

**A Project Report  
On  
PlacementApp  
Submitted to the  
Department of MCA  
In partial fulfillment of the**

**MASTER OF COMPUTER APPLICATIONS**

**Under the guidance of  
Mr. Gibin George**

**Project Done by  
AKSHAY RAJ  
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**SANTHIGIRI**

**COLLEGE OF COMPUTER SCIENCES**

Affiliated to M.G. University, Approved by AICTE and NAAC Accredited

**DEPARTMENT OF MCA**

**APRIL 2024**



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### **BONAFIDE CERTIFICATE**

Certified that the Project Work entitled

**Placement App**

is a bonafide work done by

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*In partial fulfillment of the requirement for the Award of*

**MASTER OF COMPUTER APPLICATIONS**

**Degree From**

Mahatma Gandhi University, Kottayam

(2022-2024)

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*Submitted for the Viva-Voce Examination held  
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**This is to certify that the project entitled Placement App has been successfully carried out by AKSHAY RAJ (Reg. No: 223242210905) in partial fulfillment of the Course MASTER OF COMPUTER APPLICATIONS.**

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**This is to certify that the project entitled Placement App has been successfully carried out by AKSHAY RAJ (Reg.No: 223242210905) in partial fulfillment of the course MASTER OF COMPUTER APPLICATIONS under my guidance.**

**Date:**

**Mr. Gibin George**

**Project Guide**



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### **DECLARATION**

**I, AKSHAY RAJ hereby declare that the project work entitled Placement App is an authenticated work carried out by us at LUMINAR TECHNOLAB, under the guidance of MS. SHIVAPRIYA R for the partial fulfillment of the course MASTER OF COMPUTER APPLICATIONS. This work has not been submitted for similar purpose anywhere else except to SANTHIGIRI COLLEGE OF COMPUTER SCIENCES.**

**I understand that detection of any such copying is liable to be punished in any way the college deems fit.**

**AKSHAY RAJ (Reg. No: 223242210905)**

**Signature**

**Date:**

**Place:**

## ACKNOWLEDGEMENT

A project is not complete if one fails to acknowledge all who have been instrumental in the successful completion of the project. If words were to be the symbol of undiluted feelings and token of gratitude, then let the words play the heralding role of expressing my gratitude.

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## ABSTRACT

The **Placement App** is a mobile application to innovative application designed to revolutionize workforce deployment within organization. As educational institutions are concerned training and placement cell is very important part in which most of the work till now is being done manually. It is difficult to provide information about each upcoming campus drive to each student. Looking towards, today's scenario it is difficult for students to get information about which companies are coming for placement and what they have to do? So to make this entire process smooth and efficient also to help students for training and placement cell we introduce a new platform named as "PLACEMENT APP" which is an flutter based application. It is helpful for students and training and Placement Officer (TPO) to communicate easily.

Training and Placement Cell provide employment opportunities to students, it conduct programs on communication skill and soft skill. The cell provides complete support to the visiting companies at every stage of placement process. The training and placement cell plays a crucial role in locating job opportunities for under graduates and post graduates passing out from the college by keeping in touch with reputed firm and industrial establishment. There are three modules in this application Company, TPO and Students. Students will register themselves by filling their academic details. TPO will provide with username and password. TPO can upload all the information regarding the upcoming campus drive. TPO can filter out eligible students for particular company. TPO will also provide previous year placed students details, previous year question papers and syllabus for the any particular company. Soft Skills trainers can register themselves to help students. This application will make communication between students and TPO easy and save time

## CHAPTER 1 INTRODUCTION

### 1.1 INTRODUCTION

The "In the rapidly evolving landscape of education and employment, effective placement processes are crucial for connecting students, academic institutions, and prospective employers. Our Placement App, designed with a focus on simplicity, efficiency, and transparency, acts as a comprehensive solution to streamline the placement workflow. This application caters to three primary modules: Students, Training and Placement Officers (TPOs), and Companies, creating a seamless and collaborative platform for successful placements. The Student Module is tailored to empower students in their journey from education to employment. Students can create detailed profiles showcasing their academic achievements, skills, and preferences. This module facilitates easy access to job opportunities, allows students to track their application status, and provides valuable insights into skill development areas. To view and get the study materials. Provide an area for aptitude try it out. Apply for the jobs and search the job in the app for students. View the results that provided by admin. The notification given from the to any current webinars or interview process is hiring can view Training and Placement Officers play a pivotal role in bridging the gap between students and company. The TPO Module centralizes the placement coordination process, allowing TPOs to manage student profiles, authentication of student registration verify, post the job add the current webinars or interview is upcoming add interview materials, input the quiz, filter to select the student who's apply for job, schedule the interview date to students both students and companies seamlessly. Retrieve the results from the company.

The Company Module serves as a dedicated space for recruiters to connect with talented individuals. Companies can post job opportunities, view student profiles, and streamline their recruitment process through an integrated platform. The module facilitates transparent communication between companies and TPOs, ensuring a smooth and efficient hiring process. The company schedule the interview time and date. Hence provide the interview results to tpo. By integrating these three modules, our Placement App aims to create a collaborative ecosystem where students, TPOs, and companies can interact seamlessly, fostering a more efficient and transparent placement process. This

platform not only simplifies the complexities of placement management but also contributes to the overall success and satisfaction of students, educational institutions, and recruiting companies alike.

## **1.2 PROBLEM STATEMENT**

Almost every activity in the world today is controlled by mobile driven app programs. This project focuses attention on designing efficient and reliable app which controls the transactions of a placement material. In real world, it tends to associate with automated systems as they provide many benefits than doing the same thing in manually. When we are concerning the manual process of a placement , the major problem is the waste of time. A student has to waste his/her valuable time when he needs to search for jobs and interview related materials as all the events such as searching jobs, focusing interview materials, practice aptitude questions are done by students while using this app .In briefly, the manual process is very slow. But automation will reduce the time taken in the whole process. In a placement app we should deal with many students and companies. Then TPO has to maintain it with documents which are recorded by him. Therefore, there may be defective reports. Also company has to appointed more persons to complete the interview placements to different colleges. Then the company has to have an additional cost. As we familiar with this type of app at instance we will be able to have the results that we want. Communication With TPO, Students and related companies will be more successful as the.

## **1.3 SCOPE AND RELEVANCE OF THE PROJECT**

At the scope of our project is to designing a complete environment to provide a safe and user friendly environment. The main aim of the project is to provide an easy-to-use website for services provided for user. The app developed is designed in such a way that any further enhancement can be done with ease. The system has the capability for easy integration. New modules can be added to the system with less effort. The website is developed in flutter, which makes it more reliable and compatible with other environments. This placement app is an online app so it is easily available to everyone. When a student wanted to attend or search for a job he have to register to the app is very

easy, to get register to the system he has to fill up registration form. After submitting the registration form, he can create username and password. Placement App project addresses the critical need for an organized, automated, and responsive system to manage various aspects of job searching, obtain the interview training. The App has to be an idle relation between the Tpo and company to the giving the placement.

## **1.4 OBJECTIVES**

The This Objectives for the PLACEMET App are:

The core objective of the Placement App from a user perspective is to provide a user-friendly, efficient, and transparent platform that simplifies the entire placement process. Aimed at students, Training and Placement Officers (TPOs), and companies, the app is designed to cater to the distinct needs of each user group, fostering a seamless experience in their respective roles. For students, the Placement App strives to be a comprehensive and accessible tool that facilitates their journey from academia to the professional world. The app's user-friendly interface empowers students to create detailed profiles, highlighting their academic achievements, skills, and extracurricular activities. The job search feature enables them to explore diverse employment opportunities effortlessly. Applying for placement drives becomes a streamlined process, and real-time notifications keep students informed about the status of their applications.

The app serves as a direct communication channel with TPOs, fostering engagement and providing a platform for seeking guidance and support. Training and Placement Officers benefit from the app by gaining a centralized platform for managing the entire placement lifecycle. The objective is to automate routine administrative tasks, allowing TPOs to focus on strategic planning and personalized support for students. The app's analytics features offer insights into placement trends and success rates, empowering TPOs to make data-driven decisions. Efficient communication tools within the app enhance collaboration between TPOs, students, and companies.

For companies, the Placement App aims to streamline the recruitment process by providing a user-friendly interface for posting job openings, managing applications, and communicating directly with TPOs and students. The objective is to create a platform where companies can efficiently discover, evaluate, and engage with top talent emerging from academic institutions. In essence, the Placement App's user-focused objective is to

break down the complexities of the placement process, offering an intuitive platform that facilitates effective communication, seamless navigation, and valuable insights. By achieving these goals, the app becomes an indispensable tool in empowering users to navigate the transition from academia to the professional world with confidence.

## **CHAPTER 2 SYSTEM ANALYSIS**

### **2.1 INTRODUCTION**

Software Engineering is the analysis, design, construction, verification and management of technical or social entities. To engineer software accurately, a software engineering process must be defined. System analysis is a detailed study of the various operations performed by the system and their relationship within and module of the system. It is a structured method for solving the problems related to the development of a new system. The detailed investigation of the present system is the focal point of system analysis. This phase involves the study of the parent system and the identification of system objectives. Information has to be collected from all people who are affected by or who use the system. During analysis, data are collected on the variable files, decision points and transactions handled by the present system. The main aim of the system is to provide efficient and user-friendly automation. So, the system analysis process should be performed with extreme precision so that an accurate picture of the existing system, its disadvantages, and the requirements of the new system can be obtained. System analysis involves gathering the necessary information and using the structured tool for analysis. This includes the studying existing system and its drawback, designing a new system, and conducting a cost-benefit analysis. System analysis is a problem- solving activity that requires intensive communication between the system users and system developers. The system is studied to the minute detail and analyzed. The system is viewed as a whole and the inputs to the system are identified. The outputs from the organization are traced through various phases of processing of inputs.

### **2.2 EXISTING SYSTEM**

The existing Placements systems serve as digital platforms where individuals can explore jobs based on their preferences. Traditionally, placements were facilitated through college campus visit and recruit. In the rapidly evolving landscape of education and employment, effective placement processes are crucial for connecting students, academic institutions, and prospective employers. Our Placement App, designed with a focus on simplicity, efficiency, and transparency, acts as a comprehensive solution to streamline the placement workflow.

Additionally, the system will prioritize security, allowing guest access for situational awareness without compromising system integrity, and support administrators in their configuration, monitoring, and maintenance responsibilities. Ultimately, the Placement App seeks to enhance the overall effectiveness, responsiveness, and compliance of placement.

### **2.2.1 Limitations of the existing system:**

- Requires filtering search in the jobs section.
- Difficult to track current status of applied job.
- Less accuracy in quiz provided.
- Difficulty to make report for various purpose.
- There may occur errors in the link provided study materials.
- Difficulty of managing bulk application.

## **2.3 PROPOSED SYSTEM**

The proposed PLACEMENT App aims to revolutionize placement operations by providing a comprehensive and integrated software solution. It will be a centralized platform accessible to authorized users, primarily administrators responsible for configuration, monitoring, and maintenance, and access by the companies and students. The proposed system will automate manual processes, such as incident logging and resource allocation, to improve efficiency and response times. . Training and Placement Cell provide employment opportunities to students, it conduct programs on communication skill and soft skill. The cell provides complete support to the visiting companies at every stage of placement process. The training and placement cell plays a crucial role in locating job opportunities for under graduates and post graduates passing out from the college by keeping in touch with reputed firm and industrial establishment. There are three modules in this application Company,TPO and Students. Students will register themselves by filling their academic details. TPO will provide with username and password. TPO can upload all the information regarding the upcoming campus drive. TPO can filter out eligible students for particular company. TPO will also provide previous year placed students details, previous year question papers and syllabus for the any particular company. Soft Skills trainers can register themselves to help students. This



application will make communication between students and TPO easy and save time. The proposed system consists of two stakeholders.

They are:

1. TPO
2. Student
3. Company

### **2.3.1 Advantages of the Proposed System**

Here are some of the advantages of the proposed system:

- The system avoids redundancy by the use of several type of validation that is the system is enhanced
- Quick access and processing are the main advantage that forces as to implement the proposed system.
- The main alteration between the existing system and the new automated system lies in the specialty which reduces the time consumption in an appropriate manner
- User offering an unparalleled Job application experience for students for their bright future
- Our proposed system promote companies to promote our placement drive and assure placements to college.
- The system will reduce the amount of paper work require.
- It handles the companies interviews and application on one platform.

## **2.4 FEASIBILITY STUDY**

Placement App is efficiently handled all the requirements for service providers and service seekers in one system. It allows freeing up wasted time, information is easy to find anytime, anywhere. Use of one system is more secure than using lot of applications. Using this system tasks are difficult to handle the existing system are easily performed. And for the System to be act as worth-while it should pass through some test that examine that it should proceed further or not. This series of test is commonly known as feasibility study on the system and it plays a very vital role for every system projects. Feasibility studies undergo three major analyses to predict the system to be success and they are as

follows: -

- Technical Feasibility
- Operational Feasibility
- Economic Feasibility

#### **2.4.1 Technical Feasibility**

We firmly assert that the placement app project is designed as an online app system for comprehensive project management within the college. Its technical feasibility is evident as users do not require any specialized technical knowledge to interact with the system. Users can access and view job details based on their interested areas. Tpo for instance, have the capability to monitor applying jobs by students. The company schedule interview availability details and processed the further steps to students by Tpo.

#### **Recommending the Hardware Part:-**

Table 2.1 Hardware parts

SL No.	Hardware used	Specification
1.	Monitor	LCD 15" screen (HP)
2.	Keyboard	Intex Wired
3.	Mouse	Intex Wired
4.	Hard drive	500GB (gigabyte) hard drive
5.	Ram	4 GB (gigabyte)
6.	Processor	Core i5, 1.30Ghz (Gigahertz)
7.	Graphics	Graphics card, 2GB (Megabyte of memory)
8.	System type	1.30GHZ (gigahertz) 64-bit (x86)

#### **2.4.2 Operational Feasibility**

By providing the basic knowledge about the system, the users (Tpo, Company, Student) in the project can efficiently operate the system. Every user can login to their home page by just providing the credentials. And they are provided with a user-friendly interface in order to view the details according to their roles. Operational feasibility determines whether the system is operating effectively once it is developed. It ensures that the

management should support the proposed system and its working feasible in the current organizational environment. The stakeholders or users have a basic knowledge to operate the system. The application is operationally feasible because all the users are able to work with the application without any training.

### **2.4.3 Economic Feasibility**

Economic analysis is the most frequently used technique for evaluating the effectiveness of a proposed system. More commonly known as Cost / Benefit analysis, the procedure is to determine the benefits and savings that are expected from a proposed system and compare them with costs. Economic feasibility determines whether the required software is capable of generating financial gains for an organization. It involves the cost incurred on the software development team, estimated cost of hardware and software, cost of performing feasibility study, and so on. For this, it is essential to consider expenses made on purchases (such as hardware purchase) and activities required to carry out software development. In addition, it is necessary to consider the benefits that can be achieved by developing the software. Software is said to be economically feasible if it focuses on the issues listed below.

- Cost incurred on software development to produce long-term gains for an organization.
- Cost required to conduct full software investigation (such as requirements elicitation and requirements analysis).
- Cost of hardware, software, development team, and training.

It is estimated that my project is economically feasible because it is student project and also we are included only a less number of data bases, which result in reduced maintenance and hosting charges for the software. The overall maintenance charge is comparatively low while comparing to the expenditure of the existing system so we can proudly say that my system is economically feasible. The project is developed as an academic placement so there is no need to pay extra amount to the developers. The colleges have enough basic requirements to install the system. The additional charge is only for hosting so the application is economically feasible.

## **2.5 SOFTWARE ENGINEERING PARADIGM APPLIED**

One of the basic notions of the software development process is SDLC models which stand for Software Development Life Cycle models. SDLC – is a continuous process,

which starts from the moment, when it's made a decision to launch the project, and it ends at the moment of its full removal from the exploitation. Software development lifecycle (SDLC) is a framework that defines the steps involved in the development of software. It covers the detailed plan for building, deploying, and maintaining the software. SDLC defines the complete cycle of development i.e., all the tasks involved in gathering a requirement for the maintenance of a Product. Some of the common SDLC models are Waterfall

Model, V- Shaped Model, Prototype Model, Spiral Model, Iterative Incremental Model, Big Bang Model, and Agile Model. We used **Agile Model** for our Project. Agile Model is a combination of the Iterative and incremental model. This model focuses more on flexibility while developing a product rather than on the requirement. In the agile methodology after every development iteration, the client is able to see the result and understand if he is satisfied with it or he is not. Extreme programming is one of the practical uses of the agile model. The basis of this model consists of short meetings where we can review our project. In Agile, a product is broken into small incremental builds. It is not developed as a complete product in one go. At the end of each sprint, the project guide verifies the product and after his approval, it is finalized. Client feedback is taken for improvement and his suggestions and enhancement are worked on in the next sprint. Testing is done in each sprint to minimize the risk of any failures.

### **Phases of Agile Model**

are the phases in the Agile model are as follows:

1. Requirements gathering
2. Design the requirements
3. Construction/ iteration
4. Testing/ Quality assurance
5. Deployment
6. Feedback

**1. Requirements gathering:** In this phase, you must define the requirements. You should explain business opportunities and plan the time and effort needed to build the project. Based on this information, you can evaluate technical and economic feasibility.

**2. Design the requirements:** When you have identified the project, work with stakeholders to define requirements. You can use the user flow diagram or the high- level UML diagram to show the work of new features and show how it will apply to your

existing system.

**3. Construction/ iteration:** When the team defines the requirements, the work begins. Designers and developers start working on their project, which aims to deploy a working product. The product will undergo various stages of improvement, so it includes simple, minimal functionality. **Deployment:** In this phase, the team issues a product for the user's work environment.

**5. Feedback:** After releasing the product, the last step is feedback. In this, the team receives feedback about the product and works through the feedback.

**Advantages of Agile Model:**

- It allows more flexibility to adapt to the changes.
- The new feature can be added easily.
- Customer satisfaction as the feedback and suggestions are taken at every stage.
- Risks are minimized thanks to the flexible change process.

**Disadvantages:**

- Lack of documentation.
- If a customer is not clear about how exactly they want the product to be, then the project would fail.
- With all the corrections and changes there is possibility that the project will exceed expected time.

## CHAPTER 3 SYSTEM DESIGN

### 3.1 INTRODUCTION

A system architecture or systems architecture is the conceptual model that defines the structure, behavior, and more views of a system. An architecture description is a formal description and representation of a system, organized in a way that supports reasoning about the structures of the system. System architecture can comprise system components, the externally visible properties of those components, the relationships (e.g. : the behavior) between them. It can provide a plan from which products can be procured, and systems developed, that will work together to implement the overall system. There have been efforts to formalize languages to describe system architecture; collectively these are called architecture description languages (ADLs). The system architecture can best be thought of as a set of representations of an existing (or to be created) system. It is used to convey the informational content of the elements comprising a system, the relationships among those elements, and the rules governing those relationships. The architectural components and set of relationships between these components that architecture describes may consist of hardware, software, documentation, facilities, manual procedures, or roles played by organizations or people. The system architecture is primarily concerned with the internal interfaces among the system's components or subsystems, and the interface between the system and its external environment, especially the user. The structural design reduces complexity, facilitates change, and result in easier implementation by encouraging parallel development of different parts of the system. The procedural design transforms structural elements of program architecture into a procedural description of software components. The architectural design considers architecture as the most important functional requirement. The system is based on the three-tier architecture. The first level is the user interface (presentation logic), which displays controls, receives, and validates user input. The second level is the business layer (business logic) where the application-specific logic takes place. The third level is the data layer where the application information is stored in files or databases. It contains logic about retrieving and updating data. The important feature about the three-tier design is that information only travels from one level to an adjacent level.

## **3.2 DATABASE DESIGN**

A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. The general objective is to make information access easy, quick, inexpensive and flexible for the users. The general theme behind a database is to integrate all information. Database design is recognized as a standard of management information system and is available virtually for every computer system.

In database design several specific objectives are considered:

- Ease of learning and use
- Controlled redundancy
- Data independence
- More information at low cost
- Accuracy and integrity

A database is an integrated collection of data and provides centralized access to the data. Usually, the centralized data managing the software is called RDBMS. The main significant difference between RDBMS and other DBMS is the separation of data as seen by the program and data has in direct access to stores device. This is the difference between logical and physical data.

### **3.2.1 TABLE STRUCTURE**

Table is a collection of complete details about a particular subject. These data are saved in rows and Columns. Hence, rows are called RECORDS and Columns of each row are called FIELDS. Data is stored in tables, which is available in the backend.

The items and data, which are entered in the input, form id directly stored in this table using linking of database. We can link more than one table to input forms. We can collect the details from the different tables to display on the output.

There are 8 tables in our project. They are,

- tbl\_login
- tbl\_Tpo
- tbl\_material
- tbl\_company
- tbl\_job
- tbl\_student
- tbl\_profile
- tbl\_application
- tbl\_interview schedule

**Table No: 1**

**Table Name:** tbl\_login

**Description:** This table is used to store login details of Users/stakeholders.

**Primary Key:** login\_id

**Foreign key:** userid

Table 3.1 tbl\_login

Sl. No	FIELD NAME	DATA TYPE	DESCRIPTION
1.	login_id	Int	Used as a primary key to uniquely identify column and it is an auto increment column
2.	user_name	Varchar (20)	This field for storing the user name
3.	password	Varchar (20)	The field for storing the user password
4.	Userid	Int	This field for storing the user id



**Table No: 2**

**Table Name:** tbl\_Tpo

**Description:** This table is used to store the Registration details of TPO.

**Primary Key:** tpo\_id

**Foreign key:** Nil

Table 3.2 tbl\_TPO

Sl. No	FIELDNAME	DATA TYPE	DESCRIPTION
1	Tpo_id	Integer	A unique identifier for eachTpo id
2	Name	Varchar(30)	This field for name of the user as a Tpo admin
3	Email	Varchar(30)	This field for email address of the Tpo
4	Phone	Integer	This field for contact Number of the Tpo
5.	Username	Varchar(30)	This field for storing the user name of Tpo.
6.	Password	Varchar (20)	This field for storing the password of Tpo

**Table No: 3**

**Table Name:** tbl\_Material

**Description:** This table is used to store details of study materials provided by tpo.

**Primary Key:** material\_id

**Foreign key:** Nill

Table 3.3 tbl\_material

Sl. No	FIELDNAME	DATA TYPE	DESCRIPTION
1.	activity_id	Int	Used as a primary key to uniquely identify column and it is an auto increment column
2.	Topic	Varchar(30)	This field is to store the topic for the material.
3	Description	Varchar(150)	This field is to store the description is the each topic has been described detailed.
4	Video_pdf	Varchar(100)	This field is to store the video link and pdf that shall be the materials

**Table No: 4****Table Name:** tbl\_company**Description:** This table is used to store the registration details of the company.**Primary Key:** company\_id**Foreign key:** Nil

Table 3.4 tbl\_company

Sl. No	FIELDNAME	DATA TYPE	DESCRIPTION
1.	Company_id	Integer	Used as a primary key to uniquely identify column and it is an auto increment column
2.	Company Name	Varchar(30)	This field is to store the Name of the Company name.
3.	Description	Varchar(30)	This field is to store the description of the company
4.	Industry	Varchar(50)	This field is to store the industry type which the company belongs

5.	Email	Varchar(30)	This field is to store the Unique email address of the company
6.	Contact	Integer	This field is to store the Contact no of the company
7.	Headquaters	Varchar(30)	This field is to store the Headquaters location of the company
8.	Website	Varchar(30)	This field is to store the website of the company
9.	Logo	Varchar(30)	This field is to store the logo of the company

**Table No: 5****Table Name:** tbl\_job**Description:** This table is used to store the details of job registered.**Primary Key:** job\_id**Foreign key:** project\_id

Table 3.5 tbl\_job

SI. No	FIELDNAME	DATA TYPE	DESCRIPTION
1	Job_id	Integer	Used as a primary key to uniquely identify column and it is an auto increment column
2	Position	Varchar(30)	This field is to store the Position of the each jobs .
3	Description	Varchar(30)	This field is to store the description of the jobs.
4	Requirements	Varchar(50)	This field is to store the requirements of the jobs
5	Location	Varchar(30)	This field is to store the location of the job which the company located.
6	Salary	Integer	This field is to store the salary Package of the jobs.

7	Posted_date	Timestamp	This field is to store the the Job posted date by the company,
8	Deadline	Timestamp	This field is to store the deadline of the job posted by Company

**Table No: 6****Table Name:** tbl\_student**Description:** This table is used to store the details of student register**Primary Key:** student\_id**Foreign key:** Nil

Table 3.6 tbl\_student

SL. No	FIELDNAME	DATA TYPE	DESCRIPTION
1	student_id	Integer	Used as a primary key to uniquely identify column and it is an auto increment column
2	Firstname	Varchar(30)	This field is to store the first name of the firstname of a student
3	Lastname	Varchar(100)	This field is to store the last name of the lastname of a student
4	Email	Varchar(100)	This field is to store the email address of a student
5	Phone	Integer	This field is to store the contact number of the student.
6	Username	Varchar(30)	This field is to store the username of each student
7	Password	Varchar(30)	This field is to store the password of each student

**Table No: 7**

**Table Name:** tbl\_application

**Description:** This table is used to store the details of application that is applied by the students.

**Primary Key:** application\_id

**Foreign key:** job\_id, student\_id

Table 3.7 tbl\_application

SI. No	FIELDNAME	DATA TYPE	DESCRIPTION
1	Application_id	Integer	Used as a primary key to uniquely identify column and it is an auto increment column
2	Student_id	Integer	This field is to store the unique identifier for each students
3	Job_id	Integer	This field is to store the unique identifier for each job
4	Applied_date	Integer	This field is to store the indicating which the student applied for the job
5	Status	Varchar(30)	This field is to store the Status of the Job that has been applied by the Student

**Table No: 8**

**Table Name:** tbl\_interview\_schedule

**Description:** This table is used to store the interview schedule to each assigned students applied for the job

**Primary Key:** interview\_id

**Foreign key:** company\_id, application\_id

Table 3.8 tbl\_interview\_schedule

Sl. No	FIELDNAME	DATA TYPE	DESCRIPTION
1	interview_id	Integer	Used as a primary key to uniquely identify column and it is an auto increment column
2	Application_id	Integer	This field is to store the application that has been connect the interview to schedule
3	Company_id	Integer	This field is to store the unique identifier that the company job applied by the student
4	Date_time	Timestamp	This field is to store the date and time when the interview scheduled. It defaults to the current timestamp
5	Location	Varchar(30)	This field is to store the location Where the interview has been scheduled

### 3.2.2 ENTITY-RELATIONSHIP MODEL

ER model stands for an Entity-Relationship model. It is a high-level data model. This model is used to define the data elements and relationship for a specified system. It develops a conceptual design for the database. It also develops a very simple and easy to design view of data. In ER modelling, the database structure is portrayed as a diagram called an entity relationship diagram. An entity-relationship model (or ER model) describes interrelated things of interest in a specific domain of knowledge. A basic ER model is composed of entity types and specifies relationships that can exist between entities. In software engineering, an ER model is commonly formed to represent things a business needs to remember in order to perform business processes. Consequently, the ER model becomes an abstract data model, that defines a data or information structure which can be implemented in a database, typically a relational database.

---

## TPO

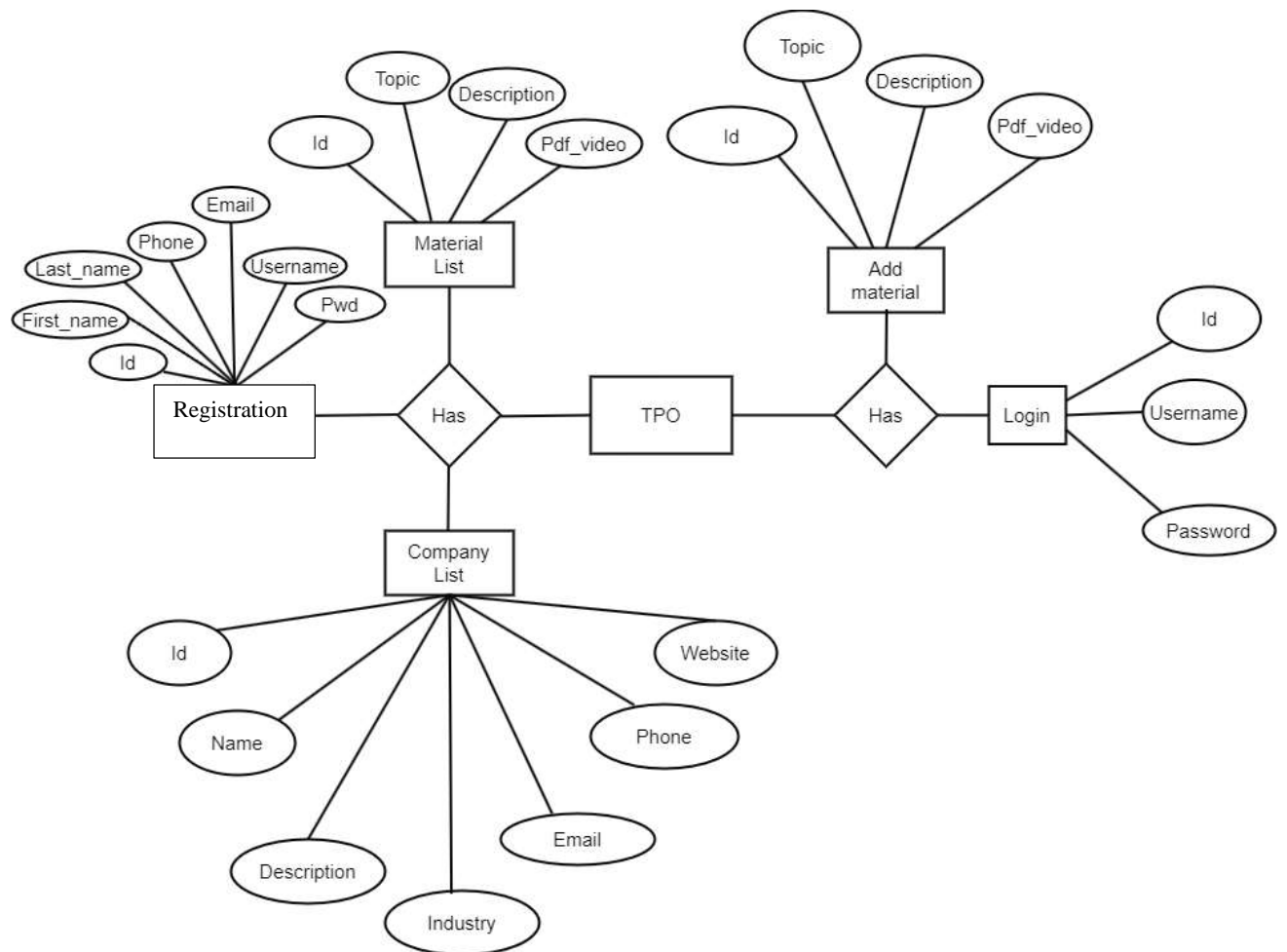


Fig 3.1 TPO ER Diagram

## COMPANY

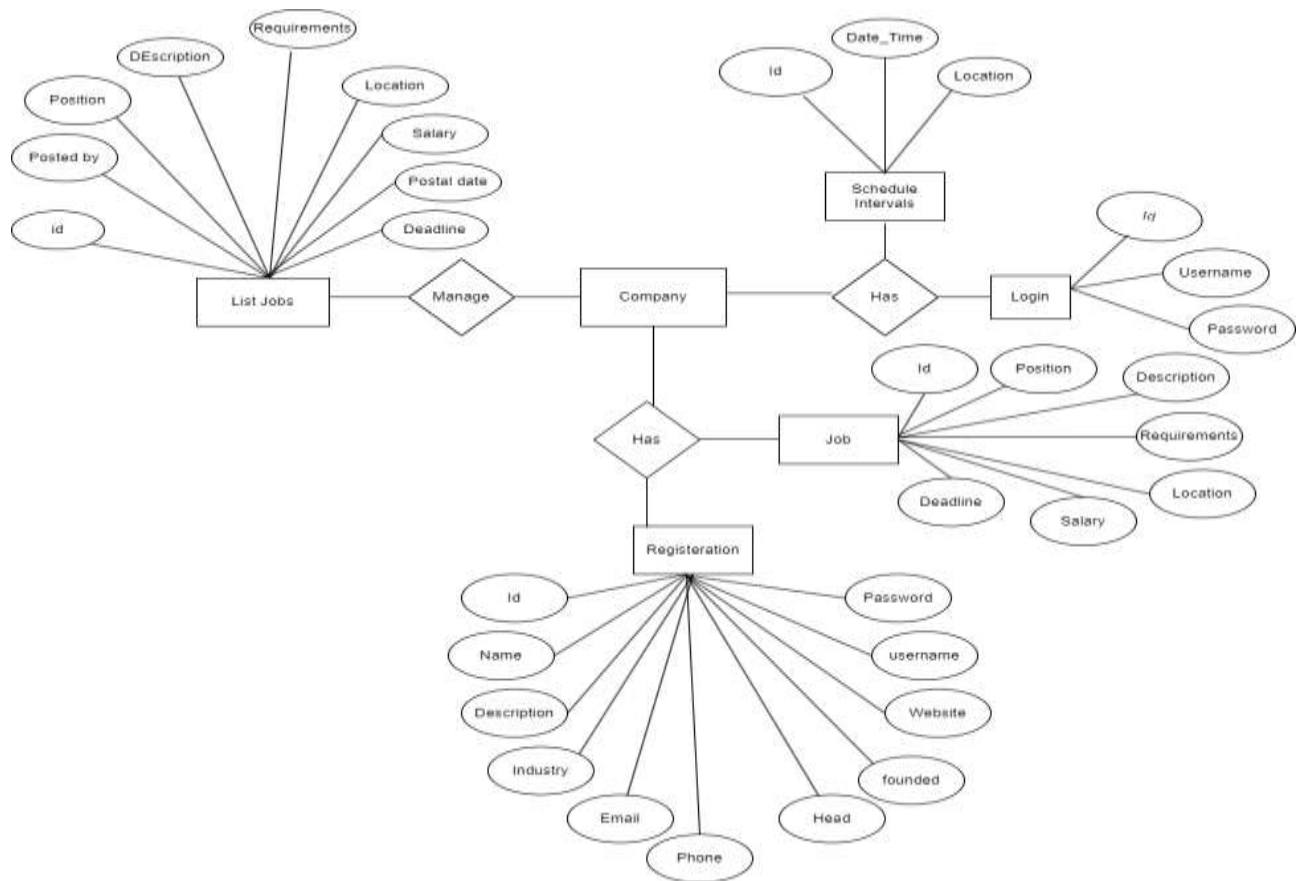


Fig 3.2 Company ER Diagram



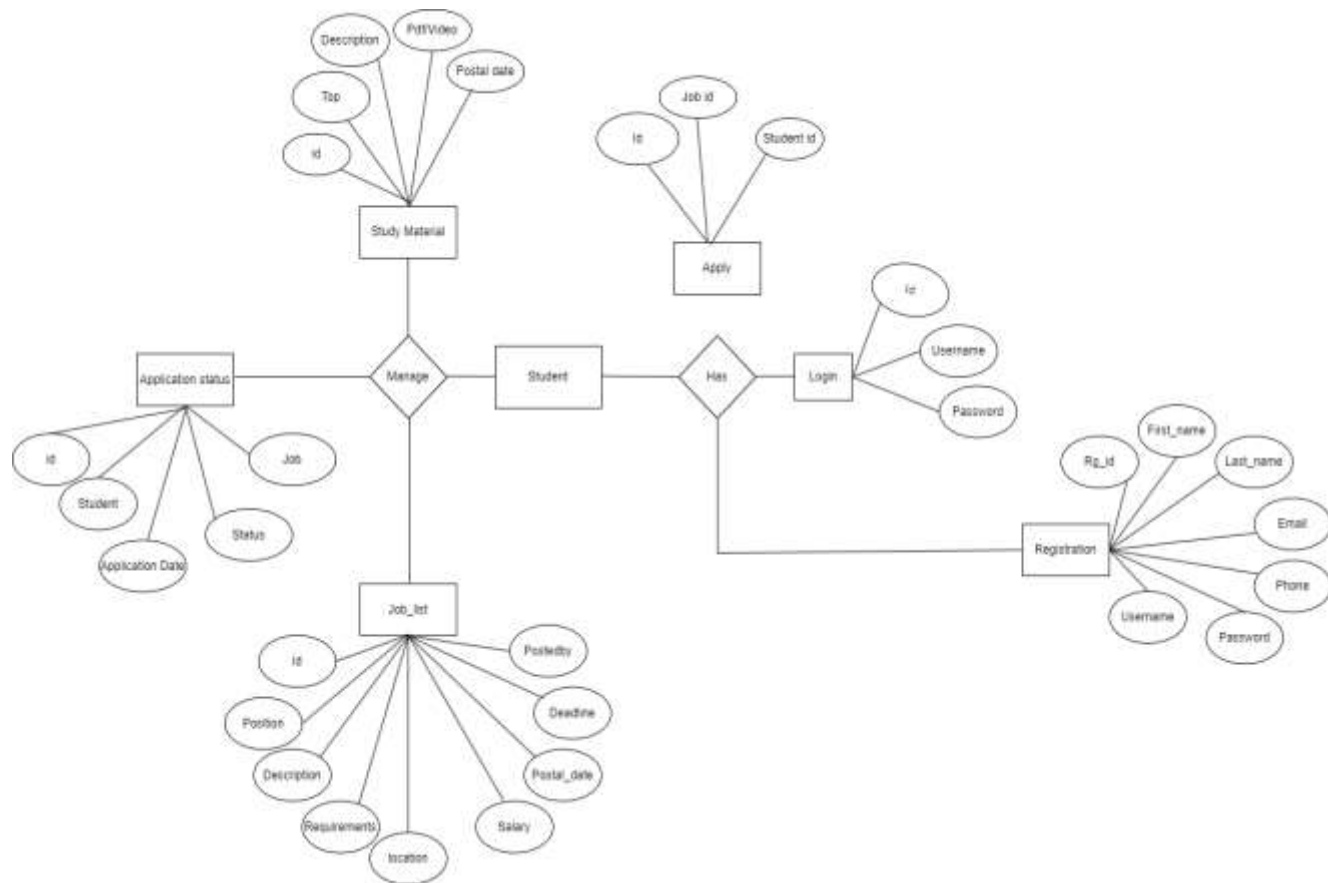


Fig 3.3 Student ER Diagram

### **3.3 PROCESS DESIGN –DATAFLOW DIAGRAMS**

Data Flow Diagram is a network that describes the flow of data and processes that change, or transforms, data throughout the system. This network is constructed by using a set of symbols that do not imply a physical implementation. It is a graphical tool for structured analysis of the system requirements. DFD models a system by using external entities from which data flows to a process, which transforms the data and creates, output-data-flows which go to other processes or external entities or files. Data in files may also flow to processes as inputs.

There are various symbols used in a DFD. Bubbles represent the processes. Named arrows indicate the data flow. External entities are represented by rectangles. Entities supplying data are known as sources and those that consume data are called sinks. Data are stored in a datastore by a process in the system. Each component in a DFD is labeled with a descriptive name. Process names are further identified with a number. The Data Flow Diagram shows the logical flow of a system and defines the boundaries of the system. For a candidate system, it describes the input (source), outputs (destination), database (files), and procedures (data flow), all in a format that meets the user's requirements. The main merit of DFD is that it can provide an overview of system requirements, what data a system would process, what transformations of data are done, what files are used, and where the results flow. This network is constructed by using a set of symbols that do not imply a physical implementation. It is a graphical tool for structured analysis of the system requirements. DFD models a system by using external entities from which data flows to a process, which transforms the data and creates, output- data-flows which go to other processes or external entities or files. External entities are represented by rectangles. Entities supplying data are known as sources and those that consume data are called sinks. Data are stored in a data store by a process in the system. It is a graphical tool for structured analysis of the system requirements. DFD models a system by using external entities from which data flows to a process, which transforms the data and creates, output-data-flows which go to other processes or external entities or files. Data in files may also flow to processes as inputs.

Rules for constructing a Data Flow Diagram

1. Arrows should not cross each other

2. Squares, circles and files must bear names.
3. Decomposed data flow squares and circles can have same time
4. Choose meaningful names for data flow
5. Draw all data flows around the outside of the diagram

Each component in a DFD is labelled with a descriptive name. Process names are further identified with a number. Context level DFD is drawn first. Then the process is decomposed into several elementary levels and is represented in the order of importance. A DFD describes what data flow (logical) rather than how they are processed, so it does not depend on hardware, software, data structure, or file organization. A DFD methodology is quite effective; especially when the required design.

### **3.4 OBJECT ORIENTED DESIGN – UML DIAGRAMS**

#### **3.4.1 Activity Diagram**

Activity Diagrams describe how activities are coordinated to provide a service that can be at different levels of abstraction. Typically, an event needs to be achieved by some operations, particularly where the operation is intended to achieve a number of different things that require coordination, or how the events in a single-use case relate to one another, in particular, use cases where activities may overlap and require coordination. It is also suitable for modeling a collection of use cases coordinates to represent business workflows.

### Activity Diagram for TPO

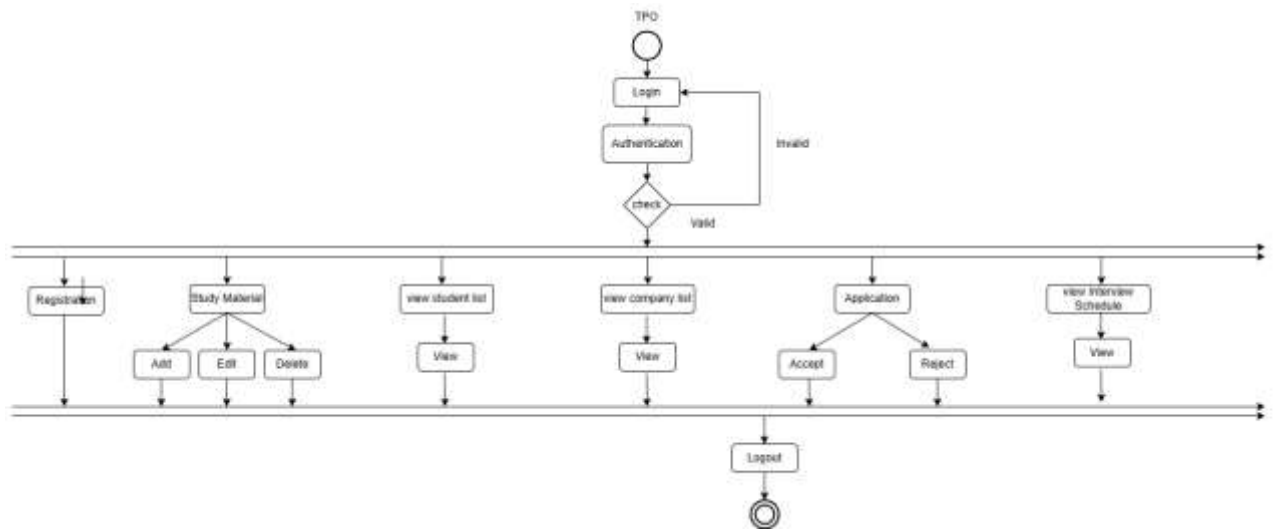


Fig 3.4 Activity Diagram for Tpo

### Activity Diagram for Company

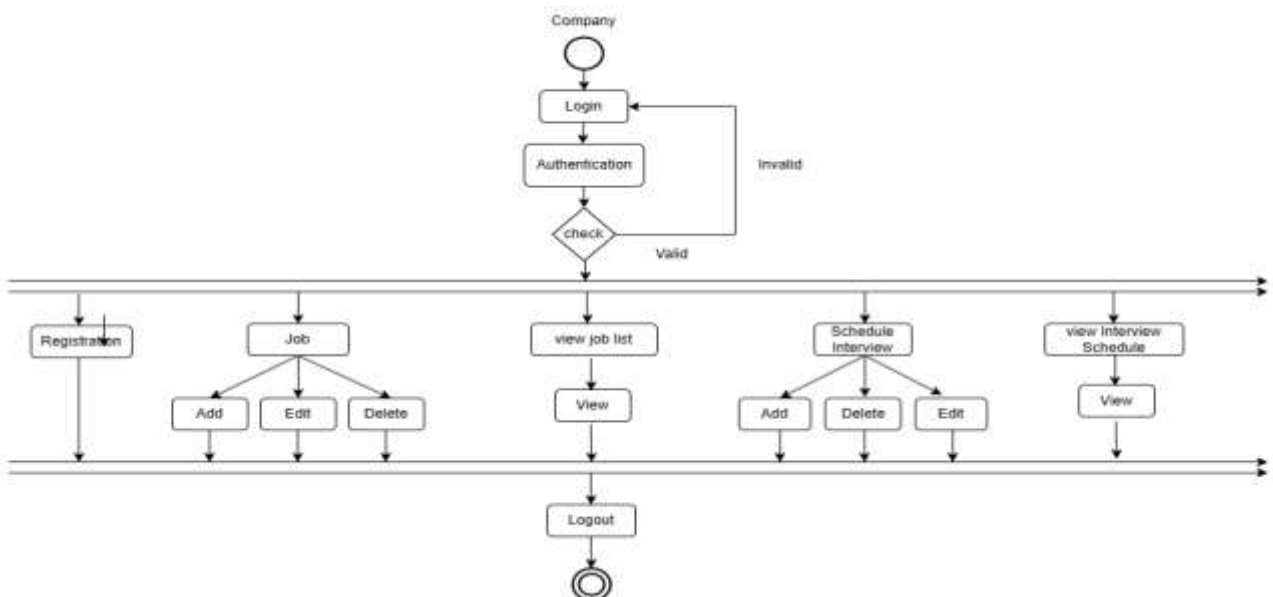


Fig 3.5 Activity Diagram for Company

### Activity Diagram for Student

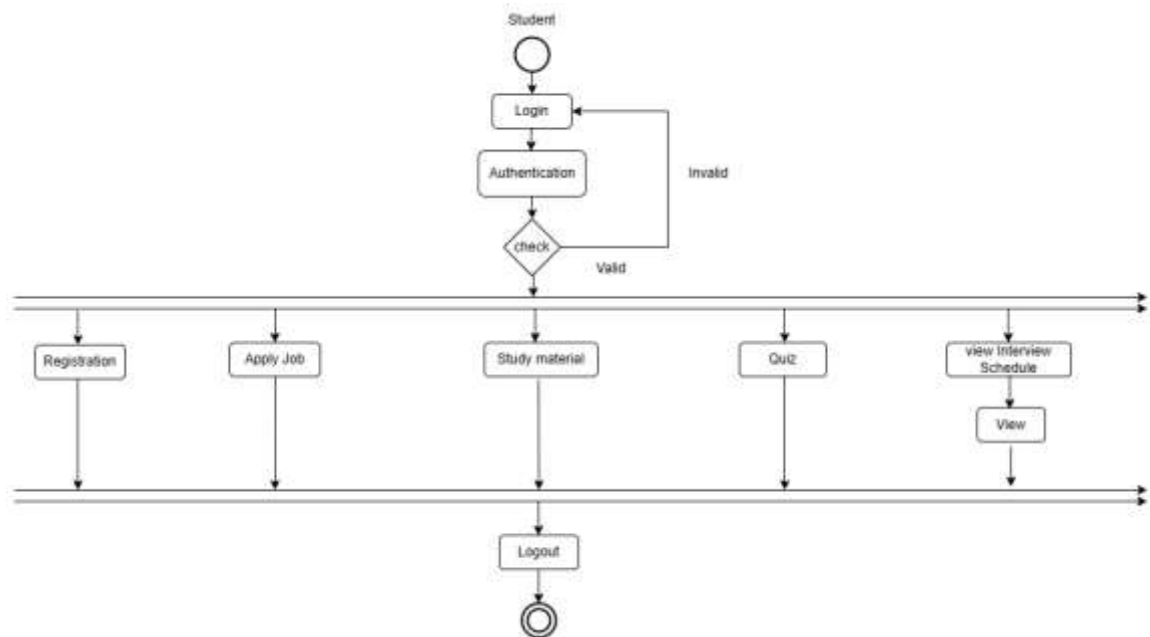


Fig 3.6 Activity Diagram for Student

### 3.4.2 Sequence Diagram

Sequence diagrams, commonly used by developers, model the interactions between objects in a single-use case. They illustrate how the different parts of a system interact with each other to carry out a function, and the order in which the interactions occur when a particular use case is executed. In simpler words, a sequence diagram shows different parts of a system working in a 'sequence' to get something done. The following nodes and edges are typically drawn in a UML sequence diagram: lifeline, execution specification, message, combined fragment, interaction use, state invariant, continuation, and destruction occurrence. Major elements of the sequence diagram are shown below:

### Sequence diagram of the Tpo:

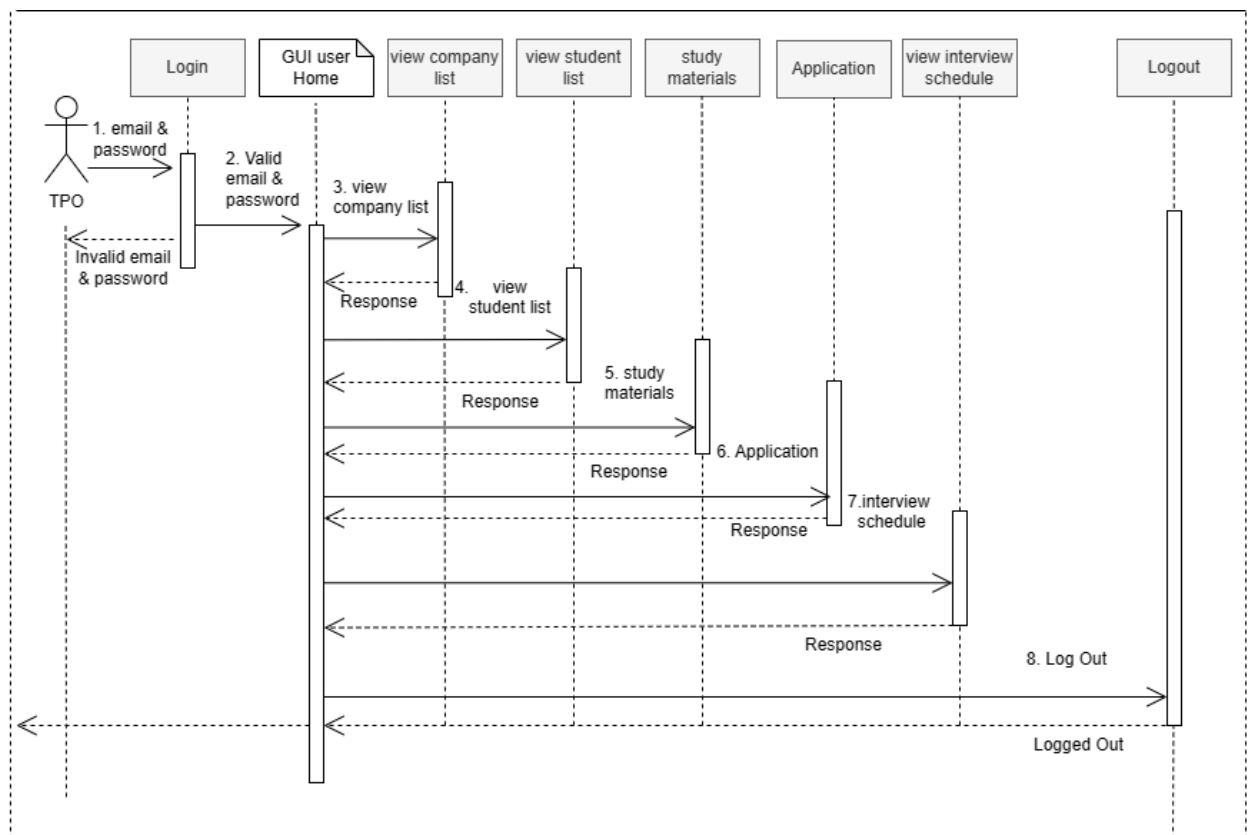


Fig 3.7 Sequence Diagram for Tpo

### Sequence diagram of the Company:

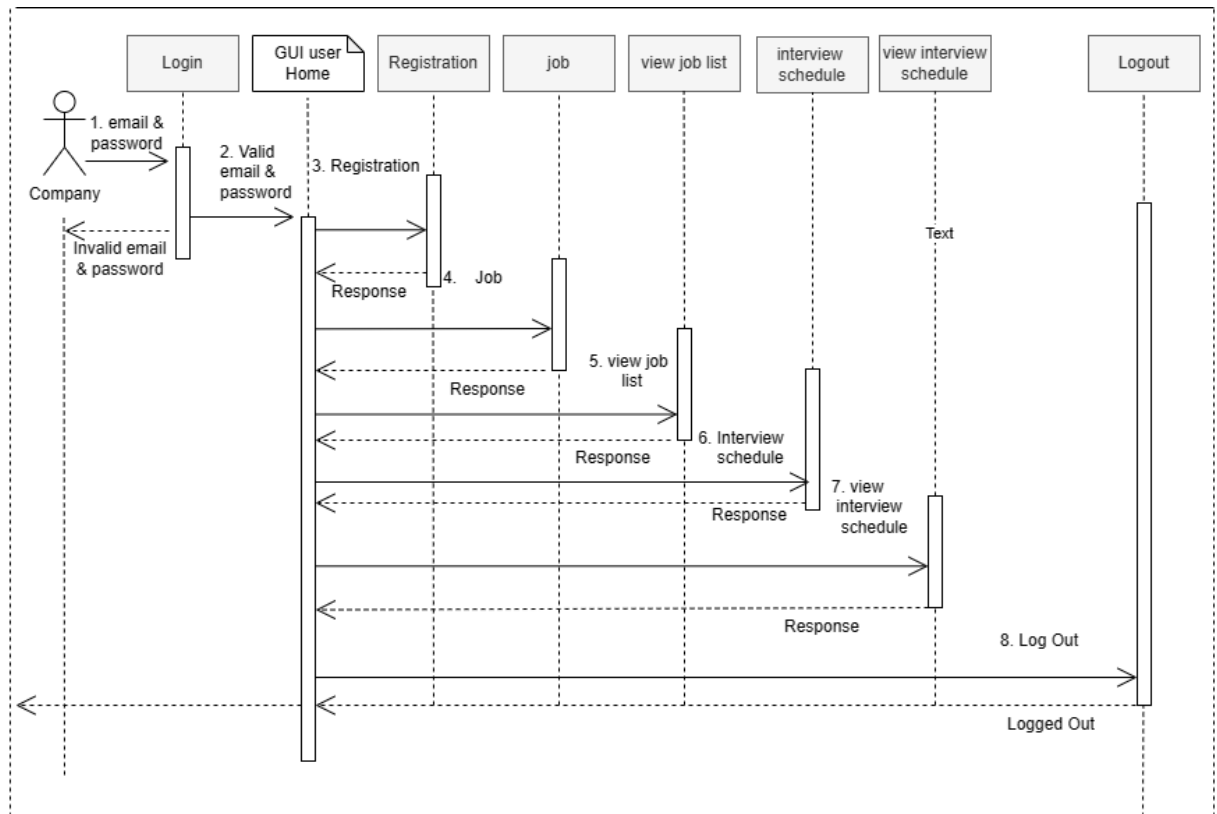


Fig 3.8 Sequence Diagram for Company

## Sequence diagram of the Student

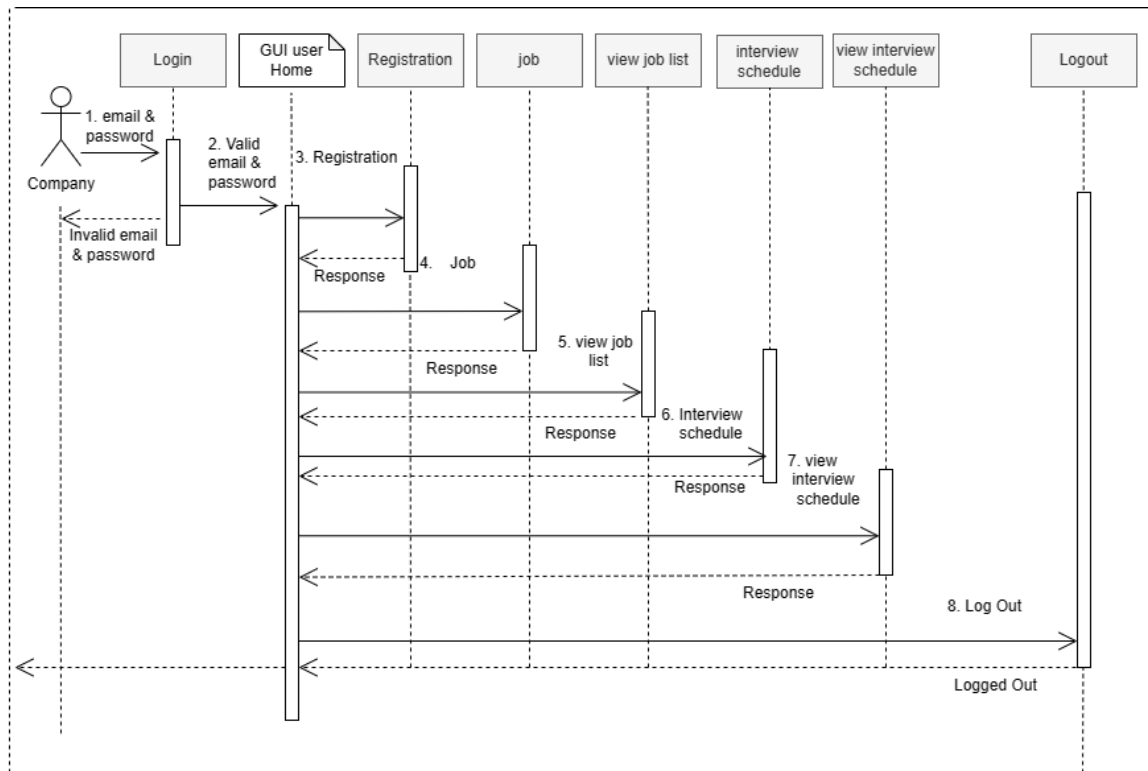


Fig 3.9 Sequence Diagram for Student



### 3.4.3 Use Case Diagram

The following shows the overall use case diagram of PLACEMENT APP:

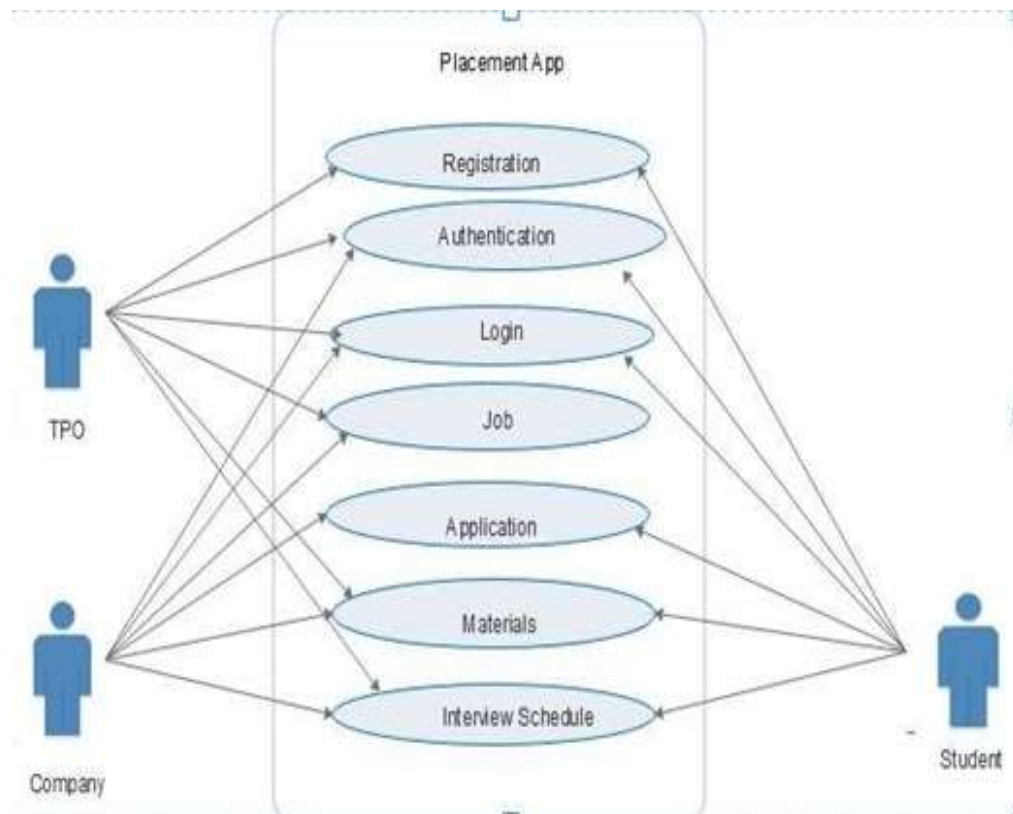


Fig 3.10 Use Case Diagram

### **3.5 INPUT DESIGN**

The user interface design is very important for any application. The interface design describes how the software communicates within itself, to the system that is interpreted with it and with humans who use it. The input design is the process of converting the user-oriented inputs into the computer-based format. The data is fed into the system using simple inactive forms. The forms have been supplied with messages so that the user can enter data without facing any difficulty. The data are validated wherever requires in the project. This ensures that only the correct data have been incorporated into the system. The goal of designing input data is to make automation as easy and free from errors as possible. For providing a good input design for the application easy data input and selection features are adopted. The input design requirements such as user-friendliness, consistent format, and interactive dialogue forgiving the right messages and help for the user at right are also considered for development for this project. Input Design is a part of the overall design. The input methods can be broadly classified into batch and online. Internal controls must be established for monitoring the number of inputs and for ensuring that the data are valid. The basic steps involved in input design are:

- Review input requirements.
- Decide how the input data flow will be implemented.
- Decide on the source document.
- Prototype on line input screens.
- Design the input screens.

The quality of the system input determines the quality of the system output. Input specifications describe the manner in which data enter the system for processing. Input design features can ensure the reliability of the system and produce results from accurate data. The input design also determines whether the user can interact efficiently with the system. In this system several forms are used as input screens for

collecting data from the users. Forms contain textbox, dropdown, button etc. For entering values text box is used. For single selection dropdown, dropdown is used. For multiple selections, multiple dropdowns are used. Validation checking is done for all mandatory fields. Already Exist Validation is also provided in some forms to avoid repeated entries. If an attempt to re enter same values, an error message will be displayed.

### **3.6 OUTPUT DESIGN**

Quality output is one, which meets the requirements of the end-user and presents the information clearly. In any system results of processing are communicated to the user and to the other system through outputs. In the output design, it is determined how the information is to be displayed for immediate need. It is the most important and direct source of information is to the user. Efficient and intelligent output design improves the system's relationships with the user and helps in decision-making. The objective of the output design is to convey the information of all the past activities, current status and to emphasize important events. The output generally refers to the results and information that is generated from the system. Outputs from computers are required primarily to communicate the results of processing to the users. Output also provides a means of storage by copying the results for later reference in consultation. There is a chance that some of the end- users will not actually operate the input data or information through workstations, but will see the output from the system. Two phases of the output design are:

1. Output Definition
2. Output Specification

Output Definition takes into account the type of output contents, its frequency, and its volume, the appropriate output media is determined for output. Once the media is chosen, the detailed specification of output documents is carried out. The nature of output required from the proposed system is determined during the logical design stage. It takes the outline of the output from the logical design and produces output as specified during the logical design phase. In a project, when designing the output, the system analyst must accomplish the following:

- Determine the information to present.
- Decide whether to display, print, speak the information and select the output medium
- Arrange the information in acceptable format.
- Decide how to distribute the output to the intended receipt.

Thus, by following the above specifications, a high-quality output can be generated. In this system, an output or response is given to the user after submission of each form. Output screens are well designed. In most of the form's tables are used to display the output information to the user. Reports values are displayed in a table format.

## **CHAPTER 4 SYSTEM ENVIRONMENT**

### **4.1 INTRODUCTION**

A software development environment (SDE) is the collection of hardware and software tools a system developer uses to build software systems. When you are developing software, you probably don't want your users to see every messy part of your application creation process. In order to make sure you control what people see and when they have access to it, development teams use environments to create "stages" of the app which they consider good for releasing. Each environment has its own unique purpose. There are different standards of environments that are used in the industry, although almost every process starts at the 'development' stage and ends with 'production'. Different organizations all have their own purposes and policies which dictate when and how each environment is used.

### **4.2 SOFTWARE REQUIREMENT SPECIFICATION**

In Placement App, there are 3 main Stakeholders. They are:

1. TPO
2. Company
3. Student

#### **Stakeholder: Admin**

- The system should have facility for login using their email and password.
- The system should have Manage Tpo dashboard.
- The system should have facility to update the profile.
- The system should have facility manage the user.
- The system should have facility to add the materials.
- The system should have facility to view the materials.
- The system should have facility to manage the company.
- The system should have facility to view the Interview schedule.
- The system should have the facility to logout.

**Stakeholder: Company**

- The system should have facility for login using their email and password.
- The system should have the facility to view the register details of the company.
- The system should have the facility to update profile.
- The system should have the facility to add job.
- The system should have the facility to schedule the interview.
- The system should have the facility to logout.

**Stakeholder: Student**

- The system should have facility for login using their email and password.
- The system should have the facility to allow new student to register.
- The system should have Student dashboard.
- The system should have facility to update the profile.
- The system should have facility to view the job.
- The system should have facility to apply the job.
- The system should have facility to view interview schedule.
- The system should have facility to view study material.
- The system should have the facility to logout.

### **4.3            HARDWARE REQUIREMENT SPECIFICATION**

The selection of hardware configuring is a very task related to the software development, particularly inefficient RAM may affect adversely on the speed and corresponding on the efficiency of the entire system. The processor should be powerful to handle all the operations. The hard disk

should have sufficient to solve the database and the application. Hardware used for development:

CPU                        : Intel Core i7 Processor

Memory                 : 8 GB

Cache                    : 6 MB

Hard Disk               : 1 TB

Monitor                 : 15.6" Monitor

Keyboard : Standard PS/2 Keyboard

Mouse : Optical Mouse

Minimum Hardware Required for implementation:

Processor : Snapdragon 650

Memory : 512 KB Above

Cache : 12 KB Above

Ram : 2 GB Above

Storage : 2 GB Above

Phone : Any

#### **4.4 TOOLS, PLATFORMS**

This project is built upon the latest technology software.

Front end : Flutter

Back end : Python

Database : My SQL

Emulator : Android Studio

Development Tools : Vscode

Operating System : Windows 10

#### **4.4.1 FRONT END TOOL**

##### **4.4.1.1 Flutter**

Flutter is a cross-platform UI toolkit that is designed to allow code reuse across operating systems such as iOS and Android, while also allowing applications to interface directly with underlying platform services. The goal is to enable developers to

deliver high- performance apps that feel natural on different platforms, embracing differences where they exist while sharing as much code as possible. During development, Flutter apps run in a VM that offers stateful hot reload of changes without needing a full recompile. For release, Flutter apps are compiled directly to machine code, whether Intel x64 or ARM instructions, or to JavaScript if targeting the web. The framework is open source, with a permissive BSD license, and has a thriving ecosystem of third-party packages that supplement the core library functionality.

#### **4.4.2 Back End Tool**

##### **4.4.2.1 Python**

Python is a high-level, versatile programming language known for its readability, simplicity, and wide range of applications. Created by Guido van Rossum and first released in 1991, Python has gained immense popularity for its ease of learning and use. It supports multiple programming paradigms, including procedural, object- oriented, and functional programming. Python's extensive standard library provides modules and packages that facilitate various tasks, from web development and data analysis to artificial intelligence and scientific computing. It is dynamically typed and interpreted, allowing for rapid development and testing. Python is also platform- independent, making it suitable for cross-platform development. With a large and active community, Python continues to evolve, and its ecosystem includes frameworks like Django for web development, TensorFlow for machine learning, and Flask for microservices, making it a go-to language for diverse programming needs.

##### **4.4.2.2 Django**

##### **4.4.2.3 SQLITE**

SQLite is an in-process library that implements a self-contained, serverless, zero configuration, transactional SQL database engine. It is the one database, which is zero-configured, that means like other database you do not need to configure it in your system. SQLite engine is not a standalone process like other databases, you can link it statically or dynamically as per your requirement with your application. The SQLite accesses its storage files directly. SQLite does not require a separate server process or system to operate. It comes with zero-configuration, which means no setup or administration needed. A complete SQLite database is stored in a single cross-platform disk file. It is



self-contained, which means no external dependencies. It is written in ANSI-C and provides simple and easy-to-use API. It is available on UNIX (Linux, Mac OS-X, Android, iOS) and Windows (Win32, WinCE, WinRT).

#### **4.4.3 Visual Studio Code**

Visual Studio Code, also commonly referred to as VS Code, is a source-code editor made by Microsoft with the Electron Framework, for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git. Users can change the theme, keyboard shortcuts, preferences, and install extensions that add additional functionality. In the Stack Overflow 2021 Developer Survey, Visual Studio Code was ranked the most popular developer environment tool among 82,000 respondents, with 70% reporting that they use it. Visual Studio Code is a source-code editor that can be used with a variety of programming languages, including C, C#, C++, Fortran, Go, Java, JavaScript, Node.js, Python, Rust. It is based on the Electron framework, which is used to develop Node.js web applications that run on the Blink layout engine. Visual Studio Code employs the same editor component (codenamed "Monaco") used in Azure DevOps (formerly called Visual Studio Online and Visual Studio Team Services). Out of the box, Visual Studio Code includes basic support for most common programming languages. This basic support includes syntax highlighting, bracket matching, code folding, and configurable snippets. Visual Studio Code also ships with IntelliSense for JavaScript, TypeScript, JSON, CSS, and HTML, as well as debugging support for Node.js. Support for additional languages can be provided by freely available extensions on the VS Code Marketplace. An orange version of the Visual Studio Code logo for the insider's version of Visual Studio Code Visual Studio Code Insiders Logo Instead of a project system, it allows users to open one or more directories, which can then be saved in workspaces for future reuse. This allows it to operate as a language-agnostic code editor for any language. It supports many programming languages and a set of features that differs per language.

Unwanted files and folders can be excluded from the project tree via the settings. Many Visual Studio Code features are not exposed through menus or the user interface but can be accessed via the command palette. Visual Studio Code can be extended via extensions, available through a central repository. This includes additions to the editor and language support. A notable feature is the ability to create extensions that add

support for new languages, themes, debuggers, time travel debuggers, perform static code analysis, and add code linters using the Language Server Protocol. Source control is a built-in feature of Visual Studio Code. It has a dedicated tab inside of the menu bar where users can access version control settings and view changes made to the current project. To use the feature, Visual Studio Code must be linked to any supported version control system (Git, Apache Subversion, Perforce, etc.). This allows users to create repositories as well as to make push and pull requests directly from the Visual Studio Code program. Visual Studio Code includes multiple extensions for FTP, allowing the software to be used as a free alternative for web development. Code can be synced between the editor and the server, without downloading any extra software.

Visual Studio Code allows users to set the code page in which the active document is saved, the newline character, and the programming language of the active document. This allows it to be used on any platform, in any locale, and for any given programming language. Visual Studio Code collects usage data and sends it to Microsoft, although this can be disabled. Due to the open-source nature of the application, the telemetry code is accessible to the public, who can see exactly what is collected.

#### **4.4.4 Operating System**

Windows 10 also introduced the Microsoft Edge web browser, a virtual desktop system, a window and desktop management Windows 10 is a series of personal computer operating systems produced by Microsoft as part of its Windows NT family of operating systems. It is the successor to Windows 8.1 and was released to manufacturing on July 15, 2015, and broadly released for retail sale on July 29, 2015. Windows 10 receives new builds on an ongoing basis, which are available at no additional cost to users, in addition to additional test builds of Windows 10 which are available to Windows Insiders. Devices in enterprise environments can receive these updates at a slower pace, or use long-term support milestones that only receive critical updates, such as security patches, over their ten-year lifespan of extended support. One of Windows 10's most notable features is support for universal apps, an expansion of the Metro style apps first introduced in Windows 8.

Universal apps can be designed to run across multiple Microsoft product families with nearly identical code—including PCs, tablets, smartphones, embedded systems, Xbox One, Surface Hub and Mixed Reality. The Windows user interface was revised to handle

transitions between a mouse- oriented interface and a touchscreen- 31Department of Computer Science optimized interface based on available input devices particularly on 2-in-1 PCs, both interfaces include an updated Start menu which incorporates elements of Windows 7's traditional Start menu with the tiles of a feature called Task View, support for fingerprint and face recognition login, new security features for enterprise environments, and DirectX 12.

Windows 10 received mostly positive reviews upon its original release in July 2015. Critics praised Microsoft's decision to provide a desktop- oriented interface in line with previous versions of Windows, contrasting the tablet-oriented approach of 8, although Windows 10's touch- oriented user interface mode was criticized for containing regressions upon the touch- oriented interface of Windows 8.

Critics also praised the improvements to Windows 10's bundled software over Windows 8.1, Xbox Live integration, as well as the functionality and capabilities of the Cortana personal assistant and the replacement of Internet Explorer with Edge. However, media outlets have been critical of changes to operating system behaviors, including mandatory update installation, privacy concerns over data collection performed by the OS for Microsoft and its partners and the adware-like tactics used to promote the operating system on its release. Although Microsoft's goal to have Windows 10 installed on over a billion devices within three years of its release had failed, it still had an estimated usage share of 60% of all the Windows versions on traditional PCs, and thus 47% of traditional PCs were running Windows 10 by September 2019. Across all platforms (PC, mobile, tablet and console), 35% of devices run some kind of Windows, Windows 10 or older.

## CHAPTER 5 SYSTEM IMPLEMENTATION

### 5.1 INTRODUCTION

The "In the rapidly evolving landscape of education and employment, effective placement processes are crucial for connecting students, academic institutions, and prospective employers. Our Placement App, designed with a focus on simplicity, efficiency, and transparency, acts as a comprehensive solution to streamline the placement workflow. This application caters to three primary modules: Students, Training and Placement Officers (TPOs), and Companies, creating a seamless and collaborative platform for successful placements. The Student Module is tailored to empower students in their journey from education to employment. Students can create detailed profiles showcasing their academic achievements, skills, and preferences. This module facilitates easy access to job opportunities, allows students to track their application status, and provides valuable insights into skill development areas. To view and get the study materials . Provide an area for aptitude try it out. Apply for the jobs and search the job in the app for students. View the results that provided by admin. The notification given from the tpo any current webinars or interview process is hiring can view Training and Placement Officers play a pivotal role in bridging the gap between students and company.

The TPO Module centralizes the placement coordination process, allowing TPOs to manage student profiles, authentication of student registration verify, post the job, add the current webinars or interview is upcoming add interview materials, input the quiz, filter to select the student who's apply for job, schedule the interview date to students both students and companies seamlessly. Retrieve the results from the company. The Company Module serves as a dedicated space for recruiters to connect with talented individuals. Companies can post job opportunities, view student profiles, and streamline their recruitment process through an integrated platform. The module facilitates transparent communication between companies and TPOs, ensuring a smooth and efficient hiring process. The company schedule the interview time and date. Hence provide the interview results to tpo. By integrating these three modules, our Placement

App aims to create a collaborative ecosystem where students, TPOs, and companies can interact seamlessly, fostering a more efficient and transparent placement process. This platform not only simplifies the complexities of placement management but also contributes to the overall success and satisfaction of students, educational institutions, and recruiting companies alike.

## **5.2 CODING**

### **5. 2. 1 Coding Standards**

Coding is a list of step-by-step instructions that get computers to do what you want them to do. This step is also called programming phase. The performance of software design starts by using program code with appropriate programming language and developing error free executable programs in efficient manner. Coding is undertaken once the design phase is complete and the design documents have been successfully reviewed. Computer Coding is term used for writing Codes & executing it for getting desired output. In this phase, every module identified and specified in the design document is independently coded and unit tested.

- The input to the coding phase is the design document.
- During the coding phase, various modules identified in the design document are coded according to the respective module specifications. In this phase, each module identified and specified in the design document is independently coded and unit tested. A coding standard gives a regular form to the codes written by different engineers.
- It provides sound understanding of the code.
- It encourages good programming practice.

#### **5.2.2 Sample Code**

```
import 'package:flutter/material.dart';
import 'package:google_fonts/google_fonts.dart';
import 'package:lottie/lottie.dart';
import 'package:placement_app/core/constants/color_constants.dart';
import 'package:placement_app/core/constants/global_text_styles.dart';
import 'package:placement_app/global_widget/global_materal_btn.dart';
import
'package:placement_app/presentation/common/registration/company/view/company_r
eg_scrn.dart';
import
```

```
'package:placement_app/presentation/common/registration/student/view/student_regist
er_scrn.dart';
import
'package:placement_app/presentation/common/registration/tpo/view/tpo_reg_scrn.dart'
;
```

```
import '../student_company_login/student_company.dart';
```

```
class GetStarted extends StatelessWidget {
  const GetStarted({super.key});
```

```

@override
Widget build(BuildContext context) {
  var size = MediaQuery.of(context).size;
  var width = size.width;
  return SafeArea(
    child: Scaffold(
      backgroundColor: const Color(0xFFeef1f3),
      appBar: AppBar(
        backgroundColor: const Color(0xFFeef1f3),
        actions: [
          PopupMenuButton(
            iconSize: 20,
            shape: RoundedRectangleBorder(
              borderRadius: BorderRadius.circular(15)),
            icon: Icon(Icons.more_vert),
            itemBuilder: (context) {
              return [
                PopupMenuItem(
                  onTap: () {
                    Navigator.push(
                      context,
                      MaterialPageRoute(
                        builder: (context) => TpoRegistration(),
                      ));
                },
                child: Text(
                  "Training & Placement Officer",
                  style: GLTextStyles.labeltxtBlk16,
                ),
              ],
            );
          ],
        );
      ],
    ),
  ),
);
```

```

        body: Container(
          padding: EdgeInsets.symmetric(horizontal: 20),
          child: Column(
            mainAxisAlignment: MainAxisAlignment.center,
            children: [
              Text(
                "Get Registered Here",
                style: GoogleFonts.poppins(
                  fontSize: 26.0,
                  fontWeight: FontWeight.w700,
                  color: ColorTheme.black,
                ),
              ),
            ],
          ),
        ),

```

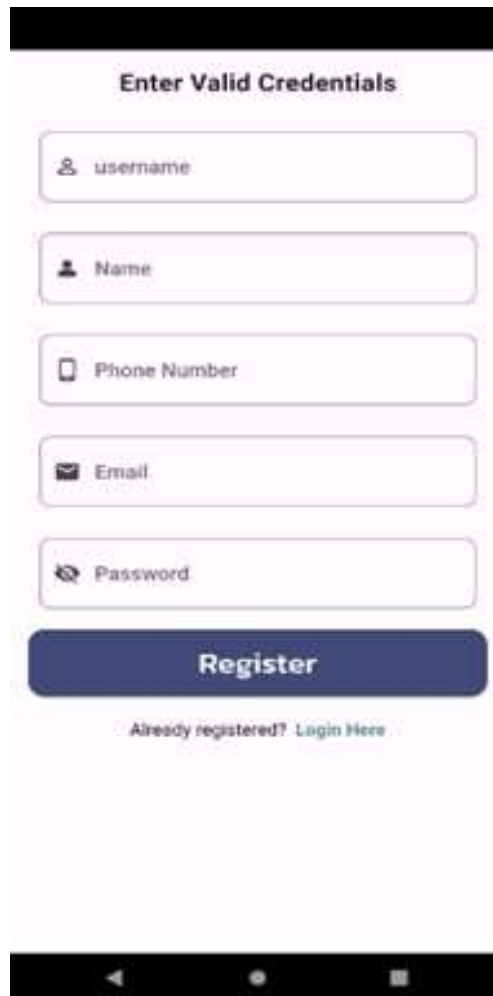
```

LottieBuilder.asset("asset/animation/getStarted.json"),
    SizedBox(
      height: 10,
    ),
    GLMetrialButton(
      text: "Login Here",
      color: ColorTheme.darkClr,
      txtClr: ColorTheme.white,
      height: width * .15,
      route: StudentCompany(),
    ),
    SizedBox(
      height: 10,
    ),
    GLMetrialButton(
      text: "Student",
      color: ColorTheme.darkClr,
      txtClr: ColorTheme.white,
      height: width * .15,
      route: StudentRegister(),
    ),
    SizedBox(
      height: 10,
    ),
    GLMetrialButton(
      text: "Company",
      color: ColorTheme.darkClr,
      txtClr: ColorTheme.white,
      height: width * .15,
      route: CompanyRegistration(),
    ),
  ],
),
));

```

}

Here is the screenshot of above display page:



The screenshot shows a mobile application interface for registration. At the top, there is a black header bar. Below it, the title 'Enter Valid Credentials' is displayed in bold. The form consists of five input fields, each with a placeholder text and a small icon to its left: 'username' (person icon), 'Name' (person icon), 'Phone Number' (phone icon), 'Email' (envelope icon), and 'Password' (key icon). Below these fields is a prominent blue button labeled 'Register'. Underneath the button, there is a link that says 'Already registered? Login Here'. At the bottom of the screen, there is a black navigation bar with three white icons: a back arrow, a home circle, and a recent apps square.

Fig 5.1 Form for TPO Registration

### 5.3.3 Code Validation & Optimization

Software/Code validation is often considered to be overwhelming for some organizations. With all the requirements and guidance specified in the standards and regulations, it appears to be a monumental task. However, it is not as complex as some may think.. While very few software systems are developed in- house anymore, many of the systems used are configurable to meet your business needs. The regulations state, that these configured systems must be validated for their intended use. Depending on the risk and complexity of the software, different levels of validation rigor should be performed. Optimization is a program transformation technique, which tries to improve the code by making it consume fewer resources (i.e. CPU, Memory) and deliver high



speed. In optimization, high-level general programming constructs are replaced by very efficient low-level programming code.

A code optimizing process must follow the three rules given below:

- The output code must not, in any way, change the meaning of the program.
- Optimization should increase the speed of the program and if possible, the program should demand a smaller number of resources.
- Optimization should itself be fast and should not delay the overall compiling process.

### **5.3 DEBUGGING**

In software engineering, debugging is the process of fixing a bug in the software. In other words, it refers to identifying, analyzing, and removing errors. This activity begins after the software fails to execute properly and concludes by solving the problem and successfully testing the software. It is an extremely complex and tedious task because errors need to be resolved at all stages of debugging. Debugging Process: Steps involved in debugging are:

- Problem identification and report preparation.
- Assigning the report to the software engineer to the defect to verify that it is genuine.
- Defect Analysis using modelling, documentation, finding and testing candidate flaws, etc.
- Defect Resolution by making required changes to the system.
- Validation of corrections

### **5.4 UNIT TESTING**

In computer programming, unit testing is a method by which individual units of source code, sets of one or more computer program modules together with associated control data, usage procedures, and operating procedures are tested to determine if they are fit for use. In this testing, we test each module individually and integrated the overall system. Unit testing focuses verification efforts on the smaller unit of software design in the module. This is also known as module testing. The modules of the system are tested separately. The testing is carried out during the programming stage itself. In this testing step each module is found to work satisfactorily as regards the expected output from the module. There are some validation checks for verifying the data input given by the user

which both the formal and validity of the entered. It is very easy to find errors debug the system. We have continued Unit Testing from the starting of the coding phase itself. Whenever we complete done small submodule, some amount of testing was done based on the requirements to see if the functionality is aligned to the gathered requirements.

#### **5.4.1 Test Plan & Test Cases**

The objective of system testing is to ensure that all individual programs are working as expected, that the programs link together to meet the requirements specified and to ensure that the computer system and the associated clerical and other procedures work together. The initial phase of system testing is the responsibility of the analyst who determines what conditions are to be tested, generates test data, produced a schedule of expected results, runs the tests and compares the computer produced results with the expected results with the expected results. The analyst may also be involved in procedures testing. When the analyst is satisfied that the system is working properly, hands it over to the users for testing. The importance of system testing by the user must be stressed. Ultimately it is the user must verify the system and give the go ahead. Special test data is input for processing (test plan) and the results are examined to locate unexpected results. A limited number of users may also be allowed to use the system so analysts can see whether they try to use it in unexpected ways. It is preferably to find these surprises before the organization implements the system and depends on it. In many organizations, testing is performed by person other than those who write the original programs. Using persons who do not know how certain parts were designed or programmed ensures more complete and unbiased testing and more reliable software

A test plan is a detailed document that describes the test strategy, objectives, schedule, estimation, deliverables, and resources required to perform testing for a software product. Test Plan helps us determine the effort needed to validate the quality of the application undertest. The test plan serves as a blueprint to conduct software testing activities as a defined process, which is minutely monitored and controlled by the test manager.

## **CHAPTER 6 SYSTEM TESTING**

### **6.1 INTRODUCTION**

The objective of system testing is to ensure that all individual programs are working as expected, that the programs link together to meet the requirements specified and to ensure that the computer system and the associated clerical and other procedures work together. The initial phase of system testing is the responsibility of the analyst who determines what conditions are to be tested, generates test data, produced a schedule of expected results, runs the tests, and compares the computer-produced results with the expected results. The analyst may also be involved in procedures testing. When the analyst is satisfied that the system is working properly, he hands it over to the users for testing. The importance of system testing by the user must be stressed. Ultimately it is the user must verify the system and give the go-ahead. During testing, the system is used experimentally to ensure that the software does not fail, i.e., that it will run according to its specifications and in the way, users expect it to. Special test data is input for processing (test plan) and the results are examined to locate unexpected results. A limited number of users may also be allowed to use the system so analysts can see whether they try to use it in unexpected ways. It is preferable to find these surprises before the organization implements the system and depends on it. In many organizations, testing is performed by persons other than those who write the original programs.

### **6.2 INTEGRATION TESTING**

Integration testing (sometimes called integration and testing, abbreviated I&T) is the phase in software testing in which individual software modules are combined and tested as a group. Software components may be integrated in an iterative way or together ("big bang"). Normally the former is considered a better practice since it allows interface issues to be located more quickly and fixed. Data can be lost across an interface; one module can have an adverse effort on the other sub-functions when combined by, may not produce the desired major functions. Integrated testing is the systematic testing for constructing the uncover errors within the interface. This testing was done with

sample data. The developed system has run success full for this sample data. The need for an integrated test is to find the overall system performance. Integration testing is a logical extension of unit testing. In its simplest form, two units that have already been tested are combined into a component and the interface between them is tested. A component, in this sense, refers to an integrated aggregate of more than one unit. Integration testing identifies problems that occur when units are combined. By using a test plan that requires you to test each unit and ensure the viability of each before combining units, you know that any errors discovered when combining units are likely related to the interface between units. This method reduces the number of possibilities to a far simpler level of analysis. Progressively larger groups of tested software components corresponding to elements of the architectural design are integrated and tested until the software works as a system.

### **6.3 SYSTEM TESTING**

System testing is the testing and is used to ensure that by putting the software in different environments it still works. It is done with executing the software system testing the application is working correctly from the point of view of a user. The main purpose of this system testing is to evaluate the system's compliance with the specified requirements. Whole system is tested as per the requirements. Black-box type testing that is related to overall requirements specifications, covers all combined parts of a system.

#### **6.4.1 Test Plan & Test Cases**

A test case is a set of conditions or variables under which a tester will determine whether a system under test satisfies requirements or works correctly. The process of developing test cases can also help find problems in the requirements or design on an application. test plan is a detailed document that describes the test strategy, objectives, schedule, estimation, deliverables, and resources required to perform testing for a software product. Test Plan helps us determine the effort needed to validate the quality of the application undertest. The test plan serves as a blueprint to conduct software testing activities as a defined process, which is minutely monitored and controlled by the test manager.

Table 6.1:test plan

Test Level	Project Team	External Party
Unit Testing	T	
Integration Testing	T	
Validation Testing	T	T
System Testing	T	T

Table 6.2: TPO Test Case Report

Function	Description	% Test case executed	% Test passed
Login	Open the application	100%	97%
Login	Open the application	100%	97%
Login	Enter valid email and password	100%	97%
Login	Enter valid email and password	100%	97%

Table 6.3:test case

T APP LOGIN SCREEN			
Test Steps	Expected Result	Actual Result	Pass/Fail
Run the application and navigate to login screen.	Login screen contains two fields for entering email & password and login button should be present.	For entering email & password together with a login button is available.	Pass
Enter a valid email & password and press the login button.	Owner must successfully login to the TPO dashboard.	Login successful and navigate to admin home page	Pass
Enter a valid email & invalid password and press the login button.	A message should be displayed that invalid password.	An asterisk(*) is displayed if no password is given.	Pass
Enter a valid email and leave password field and press login button.	An asterisk(*) should be displayed that please fill out this field.	A message has been stating that invalid email & password.	Pass
Press login button without entering email & password.	A message should be displayed that required field validation status.	A message has been stating that required field validation status.	Pass

Enter invalid data in email& password field and press login button.	A message should be displayed that regular expression validation status.	A message has been stating that regular expression Validation status.	Pass
---	--	---	------

## **CHAPTER 7 SYSTEM MAINTENANCE**

### **7.1 INTRODUCTION**

Software Maintenance is the process of modifying a software product after it has been delivered to the customer. The main purpose of software maintenance is to modify and update software applications after delivery to correct faults and to improve performance.

Need for Maintenance Software Maintenance must be performed to:

- Correct faults
- Improve the design
- Implement enhancements
- Interface with other systems
- Accommodate programs so that different hardware, software, system features, and telecommunications facilities can be used
- Migrate legacy software
- Retire Software

### **7.2 MAINTENANCE**

The definition of software maintenance can be given by describing four activities that are undertaken after the program is released for use. The first maintenance activity occurs since it is unreasonable to assume that software testing will uncover all errors in a large software system. The process of including the diagnosis and correction of one or more error is called corrective maintenance. The second activity that contributes to a definition of maintenance occurs since rapid change is encountered in every aspect of computing. Therefore, maintenance modifies to properly interface with a changing environment. The third activity involves recommendation for new capabilities, modification to the exiting function and general enhancement when the software is used. To satisfy requests, prefecture maintenance is performed. The fourth maintenance activity occurs when software is changed to improve future maintainability or reliability. This is called preventive maintenance.



## CHAPTER 8 SYSTEM SECURITY MEASURES

### 8.1 INTRODUCTION

Project security is defined as, the invested parties having correct protocols to access the project. It means that everyone involved should have the access to information and data according to their role. The encryption of the data is crucial in project management security and the data should not be available to everyone. Information and physical security both are important in this regard, and we will be discussing both below. Several steps you can take will make your project more secure and ensure its success.

### 8.2 OPERATING SYSTEM-LEVEL SECURITY

The process of ensuring OS availability, confidentiality, and integrity is known as operating system security. OS security refers to the processes or measures taken to protect the operating system from dangers, including viruses, worms, malware, and remote hacker intrusions. Operating system security comprises all preventive-control procedures that protect any system assets that could be stolen, modified, or deleted if OS security is breached.

In this project there are various ways to ensure operating system security. These are as follows:

**Username/Password:** Each stakeholder like Tpo , Student and Company contains a unique username and password that should be input correctly before login to the system.

**User Identification:** These techniques usually include type of user along with the login window. This authentication is based on user type and is compared to database samples already in the system. Users can only allow access if there is a match.

### 8.3 DATABASE LEVEL SECURITY

SQLite security is an essential aspect of managing and maintaining a SQLite database. Proper security measures help protect your data from unauthorized access, data breaches, and other malicious activities. Below are some important considerations and best practices

for enhancing the security of your SQLite database:

- **Secure Authentication:**

Use strong passwords: Set strong passwords for all SQLite user accounts and avoid using default or easily guessable passwords.

Use SSL/TLS: Enable SSL/TLS encryption to secure data transmission between the client and the server.

- **User Privileges:**

Grant minimum privileges: Give each user only the necessary privileges required for their tasks. Avoid granting unnecessary permissions.

Use separate accounts: Create separate accounts for administrative tasks and application usage. Do not use the root account for routine operations.

- **Firewall Protection:**

Restrict access: Limit access to your SQLite server only to trusted hosts and networks. Use firewalls to control incoming connections.

- **Regular Updates:**

Keep MySQL updated: Stay up to date with the latest SQLite releases and security patches to protect against known vulnerabilities.

- **Backup and Recovery:**

Regular backups: Implement a reliable backup strategy to ensure data can be restored in case of data loss or security incidents.

- **Auditing and Monitoring:**

Enable logging: Enable logging features in SQLite to monitor and review activities on the database server.

Monitor for anomalies: Implement monitoring tools to detect suspicious activities and potential security breaches.

- **Parameterized Queries:**

Use prepared statements or parameterized queries to prevent SQL injection attacks.

- **Input Validation:**

Validate and sanitize all input from users and applications to prevent malicious data from being executed as queries.

- **Avoid Exposing Sensitive Information:**

Be cautious with error messages: Ensure that error messages do not reveal sensitive information about your database structure or credentials.

- **Least Privilege Principle:**

Follow the principle of least privilege, which means granting the minimum permissions required to perform specific tasks.

- **Disable Unnecessary Features:**

Disable any unnecessary SQLite features to reduce the attack surface.

- **Application Security:**

Ensure that your applications are also secure, as vulnerabilities in the application layer can impact the security of the database.

- **Regular Security Reviews:**

Conduct periodic security reviews and assessments to identify and address potential vulnerabilities.

## **8.4 SYSTEM-LEVEL SECURITY**

System level security is a crucial aspect of the overall security framework for the Placement App. It is designed to safeguard the entire system infrastructure, including servers, network components, and critical resources, from potential security breaches and unauthorized access. Access control is a primary consideration in the system level security of the Placement App. Strict access controls are enforced to restrict both physical and logical access to servers and computing resources. Only authorized personnel with the necessary credentials and privileges are allowed to access and manage system components. To fortify the system against network-based attacks, firewalls are deployed to monitor and regulate incoming and outgoing traffic. Intrusion detection and prevention systems (IDPS) are also implemented to promptly detect and respond to any suspicious activities or potential threats.

Frequent system patches and updates are applied to address known vulnerabilities and security issues. Moreover, robust antivirus and anti-malware software are installed to proactively detect and prevent any malicious software from infiltrating the system. Secure configurations and settings at the system level are utilized to minimize potential attack surfaces for the Placement App. Unnecessary services are disabled, and default configurations are modified to enhance the system's overall security posture. Continuous monitoring of system logs is implemented to track system activities, detect anomalies, and investigate potential security incidents. Analyzing logs helps identify any unauthorized access attempts and enabling timely responses to potential threats. Physical security measures are also in place to safeguard the physical infrastructure of the Placement App. Servers and data centers are housed in secure facilities with restricted access to prevent unauthorized physical entry. By implementing robust system level security practices, the Placement App ensures the integrity, confidentiality, and availability of data, promoting a safe and secure environment for managing shop-related activities and transactions.

## **CHAPTER 9 SYSTEM PLANNING AND SCHEDULING**

### **9.1 INTRODUCTION**

Project Planning and Scheduling, though separate, are two sides of the same coin in project management. Fundamentally, 'Project planning' is all about choosing and designing effective policies and methodologies to attain project objectives. While 'Project scheduling' is a procedure of assigning tasks to get them completed by allocating appropriate resources within an estimated budget and time frame.

The basis of project planning is the entire project. Unlikely, project scheduling focuses only on the project-related tasks, the project start/end dates and project dependencies. Thus, a 'project plan' is a comprehensive document that contains the project aims, scope, costing, risks, and schedule. And a project schedule includes the estimated dates and sequential project tasks to be executed.

### **9.2 PLANNING A SOFTWARE PROJECT**

A Software Project is the complete methodology of programming advancement from requirement gathering to testing and support, completed by the execution procedures, in a specified period to achieve intended software product.

Need of Software Project Management: Software development is a sort of all new streams in world business, and there is next to no involvement in structure programming items. Most programming items are customized to accommodate customer's necessities.

The most significant is that the underlying technology changes and advances so generally and rapidly that experience of one element may not be connected to the other one. All such business and ecological imperatives bring risk in software development; hence, it is fundamental to manage software projects efficiently.

Software manager is responsible for planning and scheduling project development. They manage the work to ensure that it is completed to the

required standard. They monitor the progress to check that the event is on time and within budget. The project planning must incorporate the major issues like size & cost estimation scheduling, project monitoring, personnel selection evaluation & risk management. To plan a successful software project, I must understand:

- Scope of work to be completed
- Risk analysis
- The resources mandatory
- The project to be accomplished
- Record of being followed

### 9.2.1 Steps Involved in Planning a System

- Define project objectives
- Break the project into a list of deliverables and milestones
- Define tasks for each deliverable and milestone
- Estimate the time and resources needed for completion
- Identify risks
- Identify stakeholders and obtain their input
- Identify requirements

## 9.3 GANNT CHART

A Gantt chart is a horizontal bar chart that visually represents a project plan over time. Modern Gantt charts typically show you the status of as well as who's responsible for each task in the project. In other words, a Gantt chart is a super-simple way to keep you out of a project pinch.

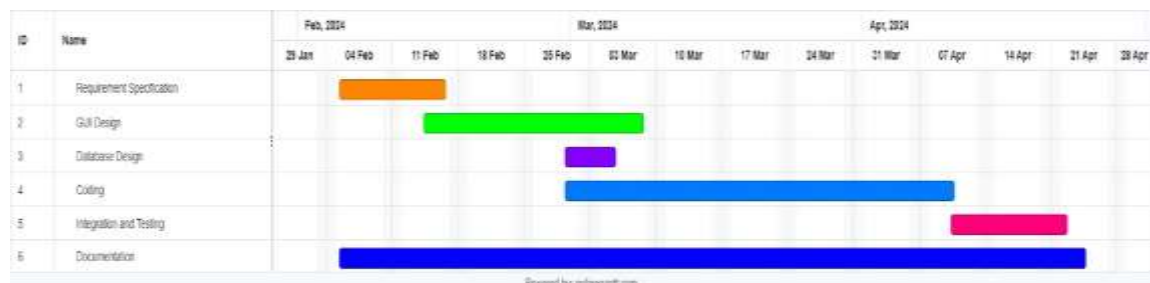


Fig 9.1 Gannt Chart

## 9.4 PERT CHART

A PERT chart is a project management tool used to schedule, organize, and coordinate task within a project. PERT stands for Program Evaluation Review Technique, a methodology developed by the US Navy in the 1950s to manage the Polaris submarines missile program. A PERT chart presents a graphic illustration of a project as a network diagram consisting of numbered nodes (either circles or rectangles) representing events.

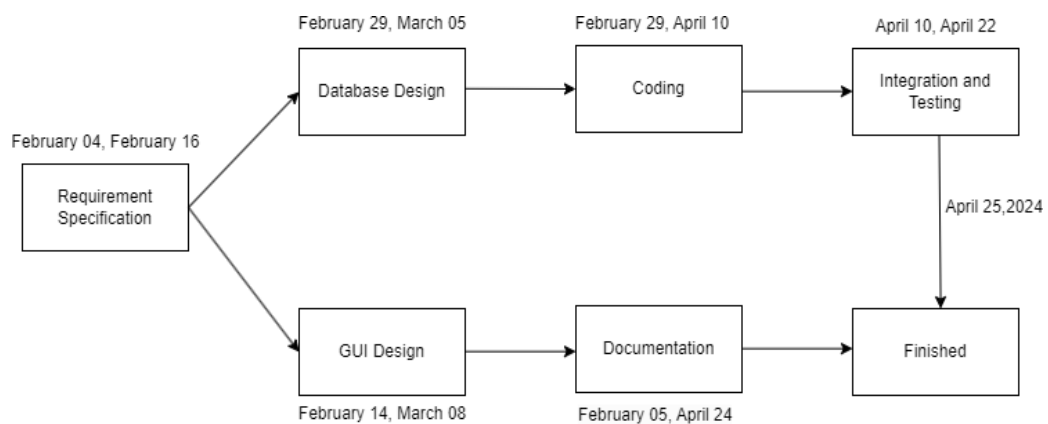


Fig 9.2 Pert Chart

## **CHAPTER 10 FUTURE ENHANCEMENT AND SCOPE FOR FURTHER DEVELOPMENT**

### **10.1 INTRODUCTION**

A placement App project serves as a comprehensive solution aimed at enhancing the efficiency and effectiveness of operations within a project placement drive. At its core, this system is designed to address the multifaceted challenges inherent in the jobs applying by the students from planning to quality control and beyond.

### **10.2 MERITS OF THE SYSYEM**

- The system will provide Job apply for students with different company.
- The system will provide fast secure job at your finger tips.
- It is easy to use the study materials provided.
- It provides 24/7 service availability
- It reduces time and human effort which exists in the system.
- It is a very flexible and user-friendly system.
- It reduces the effort of maintaining records in this system.
- Users can easily access the system at any time anywhere through internet connectivity.
- Cost Effective



### **10.3 LIMITATIONS OF THE SYSTEM**

- Searching the jobs .
- Dependency on Technology.
- Our proposed system is developed for Specific college.

### **10.4 FUTURE ENHANCEMENT OF THE SYSTEM**

The system has been designed in such a way that it can be modified with very little effort when such needs arise in the future. New features can be added with slight modifications of App which make it easy to expand the scope of this project. Though the system is working on various assumptions, it can be modified easily to any kind of requirements. This project has a very vast scope in future. The project can be implemented on different colleges in future for best academic placements. The following are the future scope for this project.

- Video Profiles and Virtual Meetings:-In the era of social distancing, virtual connections have become crucial. Jobs apps are increasingly incorporating video profiles and facilitating virtual meetings between potential company jobs. This allows users to interact face-to-face, even when physical meetings are challenging.
- Enhanced Matchmaking Algorithms:-jobs platforms are investing in more sophisticated algorithms to improve match recommendations. These algorithms consider not only basic criteria like skills and location but also deeper factors such as personality interests, and compatibility. Expect more accurate and personalized matches in the future.
- AI-Powered Chatbots and Assistance:-These chatbots can enhance user experience and engagement.
- Integration with Social Media and Professional Networks:-Integrating job profile with social media and professional networks can provide additional context about a person.

## CONCLUSION

The "In the rapidly evolving landscape of education and employment, effective placement processes are crucial for connecting students, academic institutions, and prospective employers. Our Placement App, designed with a focus on simplicity, efficiency, and transparency, acts as a comprehensive solution to streamline the placement workflow. This application caters to three primary modules: Students, Training and Placement Officers (TPOs), and Companies, creating a seamless and collaborative platform for successful placements. The Student Module is tailored to empower students in their journey from education to employment. Students can create detailed profiles showcasing their academic achievements, skills, and preferences. This module facilitates easy access to job opportunities, allows students to track their application status, and provides valuable insights into skill development areas. To view and get the study materials. Provide an area for aptitude try it out. Apply for the jobs and search the job in the app for students. View the results that provided by admin. The notification given from the tpo any current webinars or interview process is hiring can view Training and Placement Officers play a pivotal role in bridging the gap between students and company . The TPO Module centralizes the placement coordination process, allowing TPOs to manage student profiles, authentication of student registration verify , post the job , add the current webinars or interview is upcoming add interview materials, input the quiz, filter to select the student who's apply for job, schedule the interview date to students both students and companies seamlessly. Retrieve the results from the company.

## **ANNEXURE**

### **ORGANIZATION PROFILE**

#### **LUMINAR TECHNO LAB**

Luminar Technolab - ISO 9001:2015 Certified Institution - Software Training Institute.

Providing advanced level Gen 4.0 software training to students, Luminar Technolab is an IT finishing school situated at Kakkanad, near Infopark Cochin & Mavoor Road Calicut. Luminar Technolab is affiliated to National Council for Technology and Training (NACTET). NACTET is an autonomous organisation registered under Govt of Kerala and Government of India NCT, New Delhi under Indian trust act.

Born out from a group IT professionals with more than 15 years of industry experience, Luminar Technolab offers best software training and placement in emerging technologies like Big Data Analytics, Machine Learning, Artificial Intelligence, Data Science, Automation Testing, Full Stack Development, Python, MEAN Stack, Digital Marketing, PHP, Angular, Power BI & Tableau.

Luminar Technolab providing various service in world like:

- ISO 9001:2015 Certified Institution
- Training by highly experienced and certified professionals
- No slideshow (PPT) training, fully Hands-on training
- Real-time projects scenarios & Certification Help
- Placement support for all courses
- List of established & satisfied clients & students

## Document Glossary, Figures, Tables

### Glossary

PK	: Primary Key
FK	: Foreign Key
ER	: Entity Relationship
SQL	: Structured Query Language
OS	: Operating System
DBMS	: Data Base Management System
NF	: Normal Forms
CPU	: Central Processing Unit
IDE	: Integrated Development Environment
UML	: Unified Modeling Language
SRS	: Software Requirement Specification
SDE	: Software Development Environment
SDLC	: Software Development Life Cycle

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## REFERENCES

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## **CODING**

### **ADMIN**

#### **Student.dart**

```
import 'package:flutter/material.dart';
import 'package:placement_app/core/constants/global_text_styles.dart';
import 'package:placement_app/global_widget/student_appbar.dart';

class ProfileScreenView extends StatefulWidget {
  const ProfileScreenView({super.key});

  @override
  State<ProfileScreenView> createState() => _ProfileScreenViewState();
}

class _ProfileScreenViewState extends State<ProfileScreenView> {
  @override
  Widget build(BuildContext context) {
    var size = MediaQuery.of(context).size;
    return Scaffold(
      appBar: StudentAppBar(
        title: "Profile",
      ),
      body: Padding(
        padding: const EdgeInsets.only(left: 35, top: 15),
        child: Column(
          crossAxisAlignment: CrossAxisAlignment.start,
          children: [
            Text("Name", style: GLTextStyles.titleStyle26),
            SizedBox(
              height: 10,
```



```
),  
Row(  
  children: [  
    Icon(Icons.person_pin),  
    SizedBox(  
      width: 6,  
    ),  
    Text("username", style: GLTextStyles.titleStyle),  
  ],  
,  
SizedBox(  
  height: 10,  
,  
Row(  
  children: [  
    Icon(Icons.email),  
    SizedBox(  
      width: 6,  
    ),  
    Text("abc@gmail.com", style: GLTextStyles.titleStyle),  
  ],  
,  
SizedBox(  
  height: 10,  
,  
Row(  
  children: [  
    Icon(Icons.phone),  
    SizedBox(  
      width: 6,  
    ),  
    Text("9898989898", style: GLTextStyles.titleStyle),  
  ],
```

```

    ),
    SizedBox(
      height: 25,
    ),
    Text("Resume", style: GLTextStyles.labeltxtBlk20),
    InkWell(
      child: Container(
        height: size.height * .12,
        width: size.width * .8,
        child: Card(
          child: Row(
            mainAxisAlignment: MainAxisAlignment.spaceBetween,
            children: [
              SizedBox(
                width: 6,
              ),
              Text("Upload Resume", style: GLTextStyles.labeltxtBlk16),
              IconButton(
                onPressed: () {},
                icon: Icon(
                  Icons.arrow_forward_ios,
                  size: 17,
                ))
            ],
          ),
        ),
      ),
    ),
  class ProfileScreenView extends StatefulWidget {
    const ProfileScreenView({super.key});

    @override
    State<ProfileScreenView> createState() => _ProfileScreenViewState();
  }

  class _ProfileScreenViewState extends State<ProfileScreenView> {

```

```
@override
Widget build(BuildContext context) {
  var size = MediaQuery.of(context).size;
  return Scaffold(
    appBar: StudentAppBar(
      title: "Profile",
    ),
    body: Padding(
      padding: const EdgeInsets.only(left: 35, top: 15),
      child: Column(
        crossAxisAlignment: CrossAxisAlignment.start,
        children: [
          Text("Name", style: GLTextStyles.titleStyle26),
          SizedBox(
            height: 10,
          ),
          Row(
            children: [
              Icon(Icons.person_pin),
              SizedBox(
                width: 6,
              ),
              Text("username", style: GLTextStyles.titleStyle),
            ],
          ),
          SizedBox(
            height: 10,
          ),
          Row(
            children: [
              Icon(Icons.email),
              SizedBox(
                width: 6,
```

```

    ),
    Text("abc@gmail.com", style: GLTextStyles.titleStyle),
  ],
),
SizedBox(
  height: 10,
),
Row(
  children: [
    Icon(Icons.phone),
    SizedBox(
      width: 6,
    ),
    Text("9898989898", style: GLTextStyles.titleStyle),
  ],
),
SizedBox(
  height: 25,
),
Text("Resume", style: GLTextStyles.labeltxtBlk20),
InkWell(
  child: Container(
    height: size.height * .12,
    width: size.width * .8,
    child: Card(
      child: Row(
        mainAxisAlignment:

```

```

class GetStarted extends StatelessWidget {
  const GetStarted({super.key});

```

```

@override
Widget build(BuildContext context) {

```

```

var size = MediaQuery.of(context).size;
var width = size.width;
return SafeArea(
  child: Scaffold(
    backgroundColor: const Color(0xFFeef1f3),
    appBar: AppBar(
      backgroundColor: const Color(0xFFeef1f3),
      actions: [
        PopupMenuButton(
          iconSize: 20,
          shape: RoundedRectangleBorder(
            borderRadius: BorderRadius.circular(15)),
          icon: Icon(Icons.more_vert),
          itemBuilder: (context) {
            return [
              PopupMenuItem(
                onTap: () {
                  Navigator.push(
                    context,
                    MaterialPageRoute(
                      builder: (context) => TpoRegistration(),
                    ));
                },
                child: Text(
                  "Training & Placement Officer",
                  style: GLTextStyles.labeltxtBlk16,
                ),
              ),
            ];
          })
      ],
    ),
    body: Container(
      padding: EdgeInsets.symmetric(horizontal: 20),
      child: Column(
        mainAxisAlignment: MainAxisAlignment.center,
        children: [
          Text(
            "Get Registered Here",
            style: GoogleFonts.poppins(
              fontSize: 26.0,
              fontWeight: FontWeight.w700,
              color: ColorTheme.black,
            ),
          ),
        ],
      ),
    ),
  ),
  LottieBuilder.asset("asset/animation/getStarted.json"),
  SizedBox(

```

```

        height: 10,
      ),
      GLMetrialButton(
        text: "Login Here",
        color: ColorTheme.darkClr,
        txtClr: ColorTheme.white,
        height: width * .15,
        route: StudentCompany(),
      ),
      SizedBox(
        height: 10,
      ),
      GLMetrialButton(
        text: "Student",
        color: ColorTheme.darkClr,
        txtClr: ColorTheme.white,
        height: width * .15,
        route: StudentRegister(),
      ),
      SizedBox(
        height: 10,
      ),
      GLMetrialButton(
        text: "Company",
        color: ColorTheme.darkClr,
        txtClr: ColorTheme.white,
        height: width * .15,
        route: CompanyRegistration(),
      ),
    ],
  ),
  ));
}

```

MainAxisAlignment.spaceBetween

```

    ),
    ),
  )
],

```

class ProfileScreenView extends StatefulWidget {

const ProfileScreenView({super.key});

@override

State<ProfileScreenView> createState() => \_ProfileScreenViewState();

}

```
class _ProfileScreenViewState extends State<ProfileScreenView> {  
  @override  
  Widget build(BuildContext context) {  
    var size = MediaQuery.of(context).size;  
    return Scaffold(  
      appBar: StudentAppBar(  
        title: "Profile",  
      ),  
      body: Padding(  
        padding: const EdgeInsets.only(left: 35, top: 15),  
        child: Column(  
          crossAxisAlignment: CrossAxisAlignment.start,  
          children: [  
            Text("Name", style: GLTextStyles.titleStyle26),  
            SizedBox(  
              height: 10,  
            ),  
            Row(  
              children: [  
                Icon(Icons.person_pin),  
                SizedBox(  
                  width: 6,  
                ),  
                Text("username", style: GLTextStyles.titleStyle),  
              ],  
            ),  
            SizedBox(  
              height: 10,  
            ),  
            Row(  
              children: [  
                Icon(Icons.email),
```

```

        SizedBox(
          width: 6,
        ),
        Text("abc@gmail.com", style: GLTextStyles.titleStyle),
      ],
    ),
    SizedBox(
      height: 10,
    ),
    Row(
      children: [
        Icon(Icons.phone),
        SizedBox(
          width: 6,
        ),
        Text("9898989898", style: GLTextStyles.titleStyle),
      ],
    ),
    SizedBox(
      height: 25,
    ),
    Text("Resume", style: GLTextStyles.labeltxtBlk20),
    InkWell(
      child: Container(
        height: size.height * .12,
        width: size.width * .8,
        child: Card(
          child: Row(
            mainAxisAlignment: MainAxisAlignment.spaceBetween
          ),
        ),
      ),
    ),
    @override
    State<ProfileScreenView> createState() => _ProfileScreenViewState();

```



```

}

class _ProfileScreenViewState extends State<ProfileScreenView> {
  @override
  Widget build(BuildContext context) {
    var size = MediaQuery.of(context).size;
    return Scaffold(
      appBar: StudentAppBar(
        title: "Profile",
      ),
      body: Padding(
        padding: const EdgeInsets.only(left: 35, top: 15),
        child: Column(
          crossAxisAlignment: CrossAxisAlignment.start,
          children: [
            Text("Name", style: GLTextStyles.titleStyle26),
            SizedBox(
              height: 10,
            ),
            Row(
              children: [
                Icon(Icons.person_pin),
                SizedBox(
                  width: 6,
                ),
                Text("username", style: GLTextStyles.titleStyle),
              ],
            ),
            SizedBox(
              height: 10,
            ),
            Row(
              children: [

```

## ScreenShot

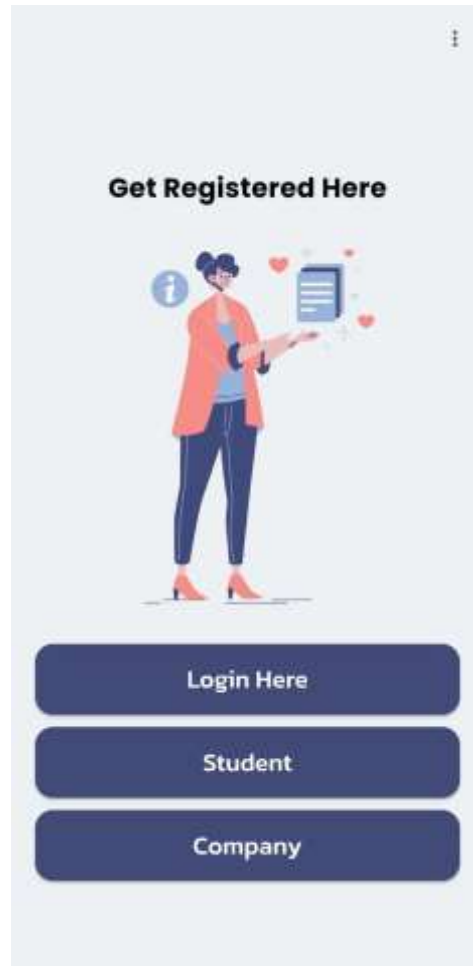


Fig 11.2.1 Home page

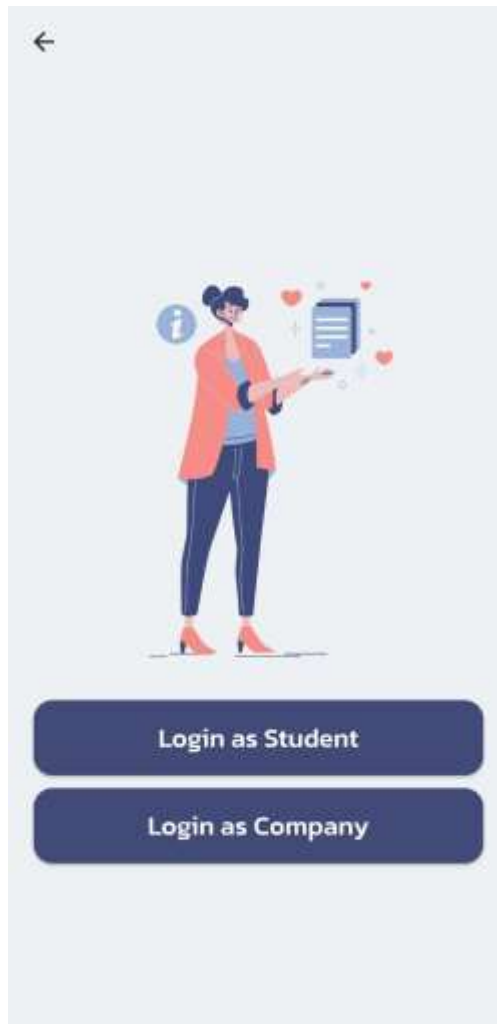


Fig 11.2.2 Login page of Stakeholders

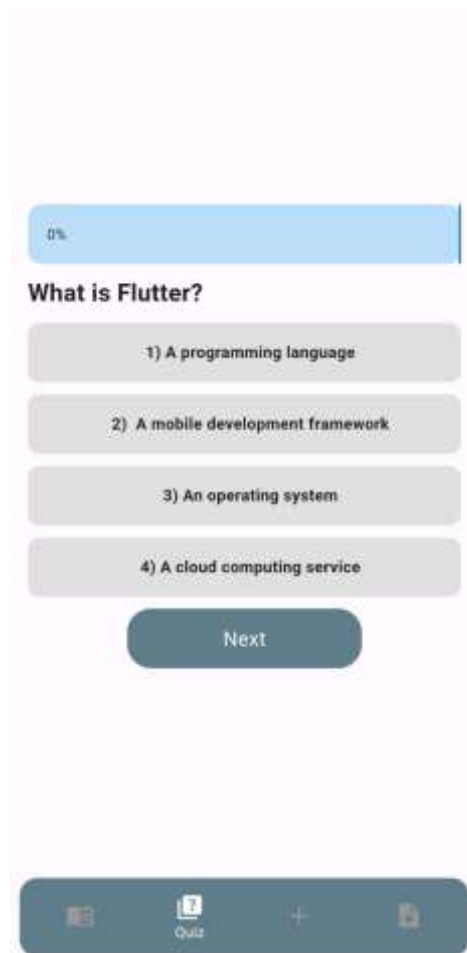


Fig 11.2.3 Quiz



Fig 11.2.4 Job list



Fig 11.2.5 Applied job list

The screenshot displays the 'Company Dashboard' interface. At the top, the title 'Company Dashboard' is visible. Below it, a user profile card shows the following details:

Name	Akshay
Date	2024-04-30 06:51:36.816092Z
Status	APPROVED

Below the profile card is a button labeled 'Schedule Interview'. At the bottom of the screen, a modal is open with two input fields: the first contains the date '2020/09/09' and the second contains the location 'kochi'. A 'Done' button is located at the bottom of the modal.

Fig 11.2.6 Company Interview Schedule



Fig 11.2.7 Scheduled Interview list



Post job

Position

embedded software developer

Description

Embedded C Programming  
Microcontrollers  
Communication Protocols like CAN, LIN, SPI, UART,  
RS232, RS485, and Ethernet

Skill Requirement

RS232, RS485, and EthernetVectorCASTCANoeMISRA

Location

kochi

Salary

60,000

Application Deadline

2024-08-20 10:30:30

DONE

Post Job

Fig 11.2.8 Job posting by Company

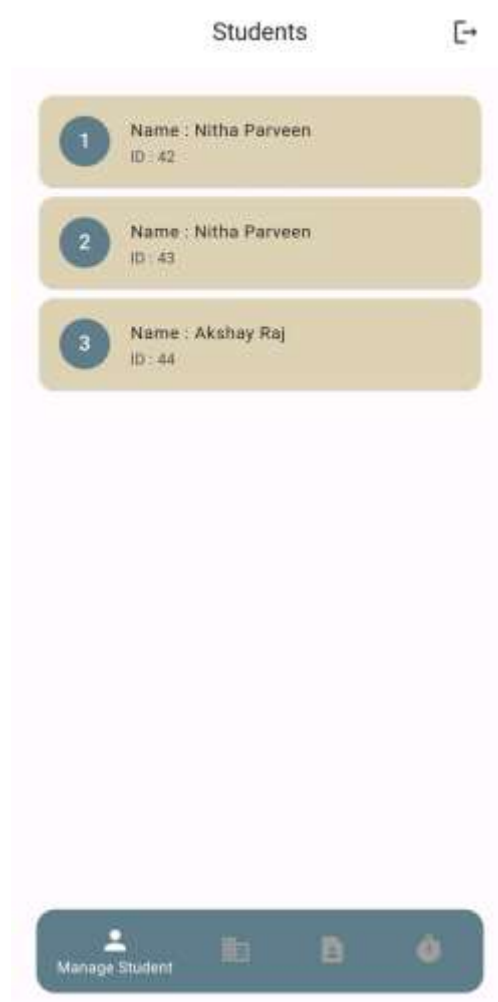


Fig 11.2.9 Tpo dashboard Student list

← Student ID : 44

First Name <b>Akshay</b>	Last Name <b>Raj</b>
Username <b>Akshay</b>	
Phone <b>7902278206</b>	
Email <b>akshayrajar174@gmail. com</b>	

Fig 11.2.10 Student Details



Fig 11.2.11 Company List

### Job Application

Name :Nitha Parveen

Phone No :9876543210

Email :nitha@gmail.com

Name :Akshay Raj

Phone No :7902278206

Email :akshayrajar174@gmail.com

Name :Akshay Raj

Phone No :7902278206

Email :akshayrajar174@gmail.com

Name :Akshay Raj

Phone No :7902278206

Email :akshayrajar174@gmail.com

---

Job title :software developer

Description :software developer

Requirement :programming language basics

Salary :45000.00

Last date :2024-02-02 10:30:00

Location :kochi

Applied Date :2024-05-01 17:24:59.685621Z

Status :PENDING

✕

✓

Manage Request

Fig 11.2.12 Application Request

Job Application

Name :Nitha Parveen

Phone No :9876543210

Email :nitha@gmail.com

Name :Akshay Raj

Phone No :7902278206

Email :akshayrajar174@gmail.com

Name :Akshay Raj

Phone No :7902278206

Email :akshayrajar174@gmail.com

Name :Akshay Raj

Phone No :7902278206

Email :akshayrajar174@gmail.com

Job title :software developer

Description :software developer

Requirement :programming language basics

Salary :45000.00

Last date :2024-02-02 10:30:00

Location :kochi

Applied Date :2024-05-01 17:24:59.685621Z

Status : PENDING

✖
✔

Application accepted successfully

👤
📅
📄
🕒

Manage Request

Fig 11.2.13 Application Request accepting

Job Application

Name : Nitha Parveen

Phone No : 9876543210

Email : nitha@gmail.com

Name : Akshay Raj

Phone No : 7902278206

Email : akshayrajar174@gmail.com

Name : Akshay Raj

Phone No : 7902278206

Email : akshayrajar174@gmail.com

Name : Akshay Raj

Phone No : 7902278206

Email : akshayrajar174@gmail.com

Job title : software developer

Description : software developer

Requirement : programming language basics

Salary : 45000.00

Last date : 2024-02-02 10:30:00

Location : kochi

Applied Date : 2024-05-01 17:24:59 685621Z

Status : APPROVED

✖

✔

👤
📅
📄
🕒

Manage Request

Fig 11.2.14 Application Approved

Interview Schedule	
Name	:Akshay Raj
Applied For	:Developer
Phone	:7902278206
Email	:akshayraja174@gmail.com
Company	:infosys
Requirement	:sdfghj
Salary	:123456.00
Last date	:2024-05-30 12:12:00
Location	:kochi
Applied Data	:2024-04-30 06:51:36.616052Z
Status	:APPROVED
Interview :-	
Date	:2024/07/07
Location	:kochi

Name	:Akshay Raj
Applied For	:software developer
Phone	:7902278206
Email	:akshayraja174@gmail.com
Company	:infosys
Requirement	:programming language basics
Salary	:45000.00
Last date	:2024-02-02 10:30:00
Location	:kochi
Applied Data	:2024-05-01 17:24:59.685621Z
Status	:APPROVED
Interview :-	
Date	:2024/09/09
Location	:kochi

			 Interview
---	---	---	--

Fig 11.2.15 Interview Scheduled List