PROJECT REPORT

MOTIVATION:

The main objective of the placement management system is to reduce manual work and time. At present, Placement managers of various departments have to manage all the student's profiles and documents. They also have to collect the information of various companies who come for recruitment. They have to arrange profiles of students according to various streams and notify them each time according to company requirements. Additionally, they are also responsible for submitting the information of students and if any changes or updates are required in the profile of any student, it has to be done manually.

This process is very difficult and tedious especially when the number of users increases, hence is also time-consuming. Chances of missing data are also very likely. It is also difficult for collecting, managing, and updating student data as the number of students increases.

The purpose of this system is to automate the existing manual system with the help of computer software and store the data entered for a longer time with ease of access.

There are many reasons why such an application would be useful, some of them are:

- Eases the process of finding out the list of eligible candidates.
- manages the details of student records and different placements happening in and out of the college.
- Saves the time of the Placement manager and others.
- Reduces manual work.
- Essentially will provide a common point of communication for students and the Placement Cell in the college, cutting down the use of multiple platforms.
- It will help students stay up to date with the offer they are applying for as well as provide a place to store their updated CV's.
- Makes student information secure.
- Digitalises existing methods of placement hence easy to find statistics of placed students and companies.

So, we will be designing a web-based placement management system. Now, the placement manager itself can carry out operations in a smooth and effective manner. They need not concentrate on record keeping. The college can maintain computerized records thus reducing paperwork, time and money.

INTRODUCTION:

Manual Placement which is done at various colleges is by human intervention due to which there is a maximum chance of errors. The major problem is searching and updating of the student data. 'Placement Management System', provides information to the students about the various ongoing placements and offers, while also keeping an up to date information about the students. It is a platform where students can view and access their opportunities.

Our solution will be a web-based platform, where students of the college can register once and then get unique dashboards. The system will have different types of accounts for different types of users such as Admin, Student, and placement secretary. Hence this provides different access levels and makes sure the data is in the right hands. A profile for each student is created with the necessary credentials for the portal. The

system uses a relational database for database management. It will sort the data of the student based on eligibility criteria demanded by the respective companies and a list of eligible candidates will be prepared. Based on the company's requirements and student details a final data set is created and the interested candidates will be marked as an applicant for an offer. Each placement drive will get a mini dashboard where applicants will be kept up to date with the progress and processes. This way it reduces the work of college staff or faculty from the problems caused by human error and wastage of time doing all processes manually.

Additionally, we would also try to integrate a Direct Messaging system so that if there are any queries a student needs to ask, they can contact the Placement Manager of their respective departments. Similarly, the Placement Managers can also personally notify confidential information to students. This reduces the need for another platform like WhatsApp for relaying quick messages to students. An additional statistics dashboard will display all the students who have sat for placements and those who have successfully got placed from the campus. Hence this will also lead to easier access to previous records.

The system intends to do user-friendly operations which may resolve ambiguity. The project is total management and informative system which provides up-to-date placement information on all the students in the college. The project facilitates a friendly, reliable and fast management system.

FEATURES:

- Displays the information of ongoing placement drives.
- Roles-based access to the Placement secretary/manager, HODs of departments, the principal and students. This helps with different levels of authorisation.
- Eases the burden of the placement manager, by creating a one-point communication between students and the placement cell.
- A main dashboard for announcing new placements will be provided. These can be filtered by the students based on year, role and type of opportunity.
- Announcements, notifications, responses and updates on student placement become easier and everything is available in one place.
- Students will be provided with a profile section, where they can upload and update their data as required by the company or the placement cell.
- Each placement drive will be given a sub-thread/dashboard so that students registered for the particular drive can get updates on ongoing processes.
- Student placement status, the number of offers received and other activities can be tracked by the manager, so that they can maintain placement policies.
- Displays the statistics of the placed student companies which approached the college.
- As a future scope, we will also try to implement a one-to-one message space, through which students can directly communicate with the respective department's placement secretaries.
- Placement Officer can add Students Data by uploading an excel sheet.
- Placement Officer can add/delete Jobs.
- Students Receive their login credentials via email.
- Students get Notified when they apply for a Job.
- Students get Notified when their application is Accepted/Rejected.
- Students can view all the companies and the companies job postings.
- Placement Officer can update job application status.

TECHNOLOGIES USED:

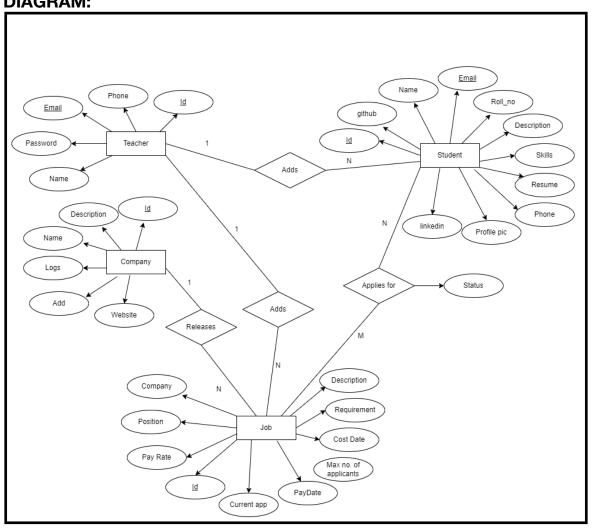
- Frontend
 - HTML (Hypertext Markup Language)
 - CSS (Cascading Style Sheets)
 - JS (Java Script)
- Backend
 - Python (Django Framework)
- Database
 - MySQL

RELATIONSHIP SCHEMA:

- 1. **Teacher** (id, Name, Email, Phone, Password)
- 2. **Student** (id, Name, Email, Phone, Password, Roll No, Bio, Skills, Resume, Profile Pic, LinkedIn Link, GitHub Link)
- 3. Company (id, Company Name, Description, Address, Website Link)
- 4. **Job** (id, Position, Company, Job Description, Requirements, Pay Rate, Last Date to Apply, Max. Applicants, Currents Applicants Count)
- 5. JobApplication (id, Job, Applicant, Status)

CODE: https://github.com/Greeshma2903/placement-management-project

ER DIAGRAM:



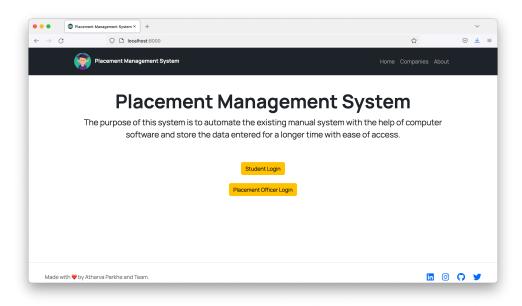
SCREEN-SHOT OF THE TABLES:

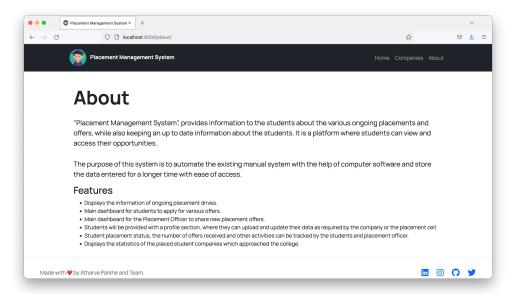
```
mysql> desc company;
                            | Null | Key | Default | Extra |
  Field
              | Type
 id
              | char(32)
                            | NO | PRI | NULL
              | datetime(6) | NO
  created at
                                         NULL
  updated_at | datetime(6) | NO
                                         | NULL
  company_name | varchar(50) | NO
                                        | NULL
 logo
         | varchar(100) | NO
                                        | NULL
              | longtext | NO
| longtext | YES
  address
                                        | NULL
                            | YES
                                         | NULL
  desc
                                         | NULL
 web_link | varchar(200) | NO |
8 rows in set (0.00 sec)
```

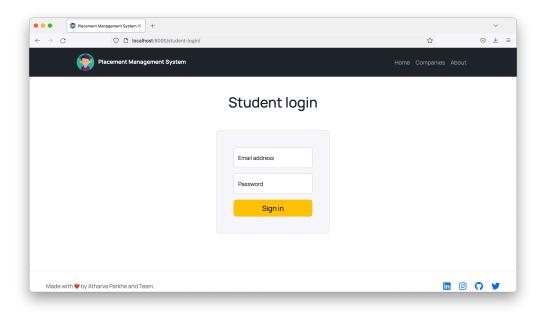
```
mysql> desc job;
                  Field
 id
                | char(32)
                                   | NO | PRI | NULL
              | datetime(6)
                                   | N0
                                                 | NULL
 created_at
               | datetime(6)
 updated_at
                                    | N0
                                                  NULL
                | varchar(50)
 position
                                    l NO
                                                  NULL
 description | longtext requirements | longtext
                                    | N0
                                                  NULL
                                    | N0
                                                 | NULL
 last_apply_date | date
                                    | N0
                                                | NULL
 pay_rate | int unsigned | NO | max_applicant | smallint unsigned | YES |
                                                 | NULL
                                                 | NULL
                                                 | NULL
 no_of_applicants | int
                                    | NO |
 is_active | tinyint(1)
company_id | char(32)
                                    | NO |
                                                 | NULL
                                    | NO | MUL | NULL
12 rows in set (0.01 sec)
```

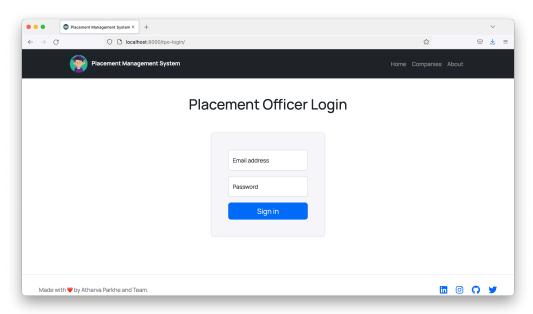
Field	Туре	Null	Key	Default	Extra
mybaseuser_ptr_id	 char(32)	+ N0	 PRI	+ NULL	+
roll_no	int	YES	İ	NULL	j i
bio	longtext	YES	ĺ	NULL	
skills	longtext	YES		NULL	ĺ
resume	varchar(100)	N0		NULL	
headshot	varchar(100)	N0		NULL	
linkedIn_link	varchar(200)	YES		NULL	
gitHub_link	varchar(200)	YES		NULL	
is_complete	tinyint(1)	N0		NULL	

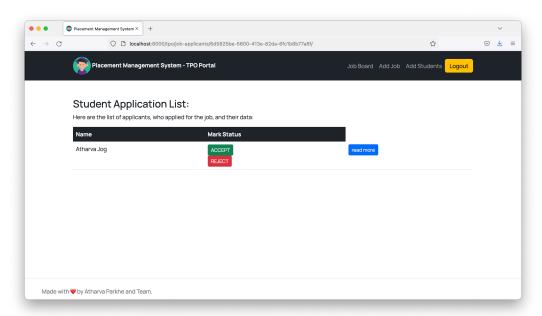
SCREEN-SHOT OF THE SYSTEM:

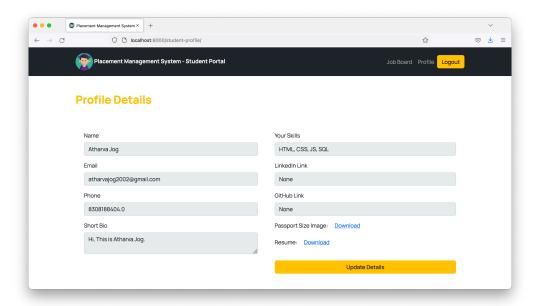


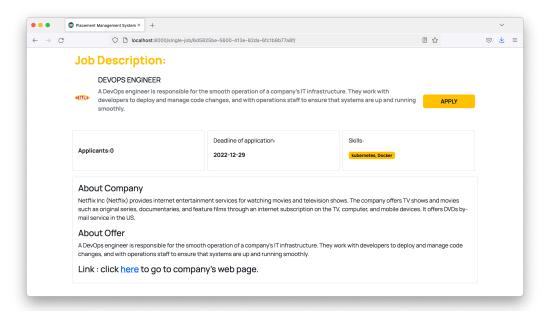


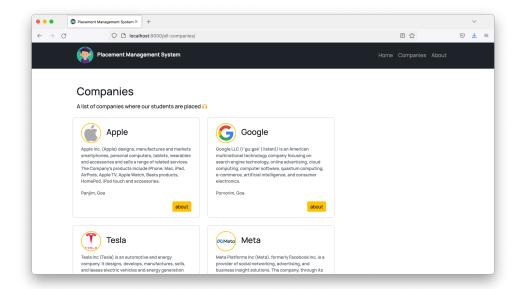


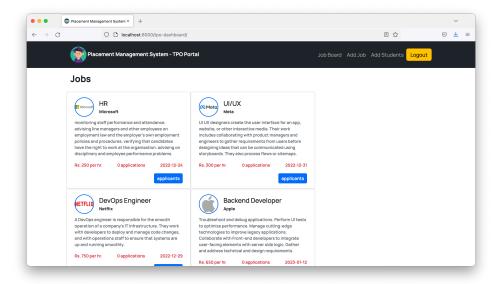




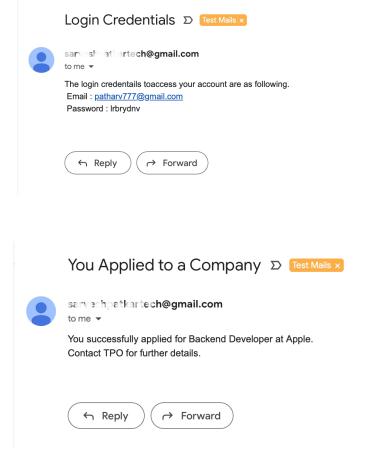


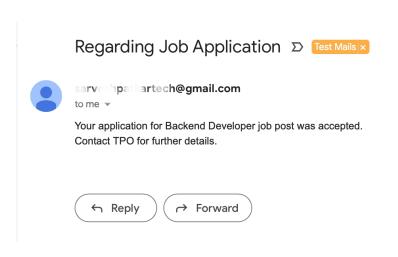






Email screen-shots:





CONCLUSION: The Placement Management System project was implemented successfully.