DBMS LAB PROJECT 2022-23

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About designed ERP system:

In this system I have designed and developed for two stakeholders
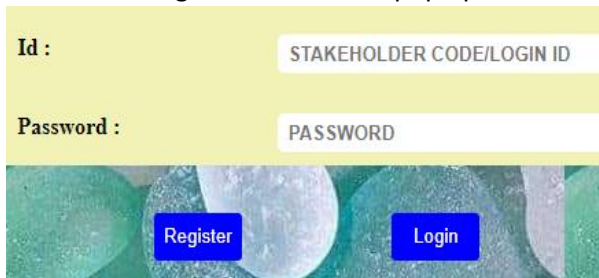
1st one is student can access student section.
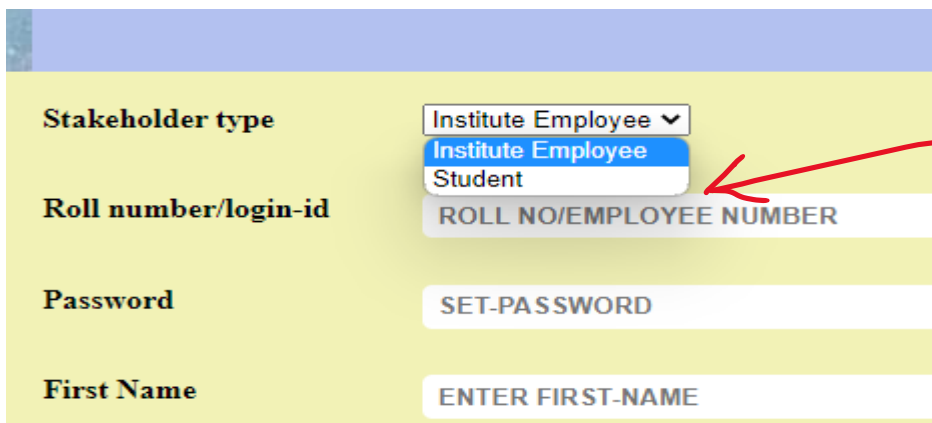
2nd one for Admin/faculty section.

And how are they controlled and their data recorded in IIT kgp's database system

The primary goal of the project was to create an all-encompassing system that would supply real-time data and insights to staff and students alike. This report serves to give a comprehensive summary of the project's scope, methodology, and implementation, including details on the testing procedures. Moreover, the report will delve into the difficulties encountered during the development phase and the key takeaways from the project. Finally, recommendations for how to enhance and improve the ERP system in the future will be provided. In this ERP System I have divided the system into administrative and student's part.

a) First step is to register for new user in "Register" section of site. if user don't have registered and tried to login an "Error" will pop up.

b)
c) Registration can be done using two different stakeholders for overlook on full features of site.

d)

e) After registering user can "Login".

f)

g) If stakeholder is student has logged in into the website using their credentials, they will reach their ERP home page.

h)

i) Home page may contain various section student is only allowed to authorized section which are student which is functioning section and scholarship and fees are not functioning yet but they are accessible by student.

j) Your Academic Information further contains the student's Roll No., Name, profile which contains student's profile in it, the performance of the student in all the semesters. With further ado, let's explain all the sections in the Academic Information as follows:

   (i) Roll number is unique and used as unique key in database.

   (ii) Name corresponding name of user.

   (iii) Profile contains information of user where user can "edit" by clicking "edit" button and "save" and can also "print".
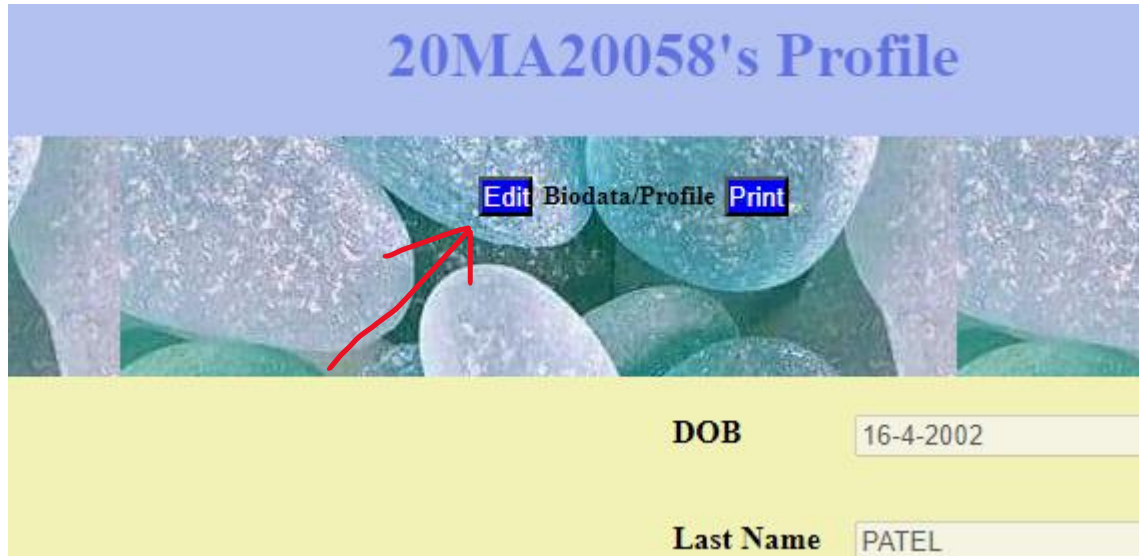

   (iv)

(v)   To edit personal information

(vi)
(vii)   To save personal information after editing.

(viii)
(ix)   The performance of the student in various academic and extracurricular activities should be recorded in the ERP system. This includes grades of the student, attendance throughout the whole semester, participation in sports and cultural events, and any disciplinary actions taken by the institute against the student.

(x)   The registration card is an important document that contains information about the student's course registration, semester-wise performance, their semester grades and points, their overall grades and points and their attendance. The ERP system generate the registration card automatically after the result of the student is feeded in it and update it regularly.
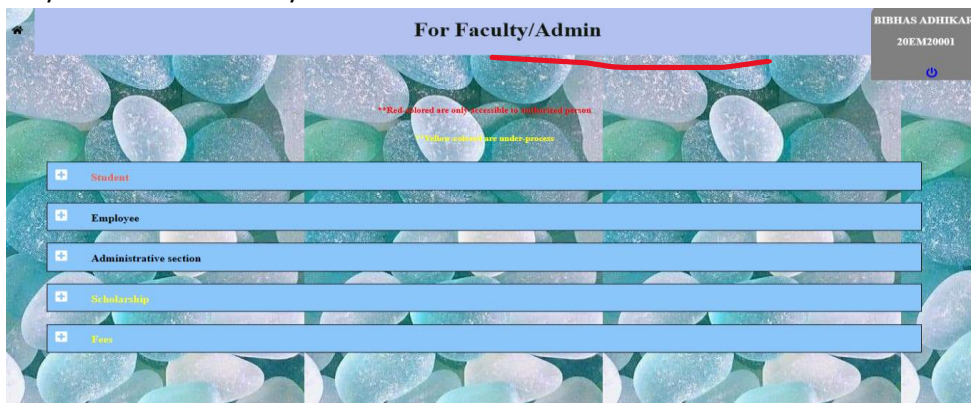
(xi)   Each student has a faculty advisor assigned to them. The faculty advisor is responsible for guiding the student in their academic journey and helping them with any academic or personal issues they may face. This ERP system maintain a record of the faculty advisor assigned to each student.

k) Time-table section student can look on his time table.

Day Name	8:0:AM-8:55:AM	9:0:AM-9:55:AM	10:0:AM-10:55:AM	11:0:AM-11:55:AM	12:0:PM-12:55:PM	2:0:PM-2:55:PM	3:0:PM-3:55:PM	4:0:PM-4:55:PM	5:0:PM-5:55:PM
Mon	MA30206 NC224	MA30206 NC224		MA60308 NR222	MA51002 NC224				
Tue	MA60308 NR222	MA60308 NR222	MA51002 NC224	MA51002 NC224	MA30206 NC224				
Wed				MA60306 NC441			MA39204 PC_Lab-II		
Thur	MA51002 NC224				MA60306 NC441				
Fri	MA60306 NC441	RE20001 NC141	RE20001 NC141				MA39206 PC_Lab-II		

Your TimeTable for SPRING 2022-2023

l)

m) If Faculty/Admin has logged in ,then the user has same option as for student. But allowed to only admin sections only..

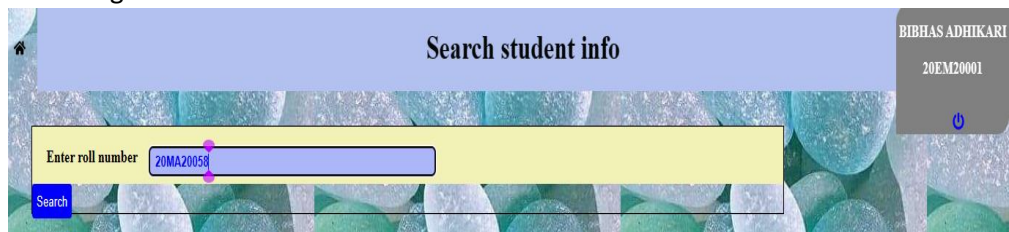(i)   Access to Personal Information: Faculty has access to personal information himself and of all student, but he can not edit student personal data.

(ii)   Search and Delete Functionality: The faculty/admin of the ERP system may also have access to search and delete a particular student's data by using student ID (roll no). This functionality can be useful in cases where a student has withdrawn from the institution or if their data needs to be updated. However, it is important to exercise caution when using this functionality. The faculty/admin must ensure that they have the proper authorization to delete a student's data and that they are not violating any privacy laws or regulations.

(iii)   Searching-

(iv)   Deleting

(v)

Technical library/framework/features used in Project

a) FOR DATABASE
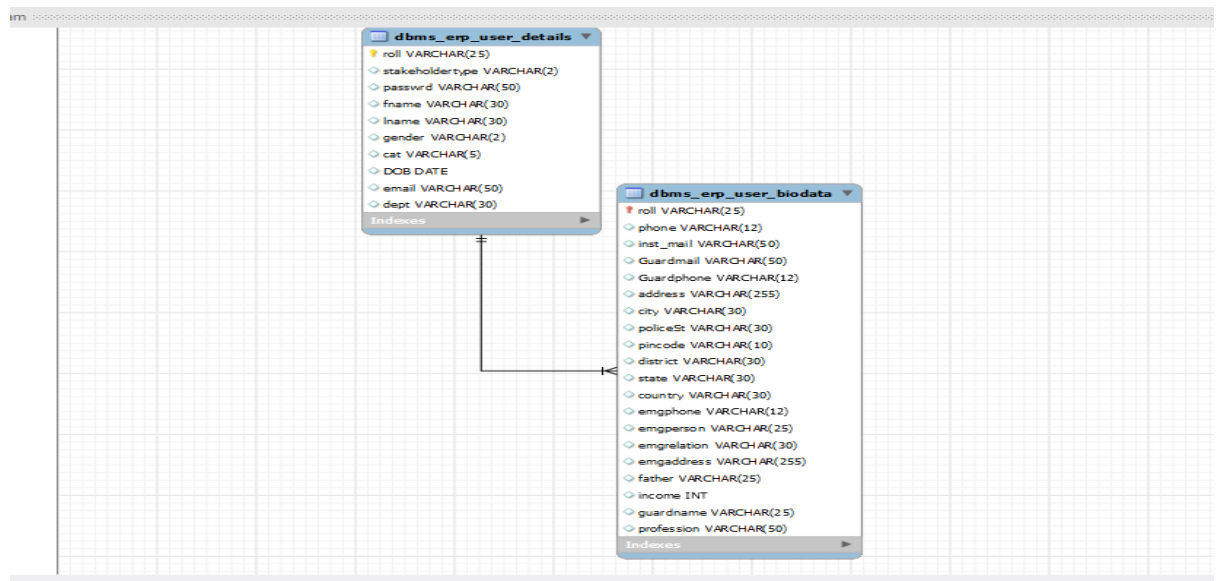
b) MySQL has been used and two tables
   1 for user identy store.
   2 for storing user biodata.
   And foreign key was ID number of user.
c) For Backend
d) Fully mounted on node js framework using JavaScript .
e) For SQL query mysql/mysql2 library has been used for query handelling (CRUD method).
f) For Frontend

g) React JS is used to build with javascript and various library and packages supported on react.
h) Styling of website designed by "styled" package of react.
i) For connecting with backend "axios" package has been used.
j) React-Router-Dom, React-Router is used to link the pages
k) The above functionalities are included in the client-side of the website
l) For the server-side Node JS is used to create backend of the website and connect the MySQL server to out host computer
m) When a user registers his info on the ERP it gets stored in a table named user details in DBMS Database and we can access the whole data of the students from there.
n) Below is the attached screenshot of user details table.
o) For user login credential (for identification) table

```
4 •   select * from dbms_erp_user_biodata;
5 •   select * from dbms_erp_user_details;
6
7
8
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

roll	stakeholdertype	passwrd	fname	lname	gender	cat	DOB	email	dept
20EM20001	E	123456	bibhas	adhikari	M	GEN	1985-04-17	bibhas@email.com	NULL
20MA20058	S	123456	sumit	patel	M	OBC	2002-05-16	xyz@gmail.com	mathematics
20MA20062	S	123456	VED	PRAKASH	F	GEN	2001-08-01	VED@EMAIL.COM	MATHEMATIC!
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

dbms_erp_user_details 18 ✕   Apply   Revert   Cont

for biodata table

```
3 •   use erp;
4
5 •   select * from dbms_erp_user_biodata;
6 •   select * from dbms_erp_user_details;
7
8
9
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

roll	phone	inst_mail	Guardmail	Guardphone	address	city	policeSt	pincode	district	state	country	emgphone	emgperson
20MA20058	9679143447	NULL	NULL	NULL	NULL	tikar	v.garh	483880	katni	m.p.	india	NULL	NULL
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Thank you