B. Tech. Project Part-1 (COC4980) Report on Assignment-III SDD – SOFTWARE DESIGN DOCUMENT VERSION 1.0

TRAINING AND PLACEMENT MANAGEMENT SYSTEM ZHCET AMU

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF

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COMPUTER ENGINEERING

BY

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[SDD] [1]

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1.0 Introduction

The management of Training and Placement is supported by paper-based systems, databases, spreadsheets and E-mail communications. Training and Placement is the crucial component of every educational institute where majority of the work till now is being done manually. The project aims at developing an application called Training and Placement Management System ZHCET AMU (TPMSZ). The project will include minimum manual work and maximum optimization, security and abstraction. This is a web application for the Training and Placement Office (TPO) department to manage the student information and activities related to placement. It enables student to register online and upload their academic and personal details.

They will have their portal to update information as necessary and can view recent and upcoming job postings on their dashboard. Whereas, the placement officers will able to utilize it to manage the student's data as well as the hiring company's data concerning the available jobs.

The benefits of the system will be to provide enhanced facilities and assemble all the placement related tasks carried out on various platforms to a single application. This will provide an accurate channel between placement authority and students will reduce repetitious work that has got to be administered. Additionally, email alerts can be provided to students in case if any new activity takes place which ensures that no important announcement is missed.

2.0 Functional Description

[1] Register:

Users can input email-id, password, name, mobile number, address, etc. details to create a new account and click on the register button. The system will create a user account and stores the required information.

[2] Login:

Initiated when a user attempts an action that is restricted. The user is then prompted to enter in their username and password to proceed.

[3] Logout:

User has an option to logged-out from the system if they wish to. Users can again login into their accounts by providing correct credentials.

[4] Student Dashboard:

Users/students can edit their profile details such as educational details, personal details and cv/resume, etc.

[5] Recruiter Dashboard:

Users/recruiters can add their company details and package-related information.

[6] ADD/EDIT/DELETE Job description to site:

Users can add or edit the job description for the recruitment with the eligibility criteria and registration form for the job.

[7] Register to available opportunities:

Users/students can apply to the ongoing job opportunity either by clicking on apply button or filling up the registration form.

[8] Management of ongoing opportunities:

Admin manages the ongoing opportunities details provided to the students.

[9] Send Email to ADMIN:

Users can send emails to the admin regarding any query related to the recruitment and for further inquiry about the placement.

[10] Notification display:

Users can display notification on site related to some extra-curricular activities such as hackathon, other internship opportunities.

[11] Management of eligibility criteria:

Admin can provide information about the eligibility criteria for the students to appear in the recruitment process of a particular company.

[12] Search opportunity:

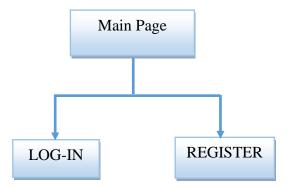
Users can able to search the available opportunities.

[13] Manage Student & company database:

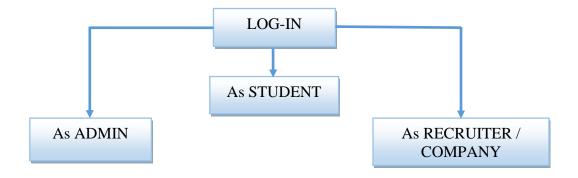
Admin has to manage the student information regarding the placement i.e., how many students are placed or not? and company database and some of the required details that are necessary at the time of any discrepancy.

FUNCTIONAL BODY DIAGRAM:

[1] Website Portal:



[2] <u>Log-in:</u>



[3] Register:

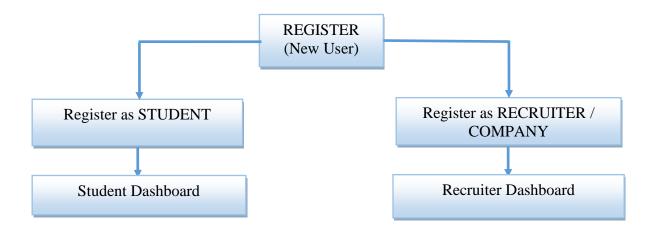


3.0 Functional Partitions

3.1 Module Name: REGISTRATION

This module allows the new users (students/recruiter) to register on the website for making the use of Training and Placement Management System of Aligarh Muslim University. And for already registered users there is no need of registration again and again. Users (Students/Recruiter) have to provide some of the information in order to create a new account.

3.1.1 Functional Block Diagram



3.1.2 Module Dependencies

3.1.2.1 Input Dependencies NA

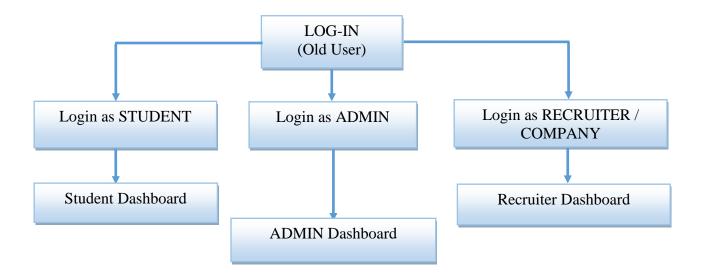
3.1.2.2 *Output Dependencies*

Module	Data	Description
NA		

3.2 Module Name: LOG-IN

This module allows the users (students/admin/recruiter) to log-in into their account. Users (students/admin/recruiter) can view their respective dashboards after the successful login.

3.2.1 Functional Block Diagram



3.2.2 Module Dependencies

3.2.2.1 Input Dependencies NA

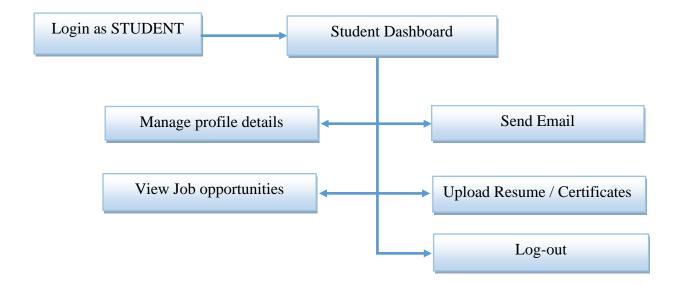
3.2.2.2 Output Dependencies

Module	Data	Description
NA		

3.3 Module Name: LOG-IN as STUDENT

This module allows the students to log-in into their respective accounts so that he/she will use the functionalities provided by the TPMSZ Admin for the registered users. Students can view their dashboard, so that they can do the following things like: completing/updating their profiles, upload the necessary documents, see the information the upcoming / ongoing career opportunities, etc.

3.3.1 Functional Block Diagram



3.3.2 Module Dependencies

3.3.2.1 Input Dependencies NA

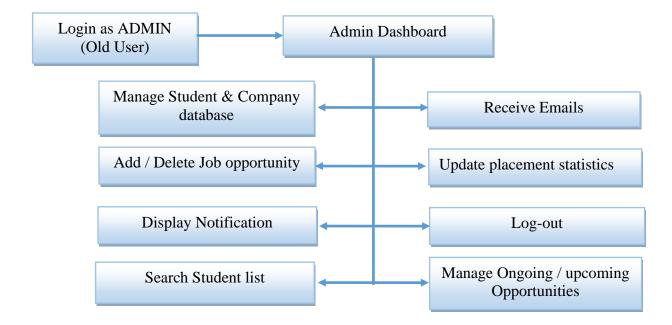
3.3.2.2 *Output Dependencies*

Module	Data	Description
NA		

3.4 Module Name: LOG-IN as ADMIN

This module allows the admin to log-in into their account. Admin has the various responsibilities such that: he/she has to responsible for maintaining the database of student's profile and the company's profile. Admin is able to notify messages over the website i.e., related to the upcoming, ongoing job opportunities or any academic related career opportunity. He / she is responsible for the management of eligibility of students for applying in an on-campus job opportunity, etc.

3.4.1 Functional Block Diagram



3.4.2 Module Dependencies

3.4.2.1 Input Dependencies NA

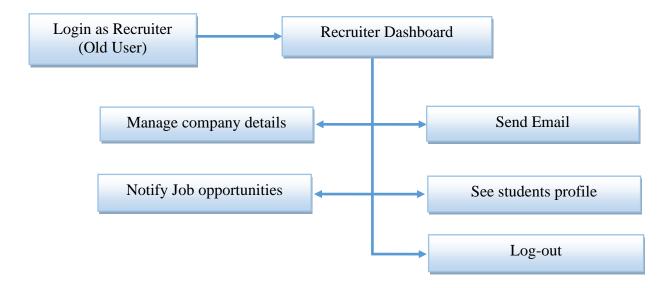
3.4.2.2 *Output Dependencies*

Module	Data	Description
NA		

3.5 Module Name: LOG-IN as RECRUITER

This module allows the recruiters to log-in into their account so that he/she will use the functionalities provided by the TPMSZ admin for the registered panel. Users (recruiters) can view the student's profile who applied / applies for an ongoing job opportunity. They can also directly contact to our placement cell for these things, etc.

3.5.1 Functional Block Diagram



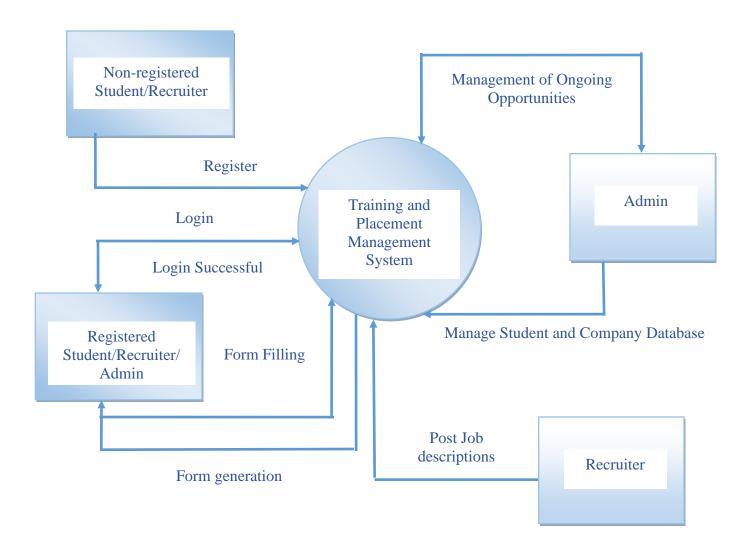
3.5.2 Module Dependencies

3.5.2.1 Input Dependencies NA

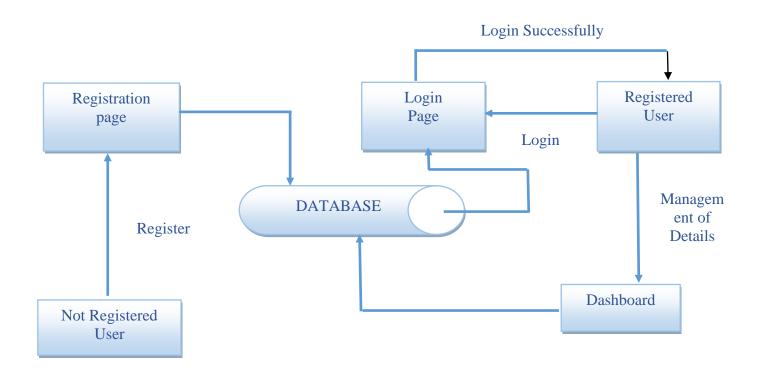
3.5.2.2 *Output Dependencies*

Module	Data	Description
NA		

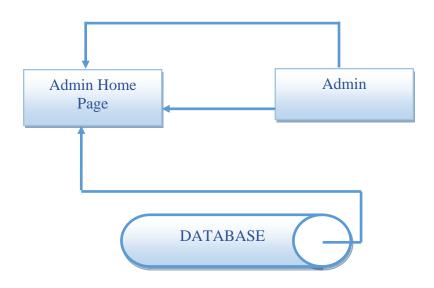
4.1 Data Flow Diagram



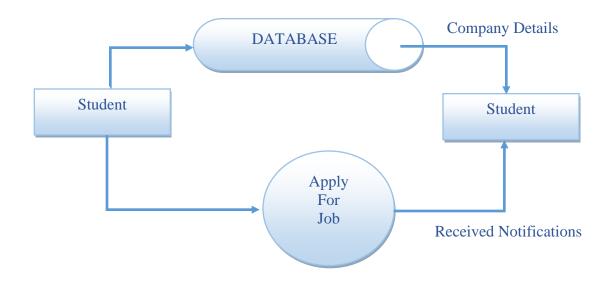
4.1.1 0-level DFD



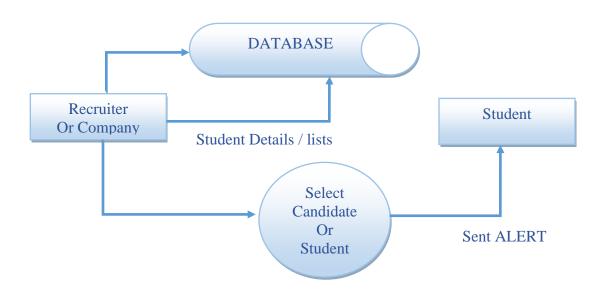
4.1.2 1-level DFD for student/recruiter login and registration



4.1.3 1-Level DFD for admin



4.1.4 1-Level DFD for Recruitment process of student



4.1.5 1-Level DFD for Recruitment/view process by Company/Recruiter

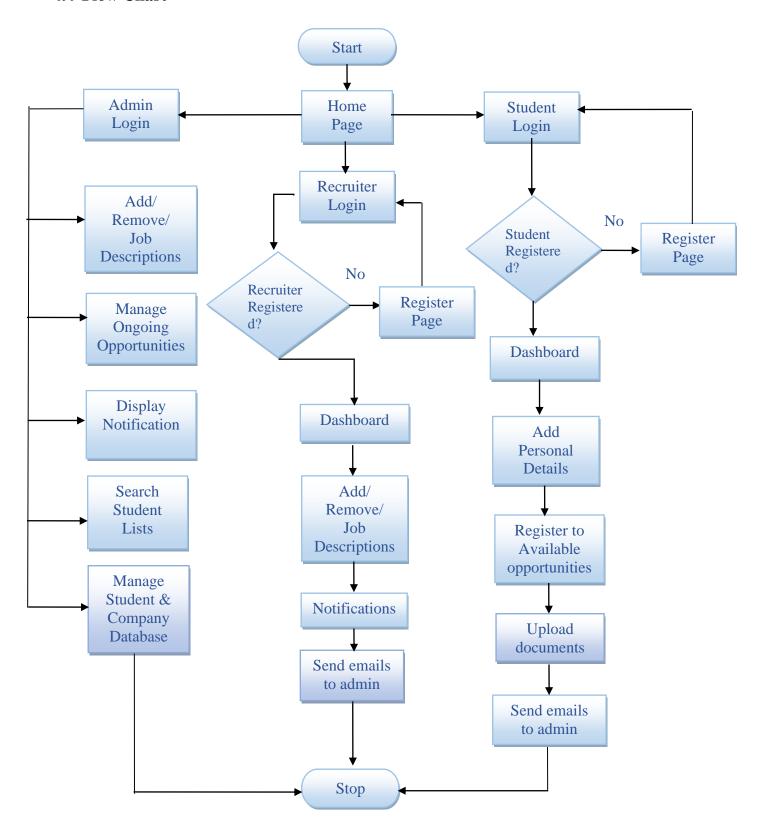
4.2 Data structures used

NA

4.3 Constant Definition

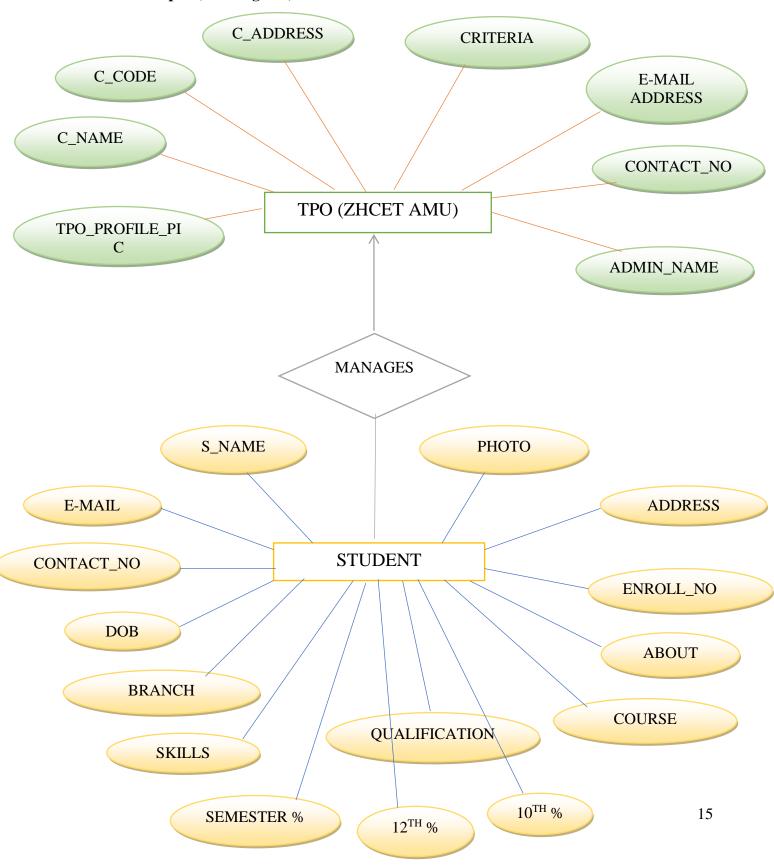
NA

4.4 Flow Chart

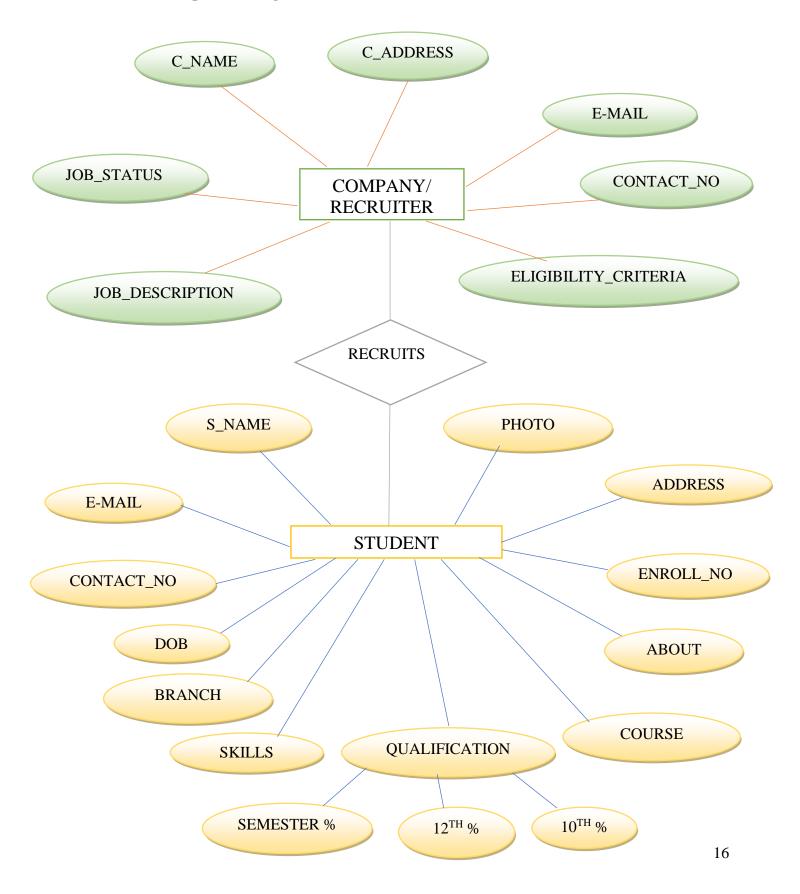


4.5 Entity Relationship Diagram

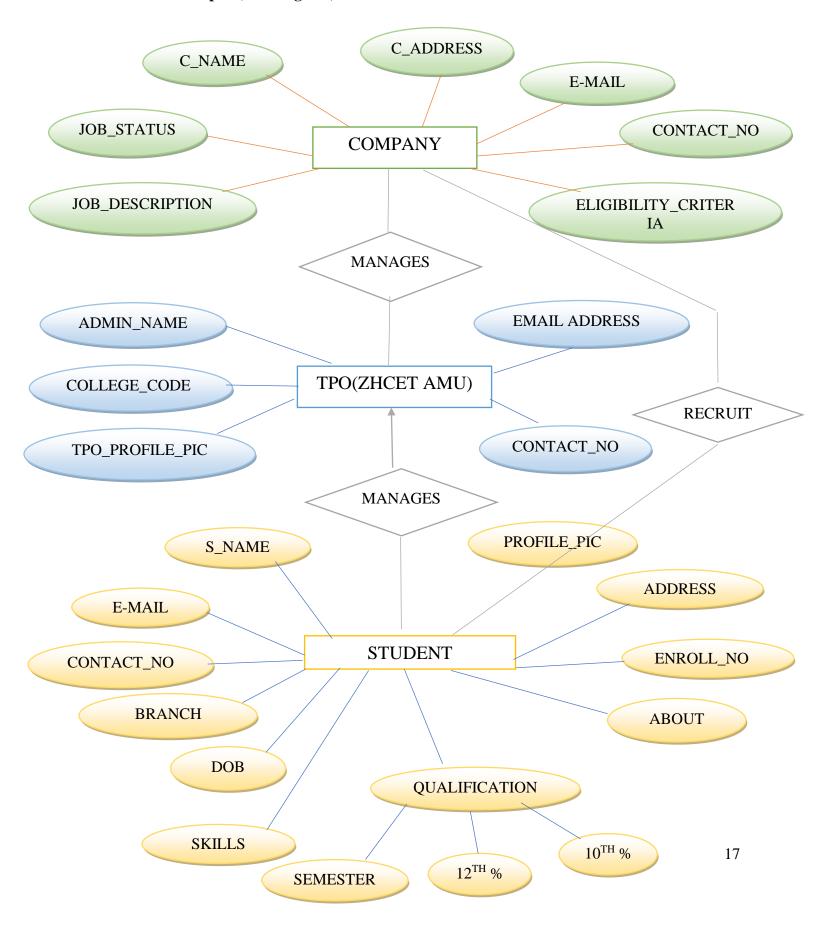
4.5.1 In-Campus (ER Diagram)



4.5.2 Off-Campus(ER Diagram)



4.5.3 Pool Campus (ER-Diagram)



4.6 Database Description

4.6.1 Table Name: User_Registration

It stores the user information like name, email-address and password and registered this user in the system.

Field Name	Data Type	Description
id	Integer	Gives the serial number and
		is the primary key of the
		table.
Name	VARCHAR	Stores the name of the user.
Email Address	VARCHAR	Stores the email-address of
		the user.
Password	VARCHAR	Stores the password provided
		by the user.

4.6.2 Table Name: Student_Profile

It stores all the personal and academic details of the students.

Field Name	Data Type	Description
id	Integer	Gives the serial number and is
		the primary key of the table.
Enrollment-No	VARCHAR	Stores the enrollment number
		of the student.
Name	VARCHAR	Stores the name of the
		student.
Email Address	VARCHAR	Stores the email-address of
		the student.
Address	VARCHAR	Stores the address of the
		student.
DOB	DATE TIME	Stores the date of birth of the
		student.
City	VARCHAR	Stores the city of the student.
Pin code	VARCHAR	Stores the pin code of the
		student 'city.
Gender	VARCHAR	Stores the gender of the
		student.
Branch	VARCHAR	Stores the branch of the
		student.
Course	VARCHAR	Stores the course of the
		student.
Percentage	Integer	Stores the present percentage

		of the student.
About	VARCHAR	Stores the description about
		the student.

4.6.3 Table Name: Upload_documents

It stores all the academic documents and cv/resume of the students.

Field Name	Data Type	Description
id	Integer	Gives the serial number and is
		the primary key of the table.
Photo	Image	Stores the photo of the
		student.
CV/Resume	VARBINARY	Stores the cv/resume of the
		student.
10 th Marksheet	VARBINARY	Stores the 10 th Marksheet of
		the student.
12 th Marksheet	VARBINARY	Stores the 12 th Marksheet of
		the student.
Upload Certificate	VARBINARY	Stores the upload certificate
		document of the student

4.6.4 Table Name: Admin

It stores all the information regarding the admin and their activities.

Field Name	Data Type	Description
id	Integer	Gives the serial number and is
		the primary key of the table.
Name	VARCHAR	Stores the name of the user.
Email Address	VARCHAR	Stores the email-address of
		the user.
Password	VARCHAR	Stores the password provided
		by the user.

4.6.5 Table Name: Company_Profile

It stores all the information regarding the company.

Field Name	Data Type	Description
id	Integer	Gives the serial number and is
		the primary key of the table.
Name	VARCHAR	Stores the name of the
		company.
Email Address	VARCHAR	Stores the email-address of the
		student.
Criteria	VARCHAR	Stores the class of the
		company.
Branch	VARCHAR	Stores the eligible branches of
		students for the company
		recruitment.
Web address	VARCHAR	Stores the web address of the
		company.
Job Description	VARCHAR	Stores the description about
		the job recruitment of the
		company.

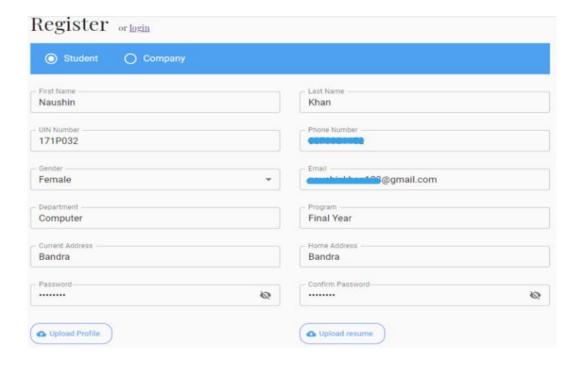
4.6.6 Table Name: Opportunities

It stores all the ongoing opportunities for the students.

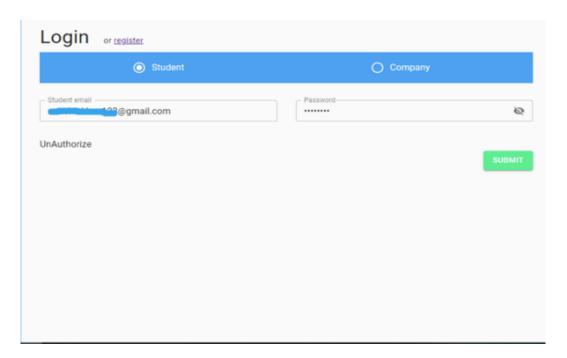
Field Name	Data Type	Description
id	Integer	Gives the serial number and is
		the primary key of the table.
Name	VARCHAR	Stores the name of the
		opportunity.
Last date of	DATE TIME	Stores the last date of
Registration		registration for students.
Criteria	VARCHAR	Stores the class of the
		company.
Branch	VARCHAR	Stores the eligible branches of
		students for the company
		recruitment.
Exam Date	DATE TIME	Stores the exam date for
		recruitment.
Exam Rules	VARCHAR	Stores the rules and regulation
		about the job recruitment
		examination of the company.

5.0 USER INTERFACE DESIGN

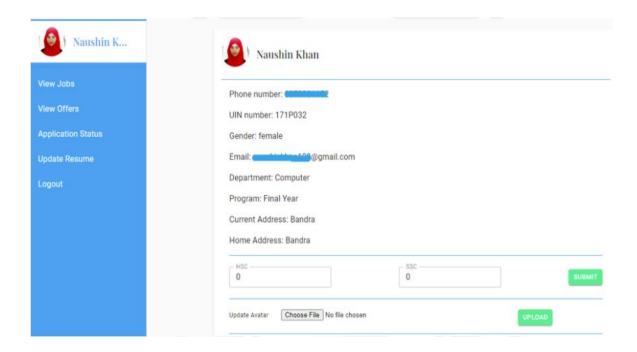
5.1 Registration Page:



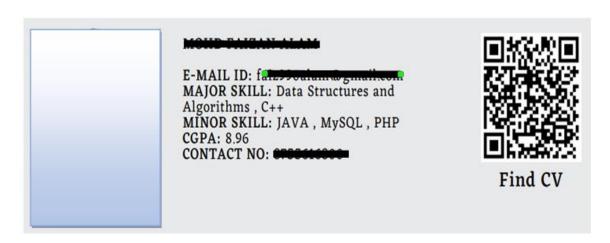
5.2 Login Page:



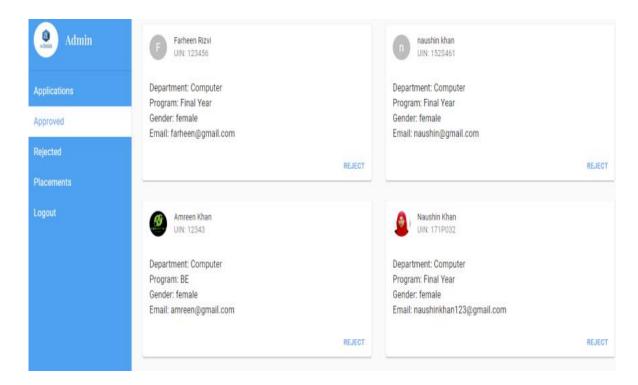
5.3 Student Dashboard:



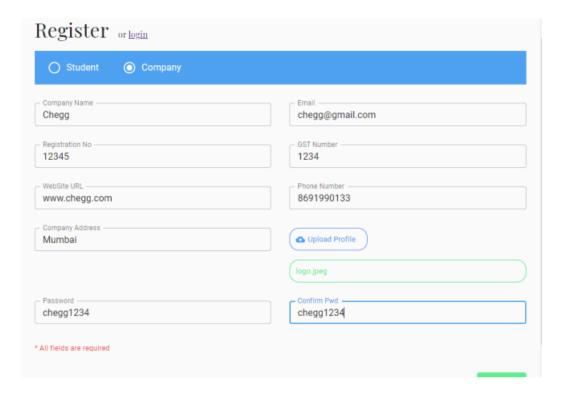
5.4 Student Profile:



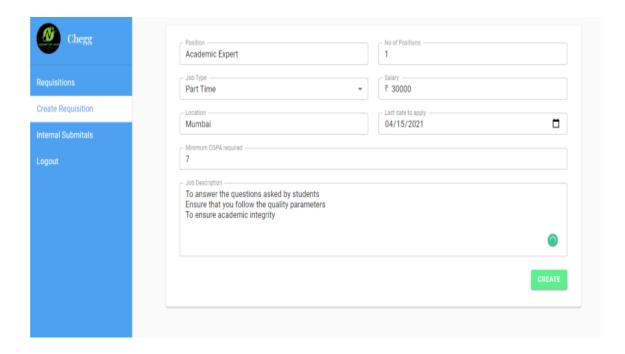
5.5 Admin Dashboard:



5.6 Company Dashboard:



5.7 Job Profile:



6.0 DEFINITIONS AND ACRONYMS

Abbreviation	Description
SDD	Software Design Document
DFD	Data Flow Diagram
FBD	Functional Body Diagram
NA	Not Applicable
ER	Entity Relationship

7.0 REFERENCES

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