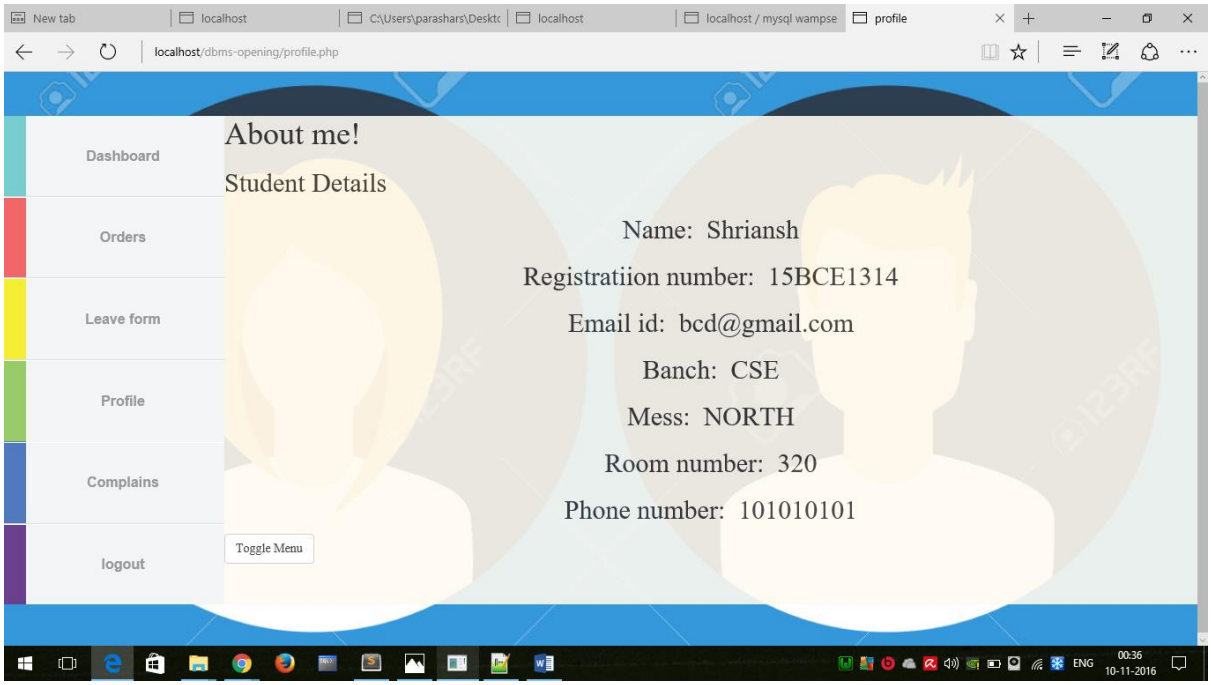
  A. First Name

  B. Last Name

  C. Room number

  D. Mess type

E. Room Type

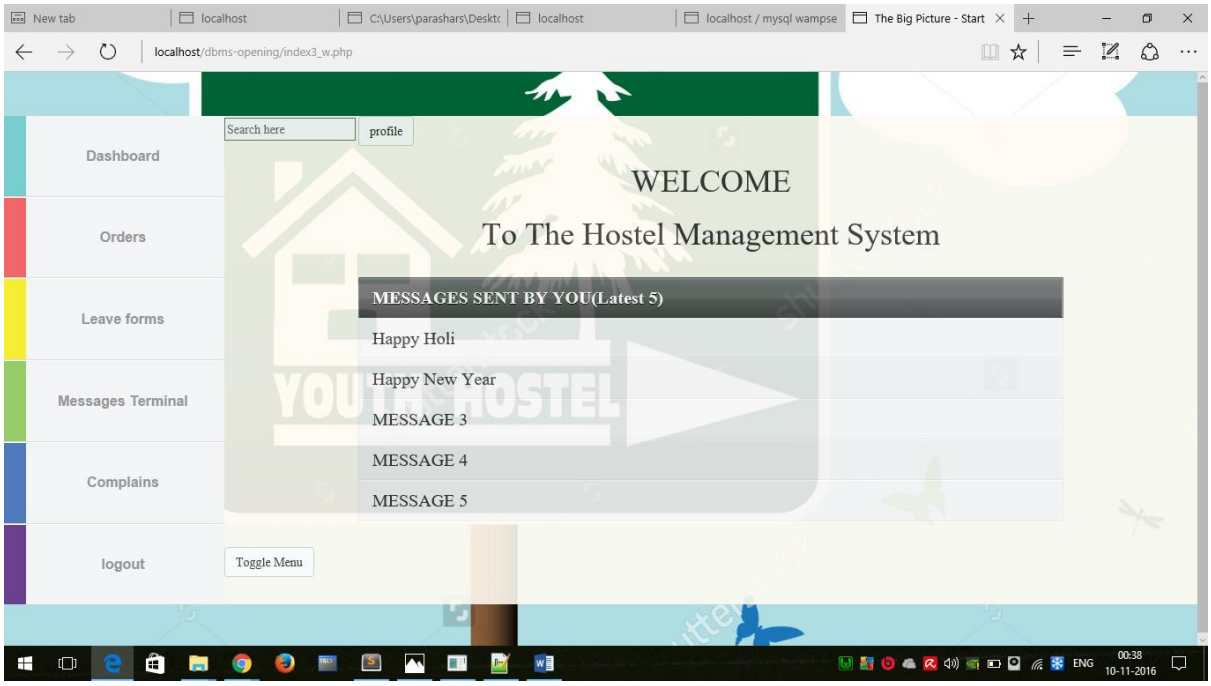


Admin Homepage

This page comprises of all the admin functionality that is

- He/she can search accept leave forms, search students by query, see complaints, online orders acceptance.

At last there is the logout button.



MODULE-3

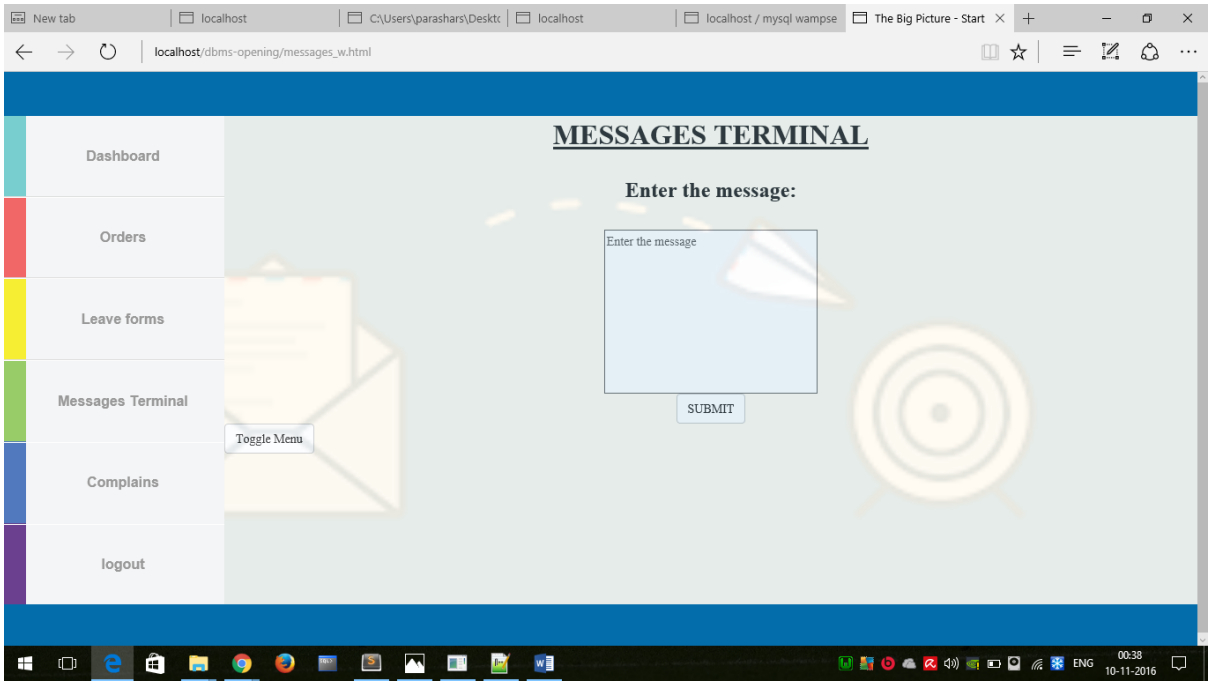
The third module comprises of the inner important functionalities of the website such as searching a student by query, dashboard updating, hostel complaints, viewing status of online orders, applying for leave forms etc.

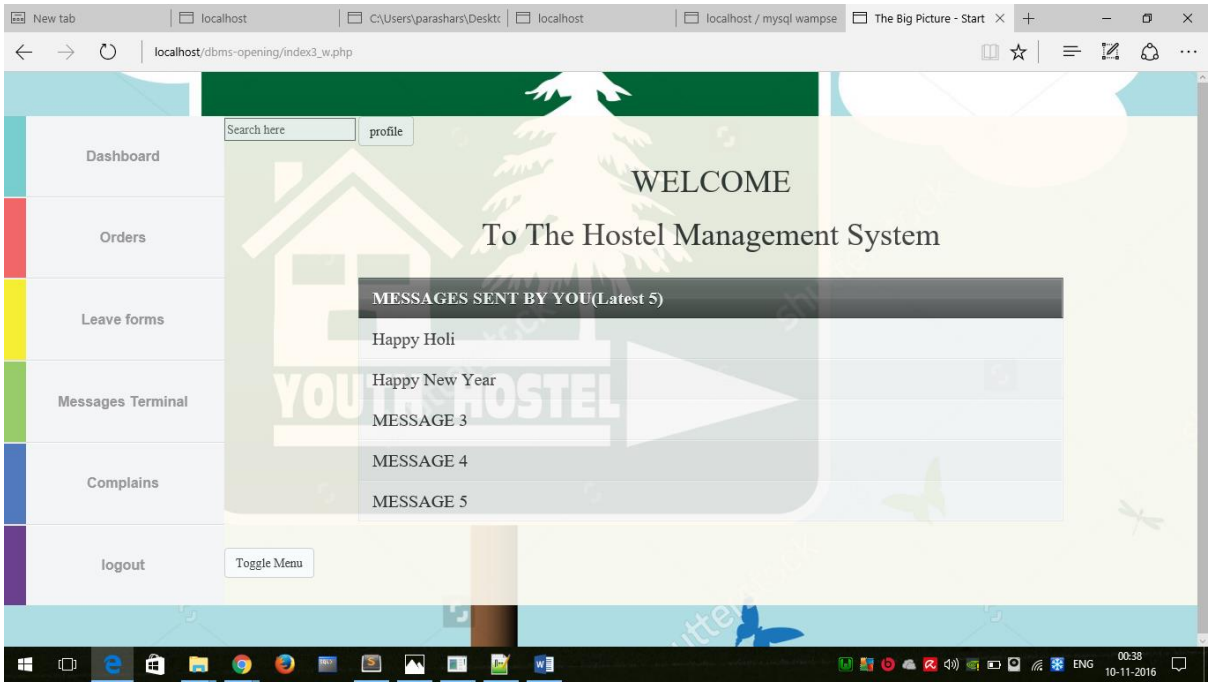
It also includes the overall working of the website and the basic functionality of the website.

Dashboard/Messages

The basic portal for the user to see and view all the functionalities of the website, and to also see the messages the student may have got. The dashboard is basically the backbone of the home page.

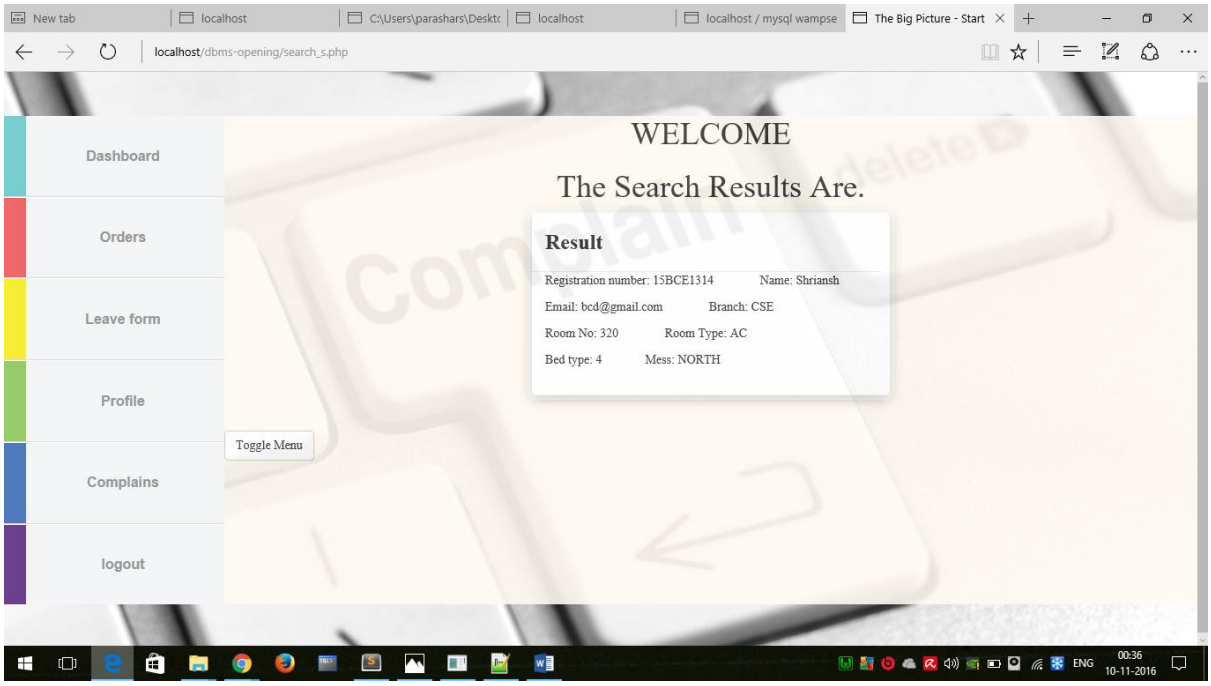
The messages are also fetched from the database and are presented to the user.





Search by Query

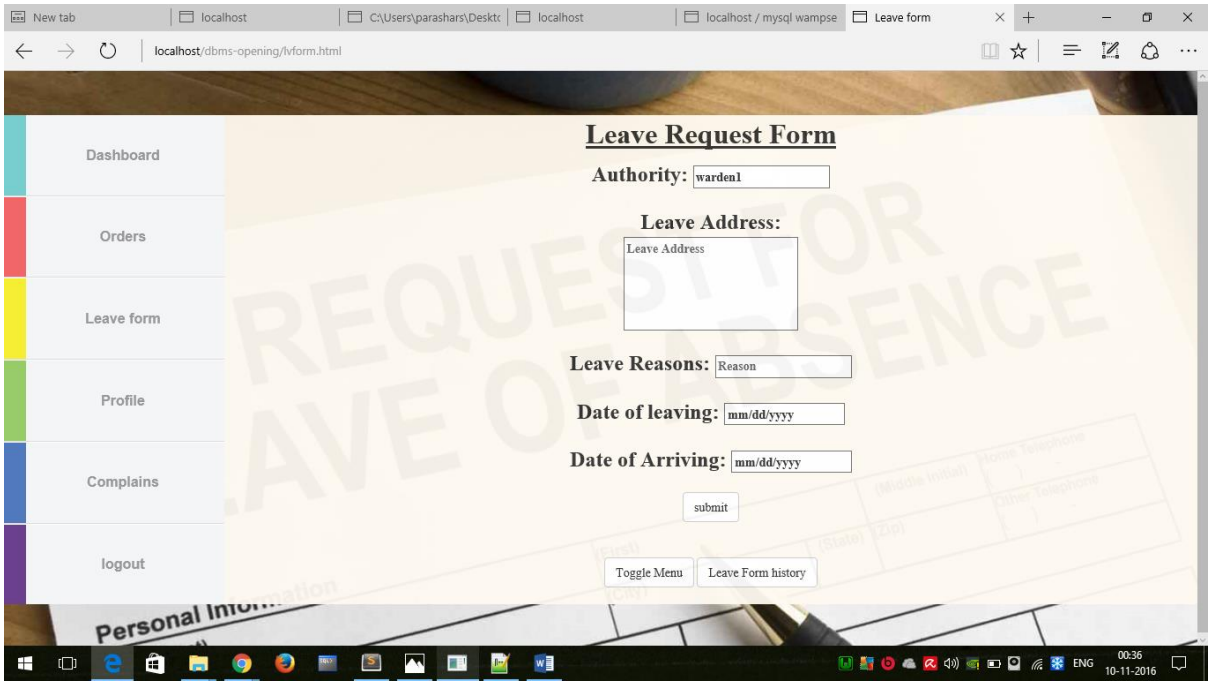
It is based purely on database where a person can search hostel members by clause such as registration number, name, mess type etc. It uses database fetching on condition functionality.

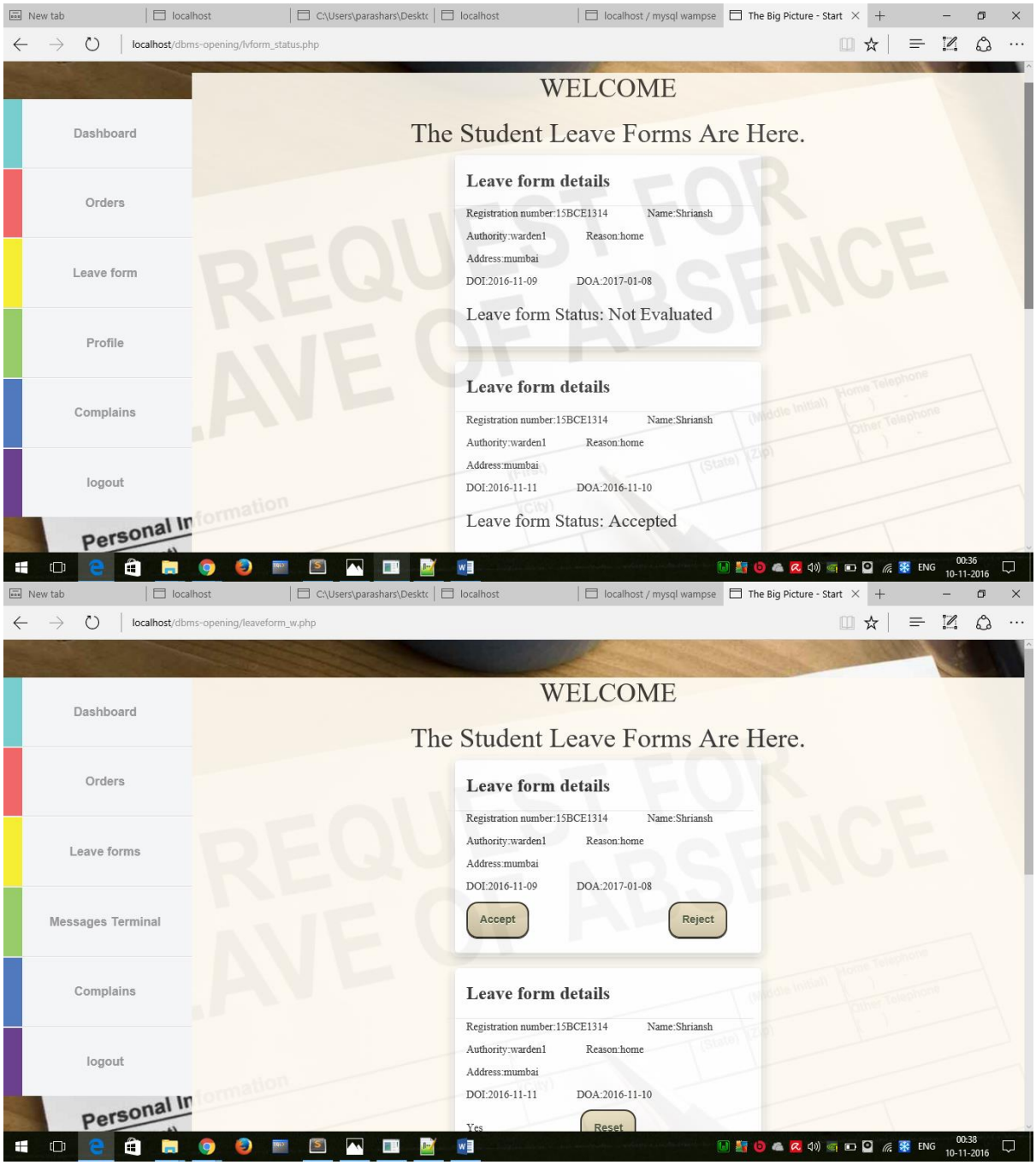


Leave forms

The leave form has been included so that the student can apply for it online and the warden can get the applied form and accept or reject it.

It works on the table functionality only, where the student's applied response in stored in a table and the same table result in fetched to the warden home page so that he/she can accept or reject the form.



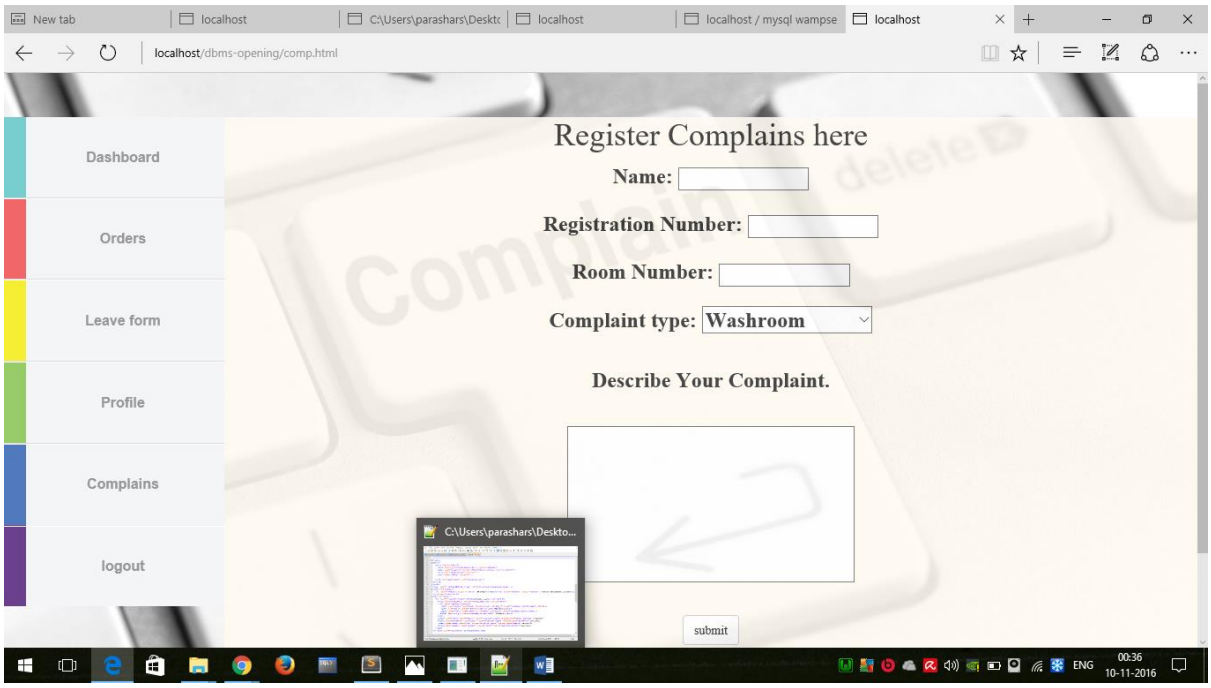


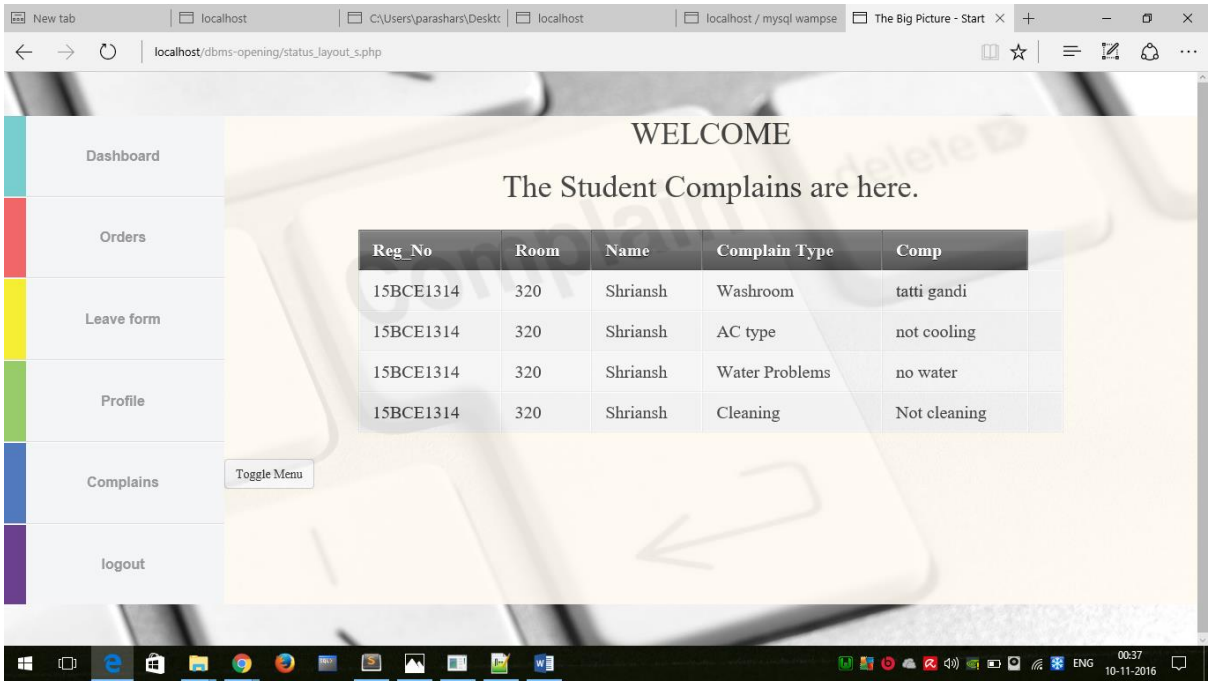
Hostel Complaints

The hostel complaints have been added so that students can give their complaints of the hostel of various kinds to the warden and the warden can take required action by accepting or rejecting the complaint.

The complaint table is again brought into picture and the result is fetched to the warden home page.

It eases the complaint procedure of the students.

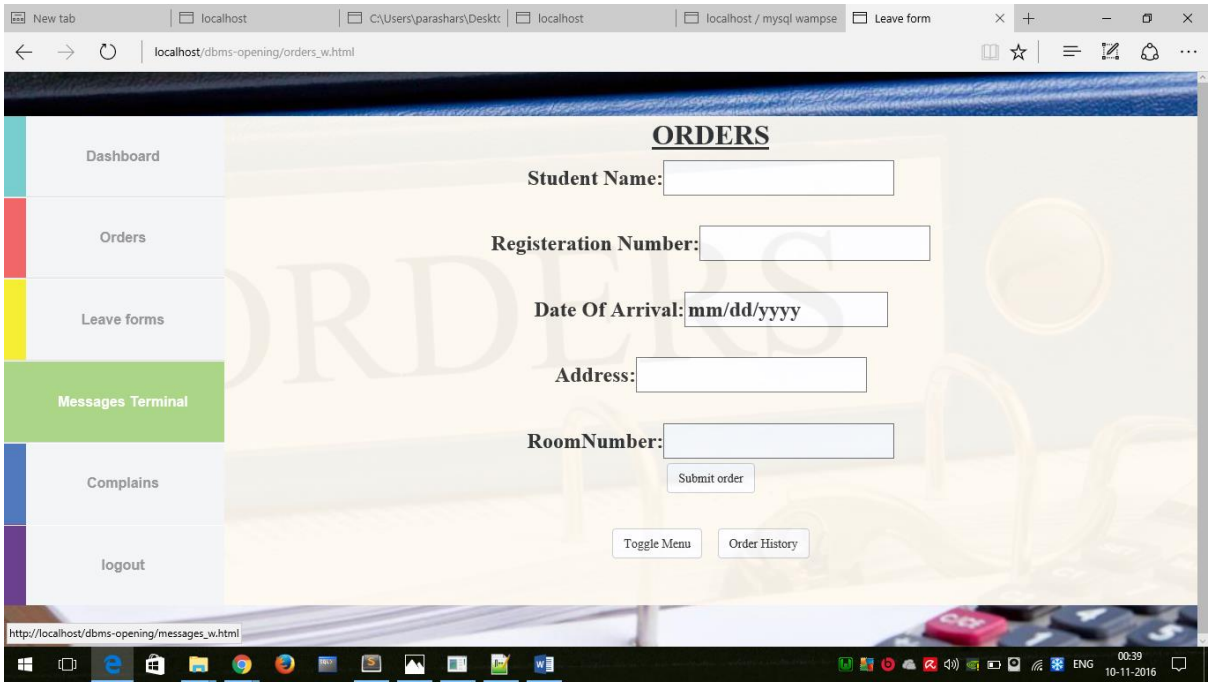




Online Orders

The online order functionality has been added so that the student could know the status about his online orders on the website itself instead of physically going and checking again and again.

The online order table is updated each time the user has an order for him/her.



Logout

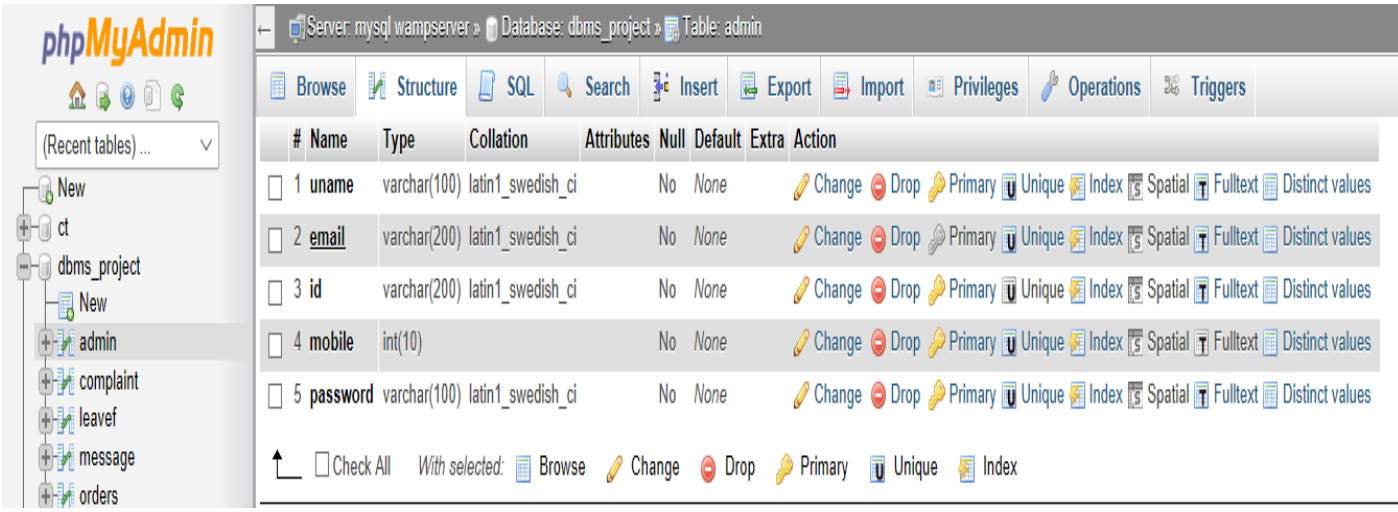
Finally, the logout button is there to get out of the website and active session.

SCHEMA/STUCTURE OF TABLES USED

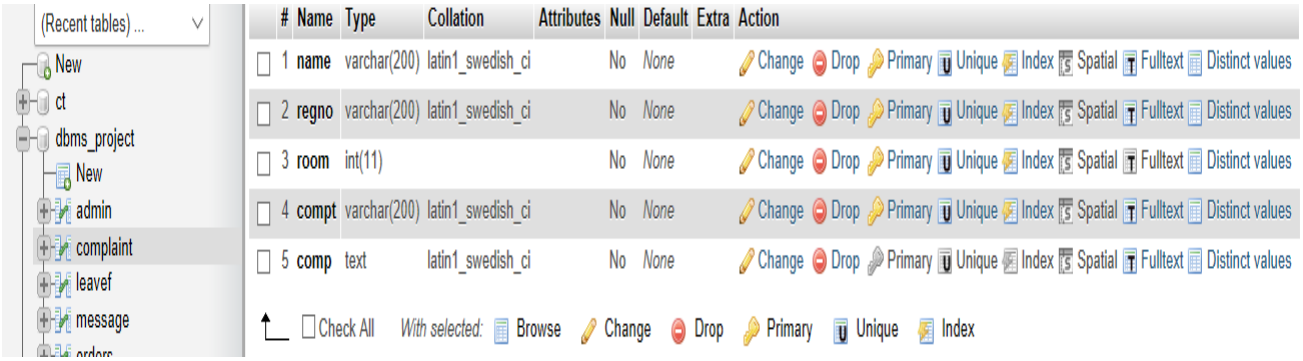
The structure of table is mentioned along with columns etc. to understand the database schema completely.

Each table has different columns which are mentioned clearly.

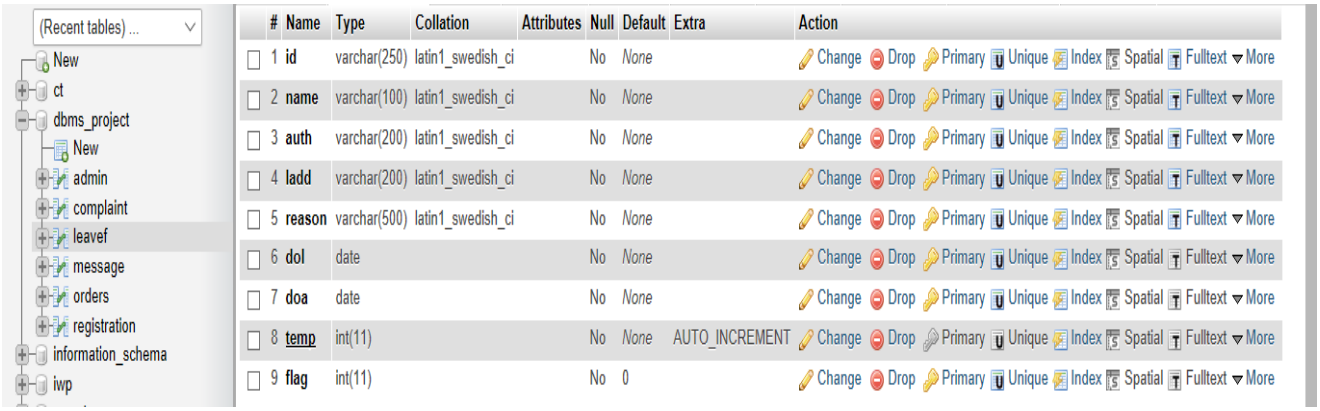
ADMIN TABLE



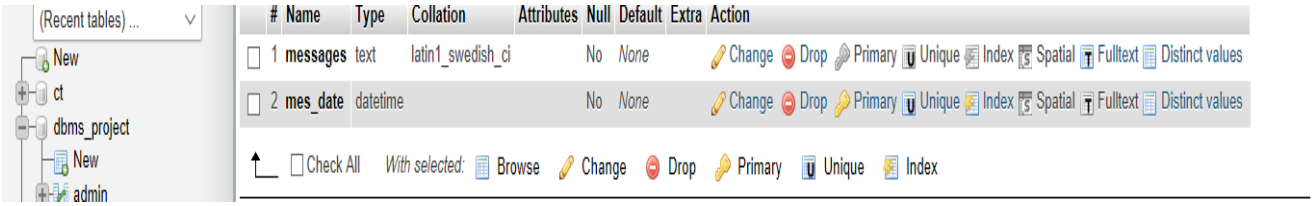
COMPLAINT TABLE



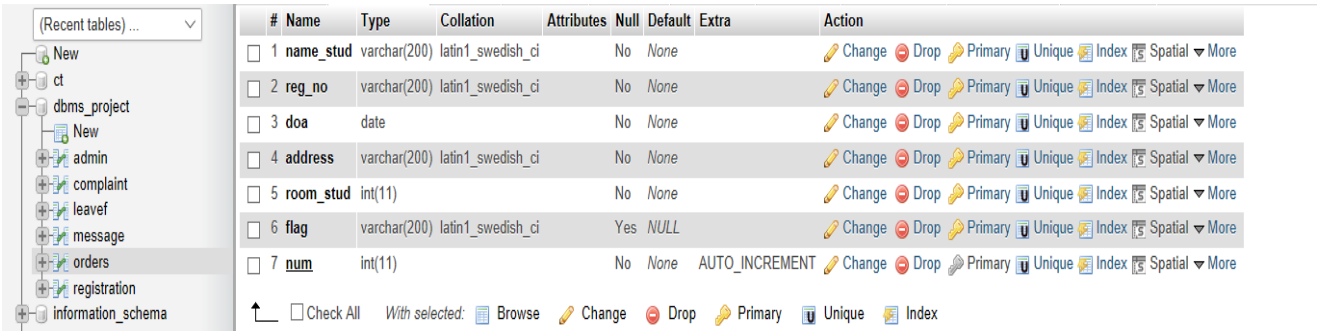
LEAVE FORM TABLE



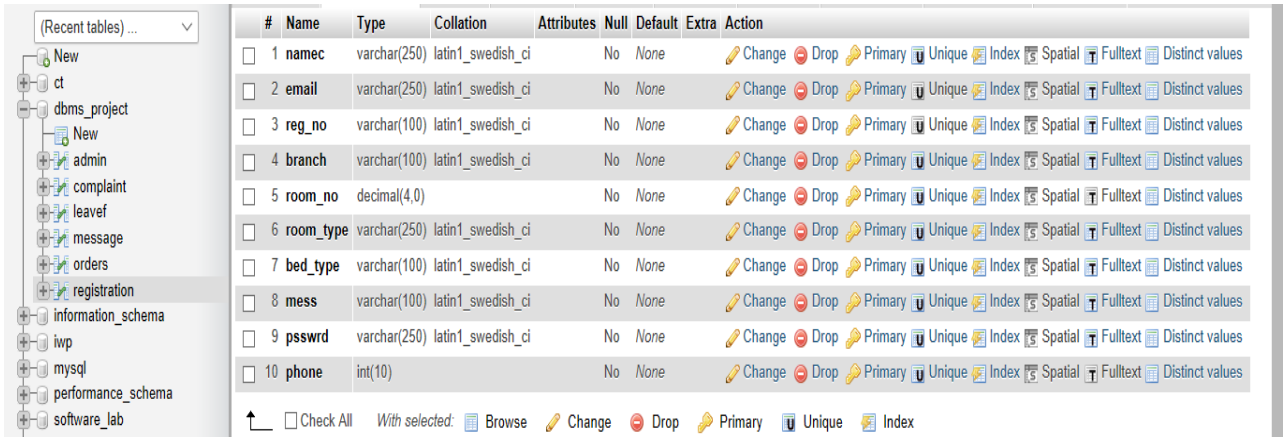
MESSAGES TABLE



ORDERS TABLE



REGISTRATION TABLE



Normalisation of Tables

REGISTRATION TABLE

admin
leavef
registration

namec	email	reg_no	branch	room_no	room_type	bed_type	mess	psswrd	phone
				0					0
Aayush Gupta	aayush.gupta2015@vit.ac.in	15bec1214	ECE	319	AC	4 Bed	Special	ttt	0
animesh	animeshsengupta@gmail.com	15BCE1198	MECH	315	AC	3-Bed	south-veg	opiujh	0
Ayush Sharma	ayush.sharma2015@vit.ac.in	15CSE1335	CSE	330	Non-Ac	4-bed	Special	ooo	0
blessvin	blessvinchrister@gmail.com	15BCE1333	ECE	1011	Non-AC	2-Bed	South	iuiu	0
Abhishek Deshmukh	deshmukhabhishek.randhhir@vit.ac.in	15bme1008	MECH	315	AC	3-Bed	North-Non-Veg	rrr	0
ddixit	dhruv.dixit999@vit.ac.in	15ECE1324	ECE	330		4-Bed	North-Non-Veg	iii	931239494
Har Shobhit Dayal	harshobhit.dayal2015@vit.ac.in	15BCE1192	CSE	316	AC	3-Bed	Special	qqq	0
justus	justusvmc@gmail.com	15BCE1043	CSE	322	AC	3-Bed	special	llll	0
Kajale Omkar Avinash	kajaleomkar.avinash@vit.ac.in	15BCL1039	BCL	319	AC	4-Bed	South-Veg	yyy	0
kashish	kashishmiglani10@gmail.com	15BCE1003	CSE	713	AC	2-Bed	special	qwewre	0
ketan	ketanatri10@gmail.com	15BCE1223	BCL	814	AC	2-Bed	North	akansha	0
mumma	mumma@gmail.com	898998	ll	0		a	o	oopp	99999
osho	oshoagyeya@gmail.com	15BCE1326	CSE	713	AC	2-Bed	special	fdjhfjdh	0
osho	oshopop@gmail.com	1234	qwe	90		io	io	osho	909009009
ovpc	ovpc@gmail.com	15BCE1023	MECH	322	Non-AC	4-Bed	North	oooo	0
Rupam Sarma	rupam.sarma@vit.ac.in	15BCE1069	CSE	319	AC	4-Bed	South-Non-Veg	uuu	0
Sachin Gopal	sachin.gopal2015@vit.ac.in	15BCE1188	CSE	316	AC	3-Bed	Special	ppp	0
Sanchay Gupta	sanchay.gupta2015@vit.ac.in	15BCL1192	BCL	316	AC	3-Bed	Special	www	0
Shivam Kapoor	shivam.kapoor@vit.ac.in	15BEC1190	ECE	315	AC	3-Bed	North-Non-Veg	eee	0
shubham	shri@gmail.com	15bce131444	cse	212		3	special	ffgghh	2147483647
shriansh	shrianshsrivastava@gmail.com	15BCE1314	CSE	320	AC	4-Bed	North-Veg	cxcvbvn	0
shubham	shubhamprashar@gmail.com	15BCE1318	BCL	320	AC	4-Bed	special	asddf	0
tushar	tusharpahuja@gmail.com	15BCE1090	CSE	714	AC	4-Bed	special	osho	0
utsav	utsavrai@gmail.com	15BCE1352	CSE	430	NON-AC	3-Bed	North	talwar	0

Given functional dependencies for table registration:

reg_no->namec, email, branch, psswrd, phone, room_no,mess

room_no->room_type,bed_type

1NF:

For this table:

1. values of each attribute are atomic
2. no composite values
3. all entries are of same kind
4. each column has unique name
5. no 2 rows are identical

Therefore it is in 1st normal form.

2NF:

A relation is in 2NF if it is in 1NF and all non-prime attributes are fully functionally dependant on each candidate key of R. Here, candidate key is reg_no. Therefore non-prime attributes are namec, email, branch, psswrd,

phone, room_no, mess ,room_type, bed_type. All of them are fully functionally dependent on the candidate key. Therefore, the table is in 2NF.

3NF:

A relation is in 3NF if it is in 2NF and no non prime attribute is transitively dependant on candidate key or in other words, there should not be the case that a non-prime attribute is determined by another non-prime attribute. Here, non prime attributes are namec, email, branch, psswrd, phone, room_no, mess ,room_type, bed_type, but room_type,bed_type are determined by room_no . Therefore the table is not in 3NF. Now, to convert it into 3NF, we break the table registration as follows:

registration=

registration1(reg_no,namec,email,branch,psswrd,phone,room_no,mess)

Its functional dependencies are:

reg_no->namec, email, branch, psswrd, phone, room_no,mess

+

registration2(room_no,room_type,bed_type)

Its functional dependencies are:

room_no->room_type,bed_type

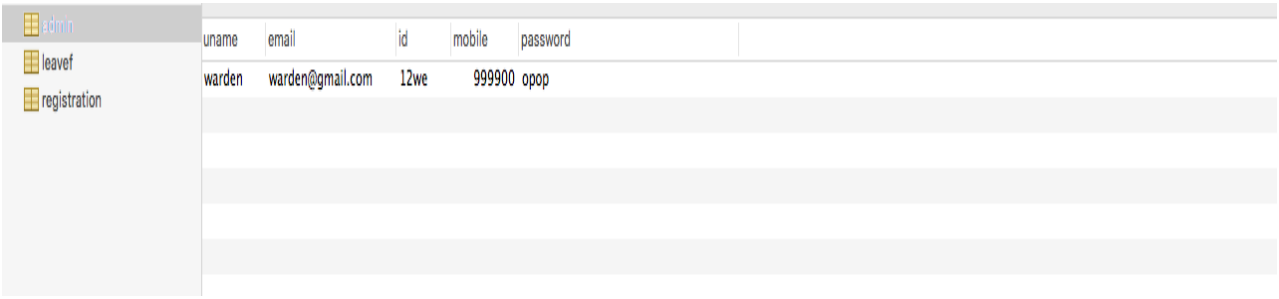
Now the table is in 3NF.

BCNF:

A relation is in BCNF if it is in 3NF and for each X->Y , X is a super key.
For table
registration1(reg_no,namec,email,branch,psswrd,phone,room_no,mess)
Its functional dependencies are:
reg_no->namec, email, branch, psswrd, phone, room_no,mess
Here reg_no is a super key. Therefore this table is in BCNF.
For table registration2(room_no,room_type,bed_type)

Its functional dependencies are:
room_no->room_type,bed_type
Here room_no is the superkey. Therefore this table is also in BCNF.

ADMIN TABLE



Given functional dependencies for table admin:

id->uname,email,mobile,password

1NF:

For this table:

1. values of each attribute are atomic
2. no composite values
3. all entries are of same kind
4. each column has unique name
5. no 2 rows are identical

Therefore in 1st normal form.

2NF:

A relation is in 2NF if it is in 1NF and all non-prime attributes are fully functionally dependant on each candidate key of R. Here, candidate key is id. Therefore non-prime attributes are uname, email,mobile,password. All of

them are fully functionally dependent on the candidate key. Therefore, the table is in 2NF.

3NF:

A relation is in 3NF if it is in 2NF and no non prime attribute is transitively dependant on candidate key or in other words, there should not be the case that a non-prime attribute is determined by another non-prime attribute. Here, non prime attributes are uname,email,mobile,password and all are determined by the candidate key only. Therefore the table is in 3NF.

BCNF:

A relation is in BCNF if it is in 3NF and for each X->Y , X is a super key. Here for table admin, id is a super key. Therefore the table is in BCNF.

LEAVE FORM TABLE

admin
leavef
registration

id	name	auth	ladd	reason	dol	doa	temp	flag
15BCE1352	kahsis	warden1	kakaka	opop	0004-03-04	0344-03-31	1	0
15BCE1352	kahsis	warden1	kk	kk	0002-02-02	0003-03-31	2	0
15BCE1352	kahsis	warden1	kk	kk	0002-02-02	0003-03-31	3	0
15BCE1352	kahsish	warden1	33	33	0033-03-31	0044-04-04	4	0
15BCE1352	utsav	warden1	33	33	0033-03-31	0044-04-04	5	-1

Given functional dependencies for table leavef:

id,temp->name,reason,ladd,auth

reason->dol,doa

1NF:

For this table:

1. values of each attribute are atomic
2. no composite values
3. all entries are of same kind
4. each column has unique name
5. no 2 rows are identical

Therefore in 1st normal form.

2NF:

A relation is in 2NF if it is in 1NF and all non-prime attributes are fully functionally dependant on each candidate key of R. Here, candidate key is (id,temp). Therefore non-prime attributes are name, reason,ladd,auth,reason,dol,doa. All of them are fully functionally dependent on the candidate key. Therefore, the table is in 2NF.

3NF:

A relation is in 3NF if it is in 2NF and no non prime attribute is transitively dependant on candidate key or in other words, there should not be the case that a non-prime attribute is determined by another non-prime attribute. Here, non prime attributes are name, reason,ladd,auth,reason,dol,doa but dol,doa is determined by reason. Therefore the table is not in 3NF. Now, to convert it into 3NF, we break the table leavef as follows:

leavef=leavef1(id,temp,name,reason,ladd,auth)

Its functional dependencies are:

id,temp->name,reason,ladd,auth

+

leavef2(reason,dol,doa)

Its functional dependencies are:

reason->dol,doa

Now the table is in 3NF.

BCNF:

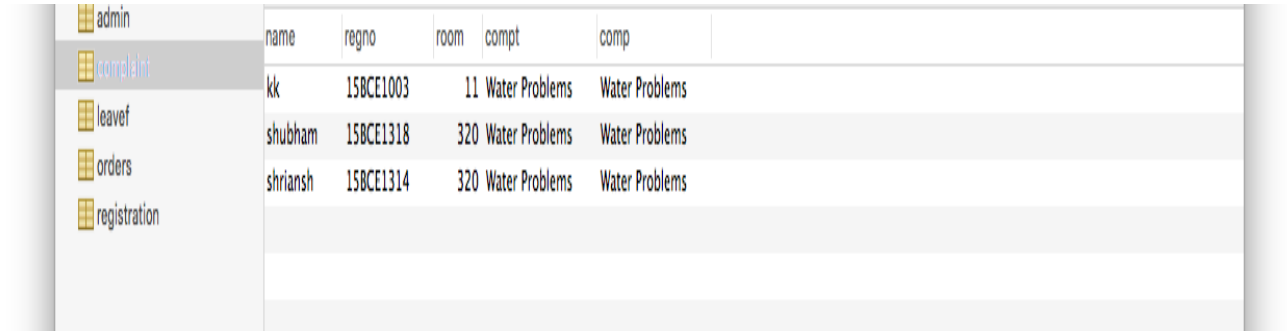
A relation is in BCNF if it is in 3NF and for each X->Y , X is a super key. Here for table

leavef=leavef1(id,temp,name,reason,ladd,auth)

Its functional dependencies are:

id,temp->name,reason,ladd,auth
(id,temp) is a super key. Therefore, the table is in BCNF.
For table
leavef2(reason,dol,doa)
Its functional dependencies are:
reason->dol,doa
Here , reason is a super key. Therefore, the table is in BCNF.

COMPLAINT



Given functional dependencies for table complaint(assuming one student from a room can lodge only one complaint)

reg_no->name,room

name->compt

compt->comp

1NF:

For this table:

1. values of each attribute are atomic
2. no composite values
3. all entries are of same kind
4. each column has unique name
5. no 2 rows are identical

Therefore in 1st normal form.

2NF:

A relation is in 2NF if it is in 1NF and all non-prime attributes are fully functionally dependant on each candidate key of R. Here, candidate key is (reg_no). Therefore non-prime attributes are name, room,compt,comp. All of them are fully functionally dependent on the candidate key. Therefore, the table is in 2NF.

3NF:

A relation is in 3NF if it is in 2NF and no non prime attribute is transitively dependant on candidate key or in other words, there should not be the case that a non-prime attribute is determined by another non-prime attribute. Here, non prime attributes are name, room,compt,comp but compt is determined by name and comp is determined by compt. Therefore the table is not in 3NF. Now, to convert it into 3NF, we break the table leavef as follows:

complaint=complaint1(reg_no,name,room)

Its functional dependencies are:

reg_no->name,room

+

complaint2(name,compt)

Its functional dependencies are:

name->compt

+

complaint3(compt.comp)

Its functional dependencies are:

compt->comp

Now the table is in 3NF.

BCNF:

A relation is in BCNF if it is in 3NF and for each X->Y , X is a super key. Here for table complaint1(reg_no,name,room)

Its functional dependencies are:

reg_no->name,room

reg_no is a super key. Therefore, this table is in BCNF.

For table

complaint2(name,compt)

Its functional dependencies are:

name->compt

name is super key. . Therefore, this table is in BCNF.

For table

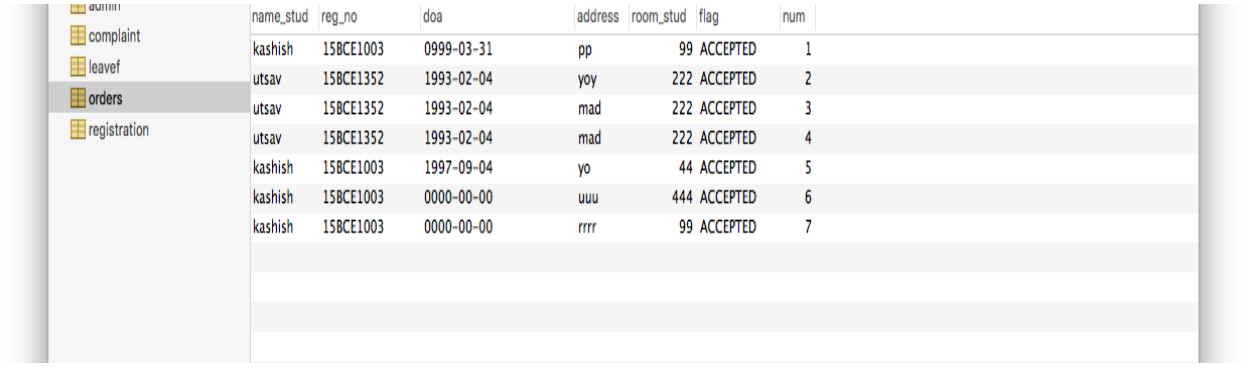
complaint3(compt,comp)

Its functional dependencies are:

compt->comp

Here, compt is a super key. Therefore, the table is in BCNF.

ORDERS



name_stud	reg_no	doa	address	room_stud	flag	num
kashish	15BCE1003	0999-03-31	pp	99	ACCEPTED	1
utsav	15BCE1352	1993-02-04	yoy	222	ACCEPTED	2
utsav	15BCE1352	1993-02-04	mad	222	ACCEPTED	3
utsav	15BCE1352	1993-02-04	mad	222	ACCEPTED	4
kashish	15BCE1003	1997-09-04	yo	44	ACCEPTED	5
kashish	15BCE1003	0000-00-00	uuu	444	ACCEPTED	6
kashish	15BCE1003	0000-00-00	rrrr	99	ACCEPTED	7

Given functional dependencies for table orders

num->name_stud,reg_no,doa,address,room_stud

reg_no->name_stud,room_stud

address->doa

1NF:

For this table:

1. values of each attribute are atomic
2. no composite values
3. all entries are of same kind
4. each column has unique name
5. no 2 rows are identical

Therefore in 1st normal form.

2NF:

A relation is in 2NF if it is in 1NF and all non-prime attributes are fully functionally dependant on each candidate key of R. Here, candidate key is (num). Therefore non-prime attributes are name_stud, reg_no,doa,address,room_stud. All of them are fully functionally dependent on the candidate key. Therefore, the table is in 2NF.

3NF:

A relation is in 3NF if it is in 2NF and no non prime attribute is transitively dependant on candidate key or in other words, there should not be the case that a non-prime attribute is determined by another non-prime attribute. Here, non prime attributes are name_stud, reg_no,doa,address,room_stud.But name_stud,room_stud are determined by reg_no. Also, doa is determined by address. Therefore the table is not in 3NF. Now, to convert it into 3NF, we break the table orders as follows:

orders=orders1(num,reg_no,address)

Its functional dependencies are:

num->,reg_no,address

+

order2(reg_no,name_stud,room_stud)

Its functional dependencies are:

reg_no->name_stud,room_stud

+

orders3(address,doa)

Its functional dependencies are:

address->doa

Now the table is in 3NF.

BCNF:

A relation is in BCNF if it is in 3NF and for each X->Y , X is a super key. Here for table

orders=orders1(num,reg_no,address)

Its functional dependencies are:

num->,reg_no,address

here,num is super key. Therefore the table is in BCNF.

For table

order2(reg_no,name_stud,room_stud)

Its functional dependencies are:

reg_no->name_stud,room_stud

reg_no is super key. Therefore the table is in BCNF.

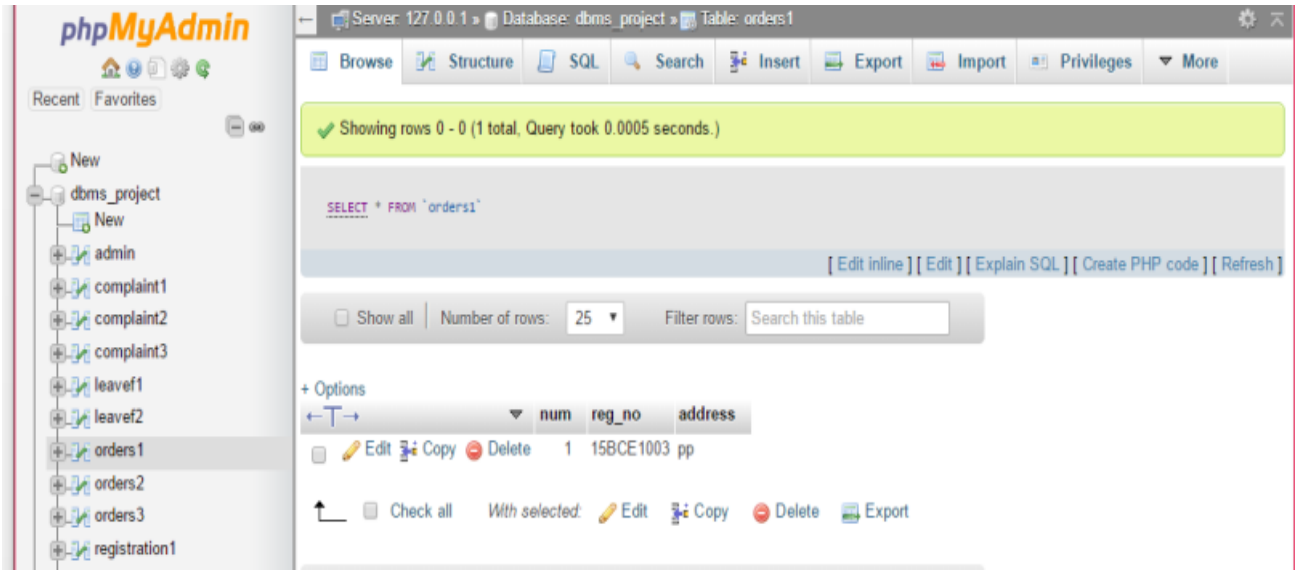
For table
orders3(address,doa)
Its functional dependencies are:

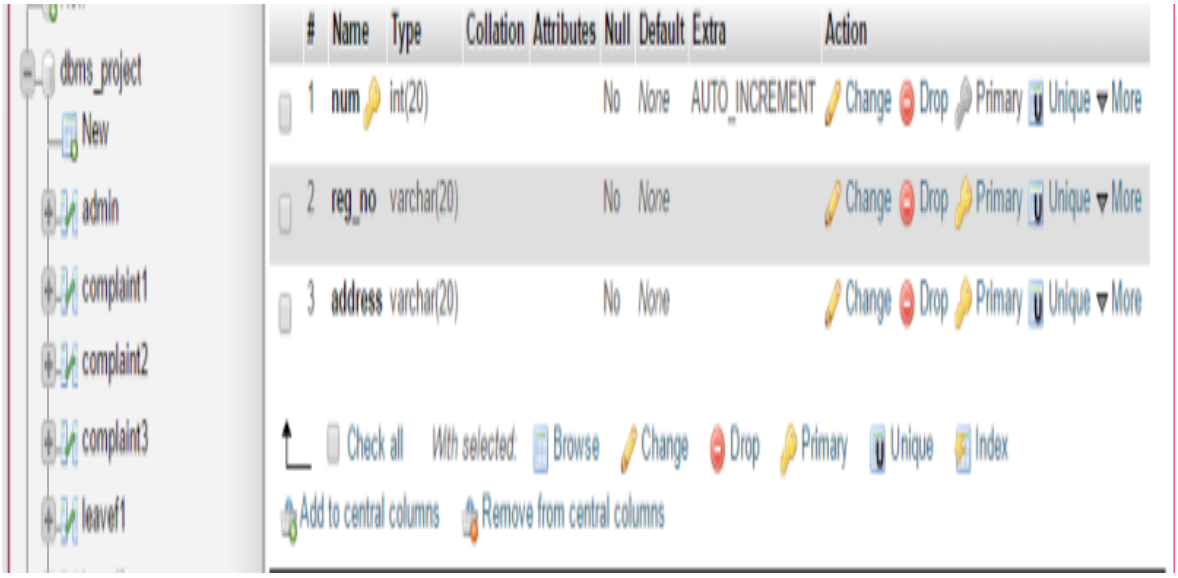
address->doa

Here, address is super key. Therefore the table is in BCNF.

ALL NORMALISED TABLES AND THEIR SCREENSHOTS:

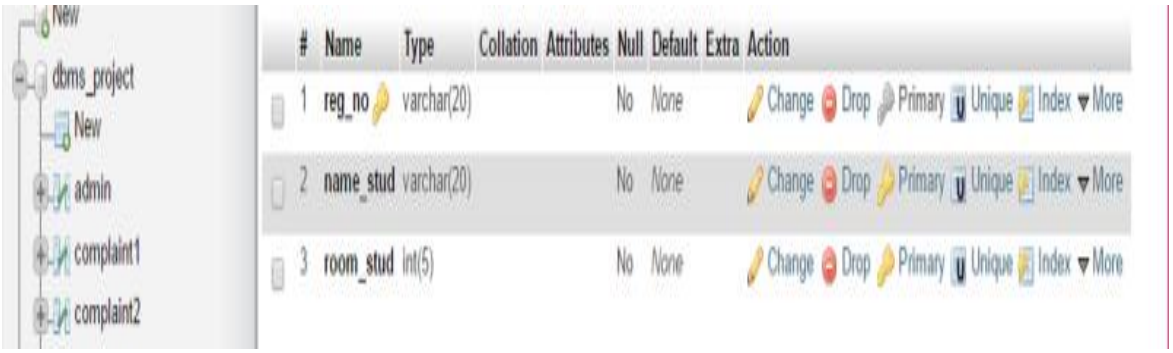
ORDERS 1



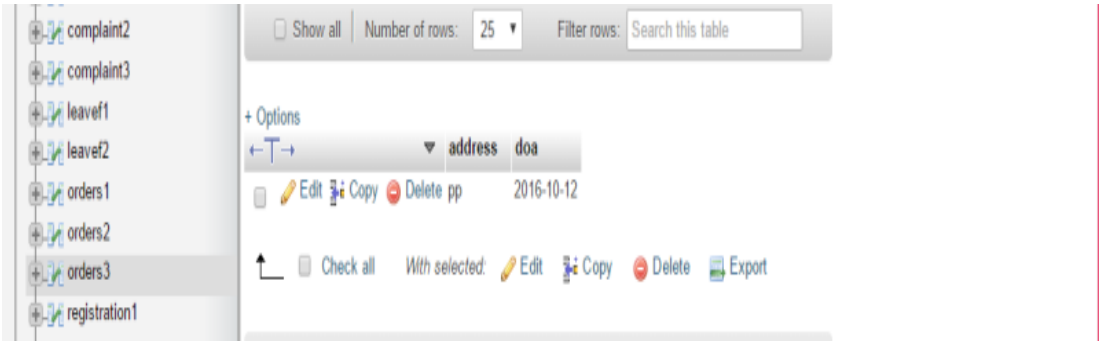


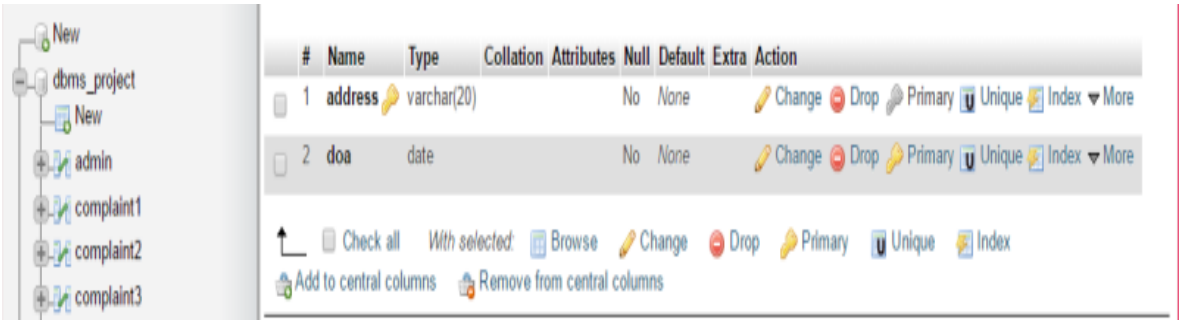
ORDERS-2


complaint2
complaint3
leavef1
leavef2
orders1
orders2
orders3
registration1
Show all
Number of rows: 25
Filter rows: Search this table
+ Options
reg_no
name_stud
room_stud
Edit Copy Delete 15BCE1003 kashish 99
Check all
With selected: Edit Copy Delete Export

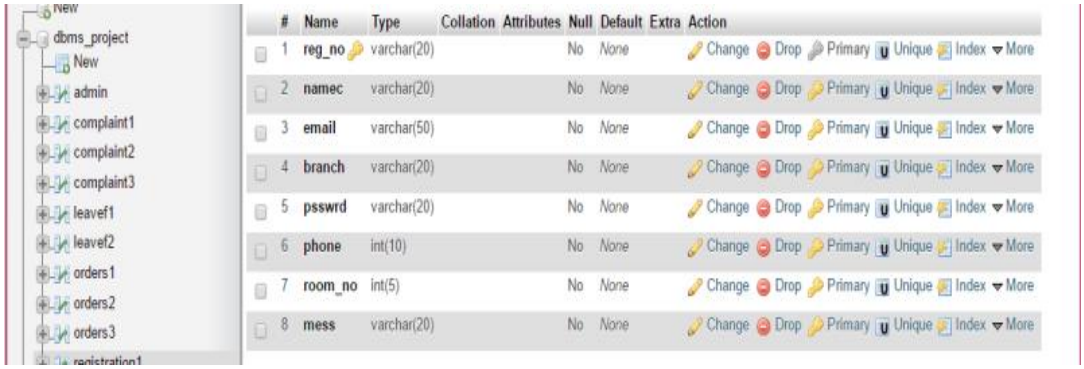

New
dbms_project
New
admin
complaint1
complaint2
Name Type Collation Attributes Null Default Extra Action
1 reg_no varchar(20) No None Change Drop Primary Unique Index More
2 name_stud varchar(20) No None Change Drop Primary Unique Index More
3 room_stud int(5) No None Change Drop Primary Unique Index More

ORDERS-3

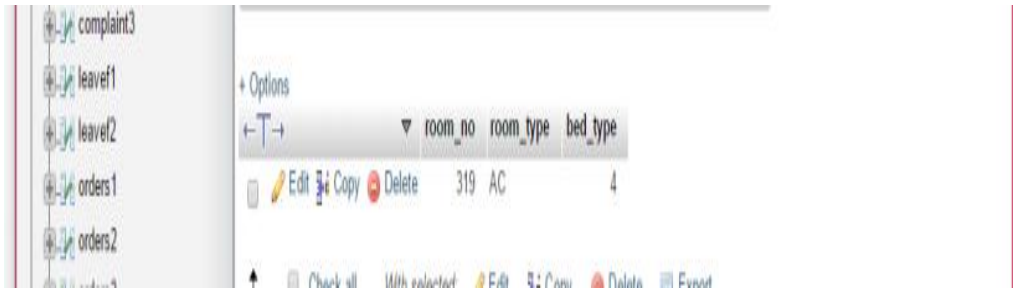


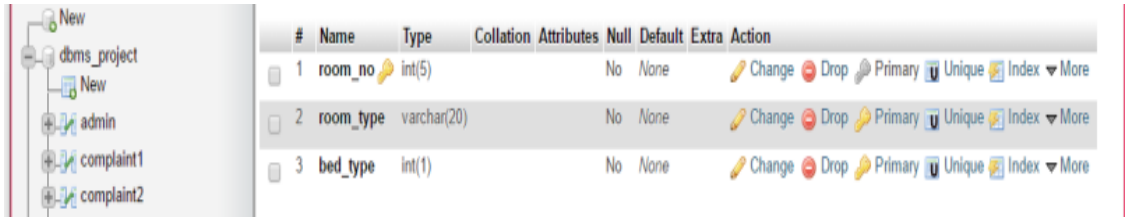


REGISTRATION-1



REGISTRATION 2



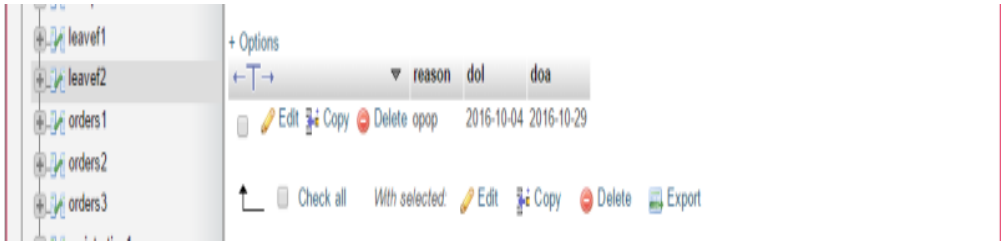


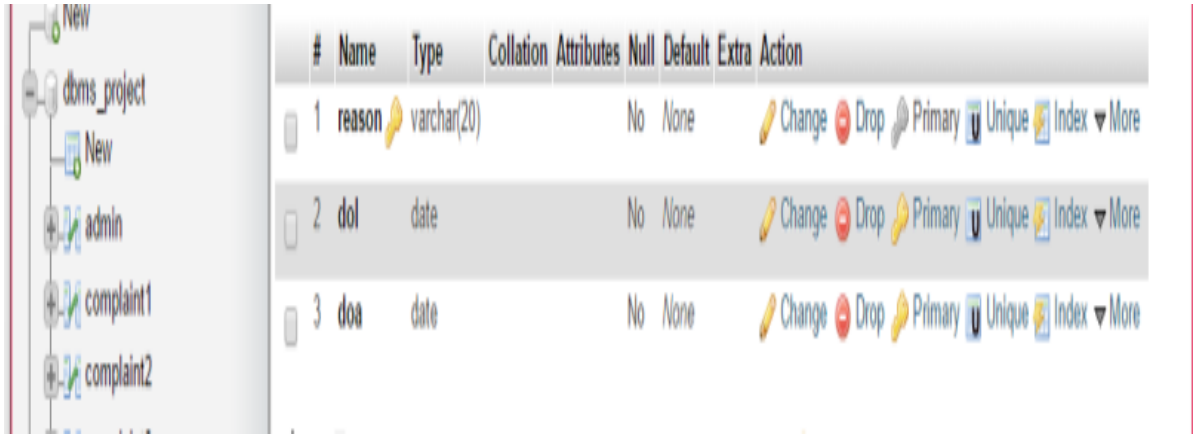
LEAVE FORM-1


leavef1
leavef2
orders1
orders2
orders3
registration1
Show all
Number of rows: 25
Filter rows: Search this table
+ Options
id temp name reason ladd auth
15BCE1352 1 kahsis opop kakaka warden1

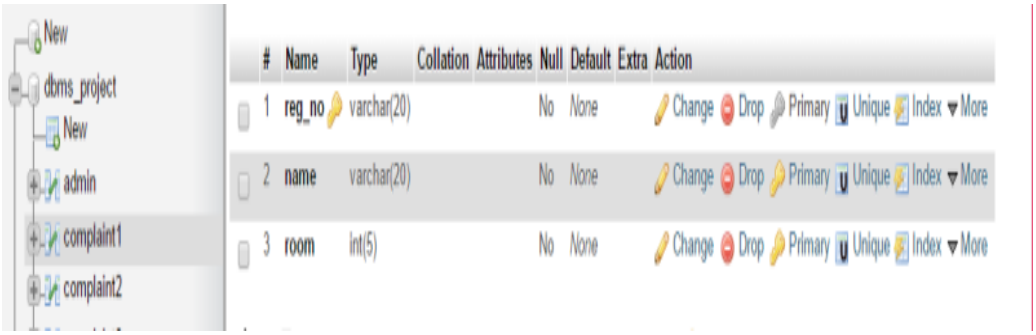

New
dbms_project
New
admin
complaint1
complaint2
complaint3
leavef1
leavef2
orders1
Name Type Collation Attributes Null Default Extra Action
1 id varchar(20) No None Change Drop Primary Unique Index More
2 temp int(20) No None Change Drop Primary Unique Index More
3 name varchar(20) No None Change Drop Primary Unique Index More
4 reason varchar(20) No None Change Drop Primary Unique Index More
5 ladd varchar(20) No None Change Drop Primary Unique Index More
6 auth varchar(20) No None Change Drop Primary Unique Index More

LEAVE FORM-2



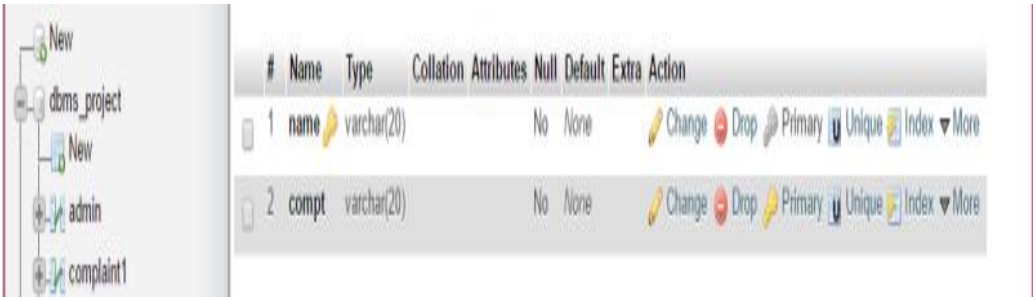


COMPLAINT-1


New
dbms_project
New
admin
complaint1
complaint2
Name Type Collation Attributes Null Default Extra Action
1 reg_no varchar(20) No None Change Drop Primary Unique Index More
2 name varchar(20) No None Change Drop Primary Unique Index More
3 room int(5) No None Change Drop Primary Unique Index More

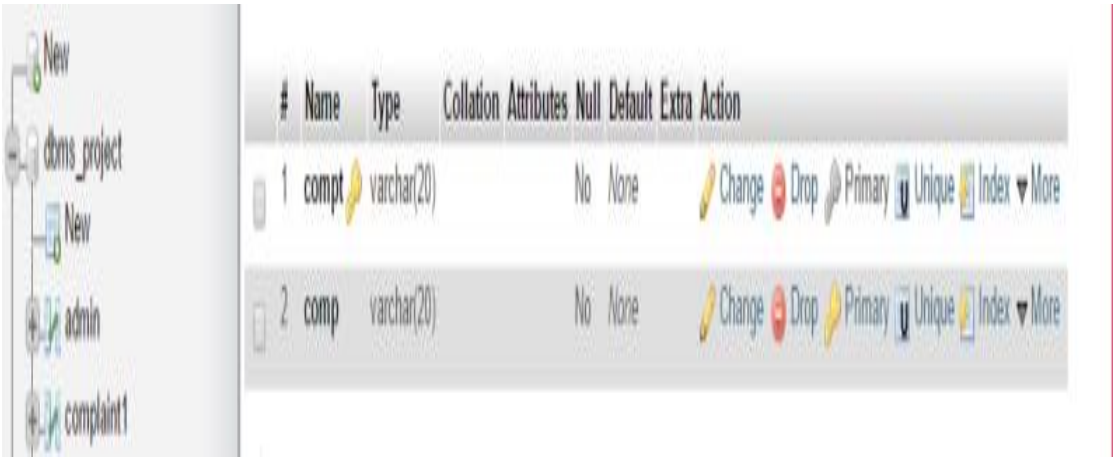
COMPLAINT-2


leavef1
leavef2
orders1
orders2
orders3
registration1
+ Options
name compt
Edit Copy Delete kk Water Problems
Check all With selected: Edit Copy Delete Export

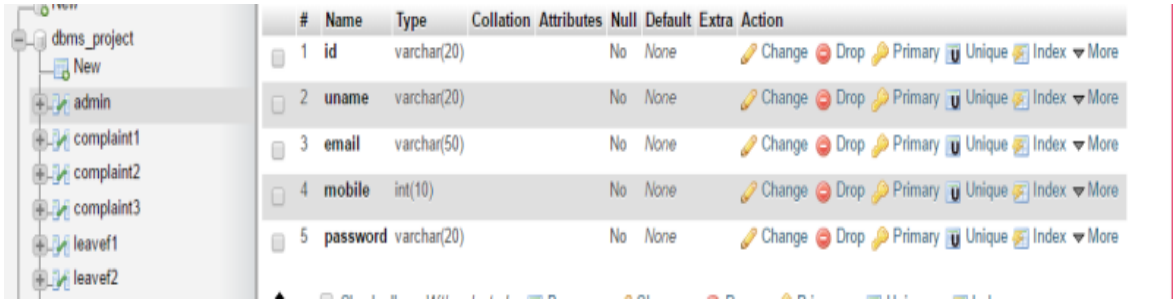

New
dbms_project
New
admin
complaint1
Name Type Collation Attributes Null Default Extra Action
1 name varchar(20) No None Change Drop Primary Unique Index More
2 compt varchar(20) No None Change Drop Primary Unique Index More

COMPLAINT-3


leavef2
orders1
orders2
orders3
registration1
+ Options
compt
comp
Edit
Copy
Delete
Water Problems
Water Problems
Check all
With selected:
Edit
Copy
Delete
Export


New
dbms_project
New
admin
complaint1
Name Type Collation Attributes Null Default Extra Action
1 compt varchar(20) No None Change Drop Primary Unique Index More
2 comp varchar(20) No None Change Drop Primary Unique Index More


orders1
orders2
orders3
registration1
+ Options
id uname email mobile password
12we warden warden@gmail.com 999990 opop


dbms_project
New
admin
complaint1
complaint2
complaint3
leavef1
leavef2
Name Type Collation Attributes Null Default Extra Action
1 id varchar(20) No None Change Drop Primary Unique Index More
2 uname varchar(20) No None Change Drop Primary Unique Index More
3 email varchar(50) No None Change Drop Primary Unique Index More
4 mobile int(10) No None Change Drop Primary Unique Index More
5 password varchar(20) No None Change Drop Primary Unique Index More

Sample Code

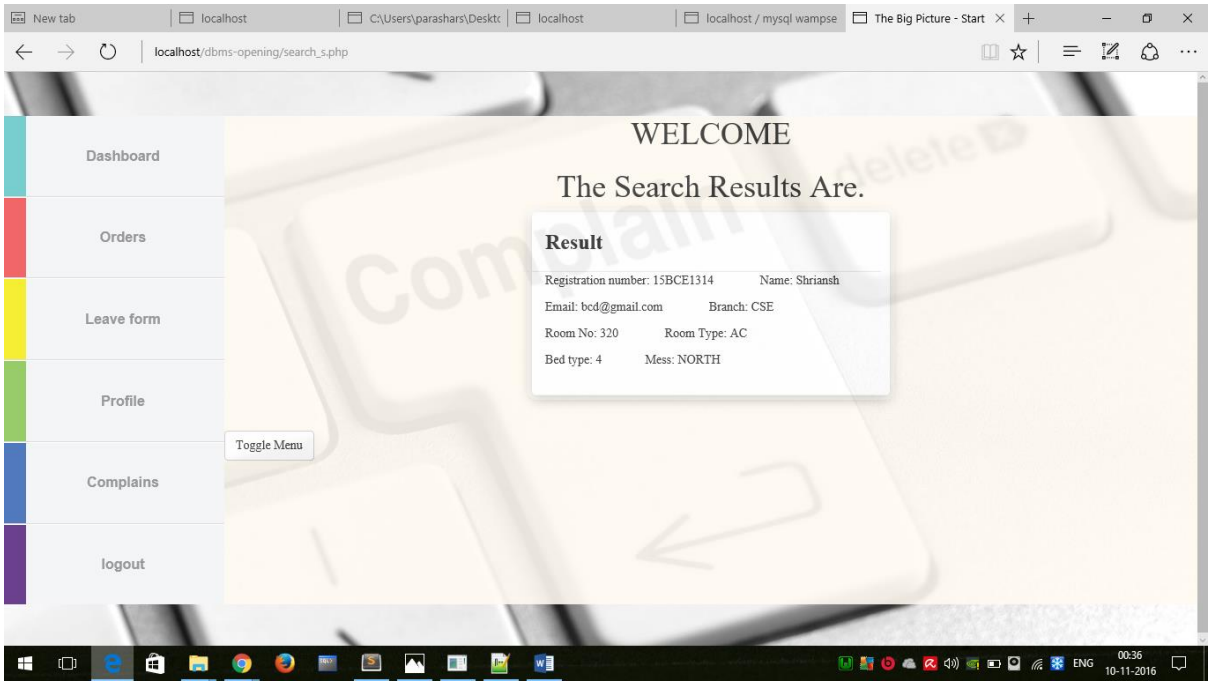
The main functionality of the website is to search student and get results based on the search query.

The code given is-:

```
<?php
      if(isset($_POST['submit']))
{
$search=$_POST['search'];
if(is_numeric($search[0]) && is_numeric($search[1]) && !is_numeric($search[2]))
{
$query1="select * from registration where reg_no='".$search."'";
$r=@mysql_query($query1) or die("no");
while($row=@mysql_fetch_array($r)){
echo "<div class='container1' id='signup'>
 <div class='header'>
            <h3>Result</h3>
        </div>
        <div class='sep'></div>
        <p>Registration number: $row[reg_no]  
            Name: $row[namec]</p>
                <p>Email: $row[email]  
            Branch: $row[branch]</p>
                <p>Room No: $row[room_no]  
            Room Type:
$row[room_type]</p>
                <p>Bed type: $row[bed_type] 
            Mess: $row[mess]</p>
          </div><br>";
         }
}
else if(is_numeric($search) && (strlen($search)==3 || strlen($search)==4) )
{
$query2="select * from registration where room_no='".$search."'";
$r=@mysql_query($query2) or die("no");
while($row=@mysql_fetch_array($r)){
echo "<div class='container1' id='signup'>
 <div class='header'>
            <h3>Result</h3>
        </div>
        <div class='sep'></div>
        <p>Registration number: $row[reg_no]  
            Name: $row[namec]</p>
                <p>Email: $row[email]  
            Branch: $row[branch]</p>
```

```
                <p>Room No: $row[room_no]  
            Room Type:
$row[room_type]</p>
                <p>Bed type: $row[bed_type] 
            Mess: $row[mess]</p>
           </div><br>";
          }
}

else
{
$query3="select * from registration where namec='".$search."'";
$r=@mysql_query($query3) or die("no");
while($row=@mysql_fetch_array($r)){
echo "<div class='container1' id='signup'>
  <div class='header'>
            <h3>Result</h3>
         </div>
         <div class='sep'></div>
         <p>Registration number: $row[reg_no]  
            Name: $row[namec]</p>
                <p>Email: $row[email]  
            Branch: $row[branch]</p>
                <p>Room No: $row[room_no]  
            Room Type:
$row[room_type]</p>
                <p>Bed type: $row[bed_type] 
            Mess: $row[mess]</p>
           </div>";
          }
}
echo "<br>";
}
?>
```


New tab
localhost
C:\Users\parashars\Deskt
localhost
localhost / mysql wampse
The Big Picture - Start
localhost/dbms-opening/search_s.php
Dashboard
Orders
Leave form
Profile
Complains
logout
Toggle Menu
WELCOME
The Search Results Are.
Result
Registration number: 15BCE1314
Name: Shriansh
Email: bcd@gmail.com
Branch: CSE
Room No: 320
Room Type: AC
Bed type: 4
Mess: NORTH
ENG
00:36
10-11-2016

BIBLIOGRAPHY

www.google.com

www.wikipedia.org.

www.w3schools.com

DBMS book