# Campus Placement Application

Submitted to the

## Savitribai Phule Pune University

In partial fulfillment for the award of the Degree of

## Bachelor of Engineering

in

## Information Technology

By

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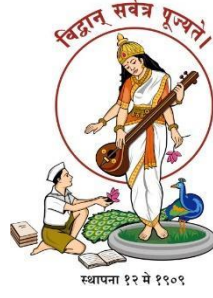
Under the guidance of

## Prof. Mrs. K. S. Balbudhe

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## 2022-23

# CERTIFICATE

This is to certify that the project-based learning report entitled

**"Campus Placement Application"**

being submitted by

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is a record of bonafide work carried out by him/her under the supervision and guidance of

**Prof. Mrs. K. S. Balbudhe** in partial fulfillment of the requirement for **S.E. (Information Technology) 2019 course** of Savitribai Phule Pune University, Pune in the academic year 2022-23.

Date:

Place:  Pune

(Prof. K. S. Balbudhe)                                                    (Dr. S. A. Mahajan)

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# ACKNOWLEDGEMENT

# CONTENTS

# ABSTRACT

Training and Placement Cell is an important part of any educational institute, in which most of the work till now is being done manually. The training and placement officer has to inform around thousands of students about every single training and placement related activity. So, to make the placement process easy and effective for the training and placement department as well as the students, an Android application can be developed. This application can help the placement officers to provide the details of upcoming companies. The students will be alerted via a notification. Once the recruitment process is completed, a list of placed students will be uploaded in the application by the administrator. It would be easy for the students to view the details of those who have been recruited. The number of students placed in a particular company can be viewed by students when required. If any changes are need to be made in the student details the student can make a request to the placement officer. This project will be helpful in faster management of the placement related activities in the college campus.

# 1. INTRODUCTION

## 1.1 Introduction to Project

The use of smartphones, internet and the World Wide Web helps the user to gain information on a particular action. The internet helps the user to manage the placement process. Actually, the earlier system is not computerized. All the transactions in the earlier system is done manually by maintaining a record. It will take much time for the placement officer to collect and approve all the student details. There is no proper communication between the students and the placement officer. So, with the help of this application the students can easily communicate with the placement officer.

The training and placement cell plays an important role in improving the overall performance of the student. The main objective of the training and placement department is to manage the details of the placement, student details, overall academic details of the students, and their technical skills. Once the details is stored in the database, it would be easy for the training and placement officer to filter
the students based on the criteria of the campus drive. The overall system of the training and placement officer is managed by the administrator.

The project "TRAINING AND PLACEMENT CELL" is an android application that can be accessed by the student throughout the organization with the proper login provided. This application can also be used by the training and placement officer to maintain all the records of the students as well as the activities related to the training and placement cell. The students need to register themselves for the placement through this application. Once the registration gets successful, a unique user ID and password will be created for an individual student. If the students need to make changes in their personal and academic profile they can send a request to the placement officer. The students may also receive the notifications regarding the upcoming campus drive. It also provides information about the campus details, criteria for the campus,

recruitment process. A link will be provided by the administrator of the upcoming campus where the students can obtain extra information about the company.

The administrator only has the rights to access the database. Once the campus recruitment get completed the final list of the placed students in a particular company will be uploaded by the administrator. Students will also be updated about the campus drive. Students can maintain their own information and update. Notifications will be sent to the students about the upcoming campus drive and also, they can access the information about the previous placement. Some of the features of this application includes the following:

- Work can be done in a computerized way
- No need of paper work
- To increase the accuracy and efficiency of the placement process management of student data
- Analysis of the overall placement process and the work burden will be less for the training and placement department.

## 1.1.1 Motivation behind project topic

The motivation to create the Campus Placement Application stemmed from the desire to simplify the recruitment process for both students and training and placement officer. With the large number of students, there was a need for a centralized platform that could connect students with relevant job opportunities and streamline the placement process. The project aimed to leverage technology to create an efficient and user-friendly platform that could enhance the placement process for an educational institution. Ultimately, the motivation behind this project was to help students secure promising career opportunities and facilitate a smoother recruitment process for training and placement officer.

## 1.1.2 Aim and Objective(s) of the work

Campus Recruitment System aims at providing the compatibility to simplify the process of placement for students. This system that consists of a student login and TPO login. This is

beneficial for college students, various companies visiting the campus for recruitment and even the college placement officer. The software system allows the students to create their profiles and upload all their details including their marks onto the system. The TPO can check each student details and can remove faulty accounts. The system also consists of a company login where various companies visiting the college can view a list of students in that college and also their respective resumes. The software system allows students to view a list of companies who have posted for vacancy. The admin/TPO has overall rights over the system and can moderate and delete any details not pertaining to college placement rules.

## 1.2 Purpose of the project

Computer based information system are designed to improve existing system. It has user friendly interface having quick authenticated access to documents. It provides the facility of maintaining the details of the students. It will reduce the paper work and utilize the maximum capabilities of the Setup and organization as well as it will save time and money which are spending in making reports and collecting data. It can be accessed throughout the organization with proper login provided.

## 1.3 Existing System and Disadvantages

The major problem in existing manual system is searching and updating of the student data. Also, it would be difficult for the training and placement officer to filter the list of the students based on the criteria of the campus drive. The proposed system includes the processes like registration, update, and searching of the student data. There are mainly two users: Training and placement officer (TPO) and student. The admin is the master user. Admin has the greater number of priorities than the other users. Students can register and can also view or edit their academic or personal details. A list of placed students will also be updated by the administrator

### 1.4 Proposed System with Features

This project is aimed at developing an Android application for training and placement cell. In the existing system every work is done manually and also student detail is maintained in a excel sheets. Maintaining and managing a large amount of data is a difficult task. So to overcome the drawbacks of existing system the proposed system is developed. The features included in the proposed system are:

- It provides an easy way for the training and placement officer to upload information and update the details in the students' database.
- Students will receive notification about the campus drive.
- Training and placement officer will upload information about the campus drive.
- This system can save time and effort.

- **SYSTEM MODULES**

  This system modules are Login and registration, Database Creation, Placement officer, Information view by students, and List of placed students.

  **1. LOGIN AND REGISTRATION**

  In this module we design to develop login and signup screen. We have two types of user for login, training and placement officer and student. The registration page contains student academic and personal details. Once the student enter the details, it will be stored in the database.

  **2. PLACEMENT OFFICER**

  To access the system, the placement officer needs to enter a proper id and password. The student can send a request to placement officer if any changes required in their academic and personal details. The students' details will be updated by the placement officer.

  **3. INFORMATION VIEW BY THE STUDENTS**

  In this module student can view the information uploaded by the administrator regarding the campus drive and also details of the particular company.

### 4. LIST OF PLACED STUDENTS

Once the campus recruitment gets completed the final list of placed will be uploaded by the administrator, which can be viewed by the students and the placement officer.

# 2. LITERATURE SURVEY

1] Campus employment information network development based on android platform by Cai Zhongxi in 2015. In this paper, system development have no greater difficulty. SQLite offers structured data store and at the same time, the amount of the resource is very low so they need less memory space and processing speed has very fast. Development of mobile communication technology, mobile phone transmission is faster based on more powerful information Processing Extensible ability as well as 3G high speed Data Transmission. This android application are written in powerful java language and it is also support the another language like C. This application has no boundary and it can be accessible the core function of mobile devices via standard API

2] Campus Recruitment Management: Platform based on dynamic electronic commerce by Diksha Varshney, Bhumika Sharma, Somya Jain in 2014. In this paper the electronic recruitment systems are used to facilitate and improve human resource management. They address the needs of employers and job-seekers via internetworking means which increase the speed of employment, and improve the quality of recruitment and services and they become vital assistance to human discrimination to put right people in right places. Due to the rapid change in jobs demands and the required specialization and experience, it becomes more and more difficult for recruiters to find employees that are right for their business state the units for each quantity that you use in an equation.

3]Information System Based On College Campus by Shilpa Bilawane, Pranali Jambhulkar in 2015 in this paper have Android mobile apps is used to provide information regarding there college and Android is the fastest growing open source mobile device platform, which in turn is powered by Linux operating system. Android offers a simple yet powerful application development framework and also open access to APIs to build richer mobile applications. Android is a software stack` for mobile devices that includes an operating system, middleware and key applications

4] Web Based Placement Management System by Anjali, Jeyalakshmi, Anbubala. R, Sri Mathura Devi. G, Ranjini. Vin 2016 in this paper have the development of the system is improved facilities.

The system can overcome all the limitation of the existing system, such as student's information is maintained in the database, it also gives more security to data, ensures data accuracy as well as reduces paper work and save time, only eligible students get chance, it makes information flow efficient and paves way for easy report generation, reduce the space And system is cost effective

# 3. SYSTEM REQUIREMENTS SPECIFICATIONS

## Software Requirements

- Operating System: - Windows 8/10 (32 or 64 bit)
- Android Studio/VS code
- Android SDK 2.3 above
- Languages: - Java, XML

## Hardware Requirements

- CPU: -Intel Core i5/AMD Ryzen 5
- Clock Speed: - 3.0GHz
- Memory: 500 GB SSD/HDD
- Screen Resolution: -1280*800

# 4. SYSTEM DESIGN

## 4.1 Process Model (Methodology)

There are various software development approaches defined and designed which are employed during development process of software. These software approaches are also referred as "Software Development Process Models". Each process model follows a particular life cycle in order to ensure success in process of software development. One such software approach used here is "The Waterfall Model".

Waterfall software approach was first Process Model to be introduced and followed widely in Software Engineering to ensure success of the project. In "The Waterfall" software approach, the whole process of software development is divided into separate process phases. The phases in Waterfall model are Requirement Specifications phase, Software Design, Implementation and Testing and there are various software development software approaches defined and designed which are used during development process of software; these software approaches are also referred as "Software Development Process Models".

Each process model follows a particular life cycle in order to ensure success in process of software development. One such software approach/process used in Software Development is "The Waterfall Model". Waterfall software approach was first Process Model to be introduced and followed widely in Software Engineering to ensure success of the project. In "The Waterfall" software approach, the whole process of software development is divided into Maintenance.

All these phases are cascaded to each other so that second phase is started as and when defined set of goals are achieved for first phase and it is signed off, so the name "Waterfall Model".
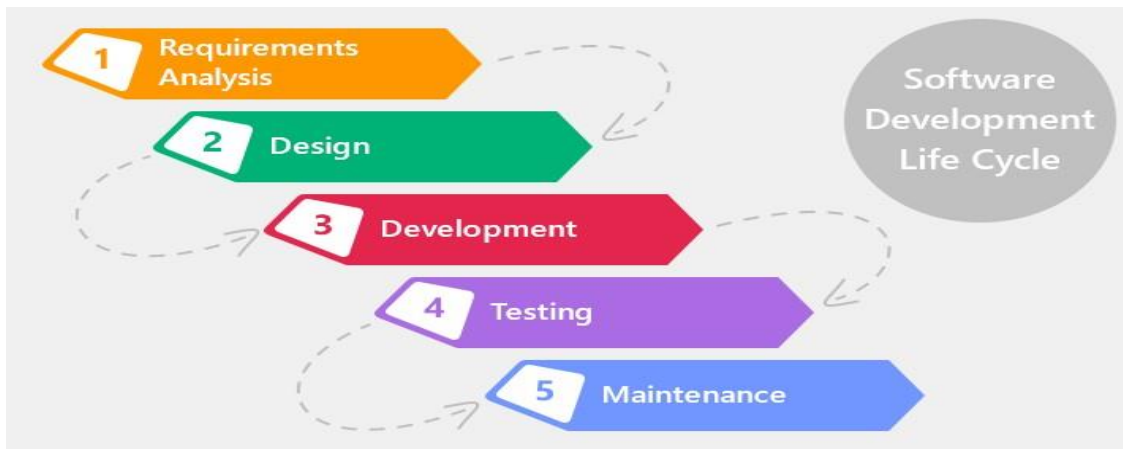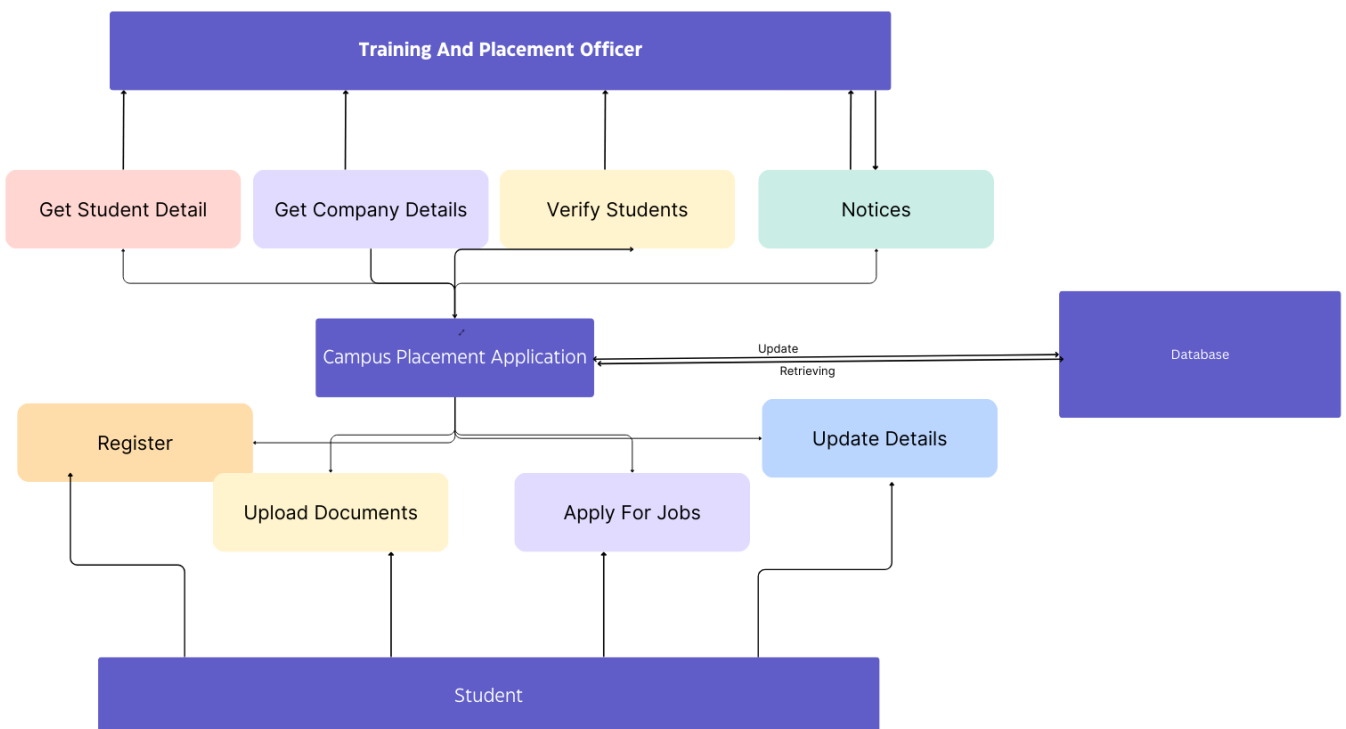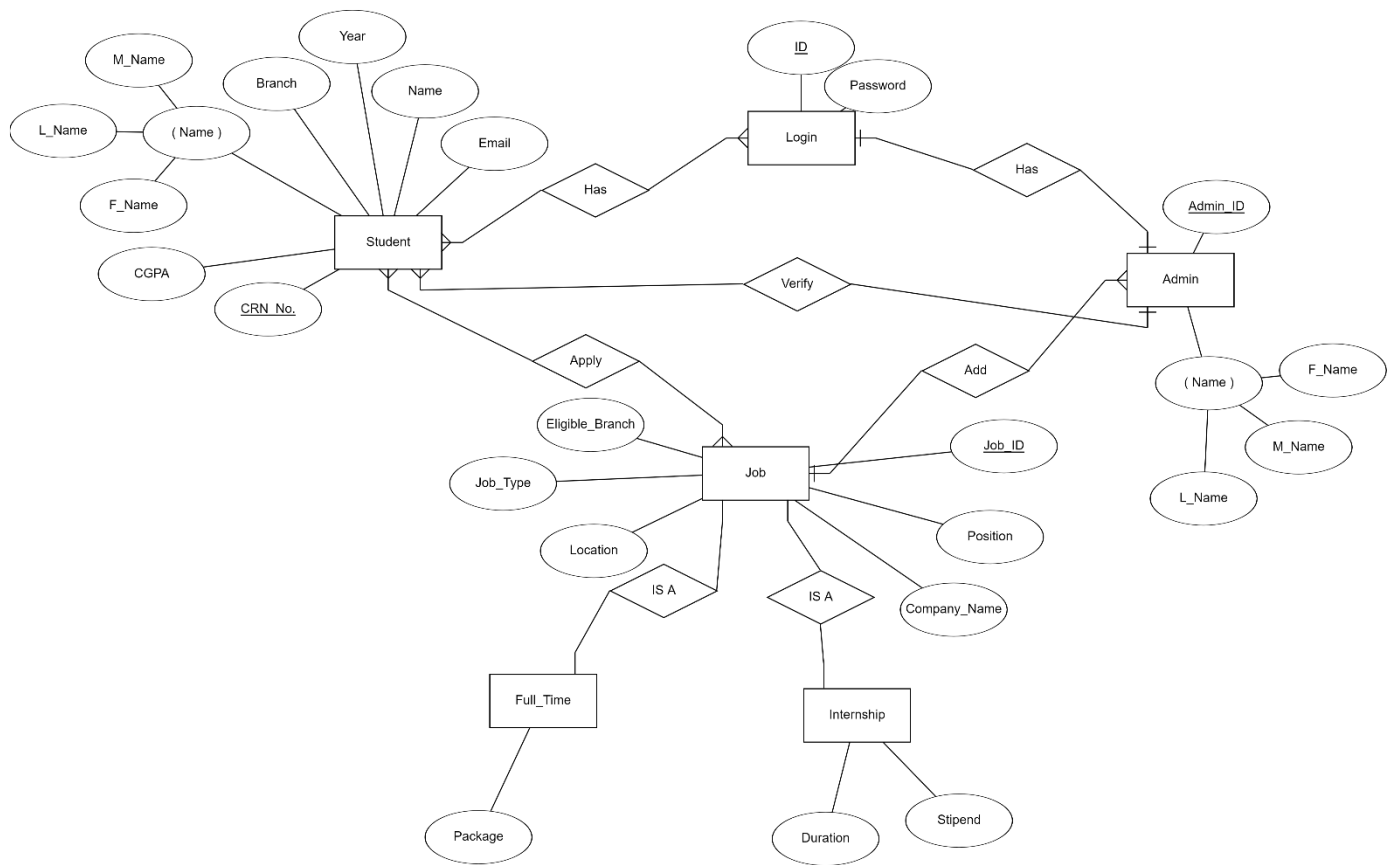
*Fig: General Overview of Waterfall Process Model*

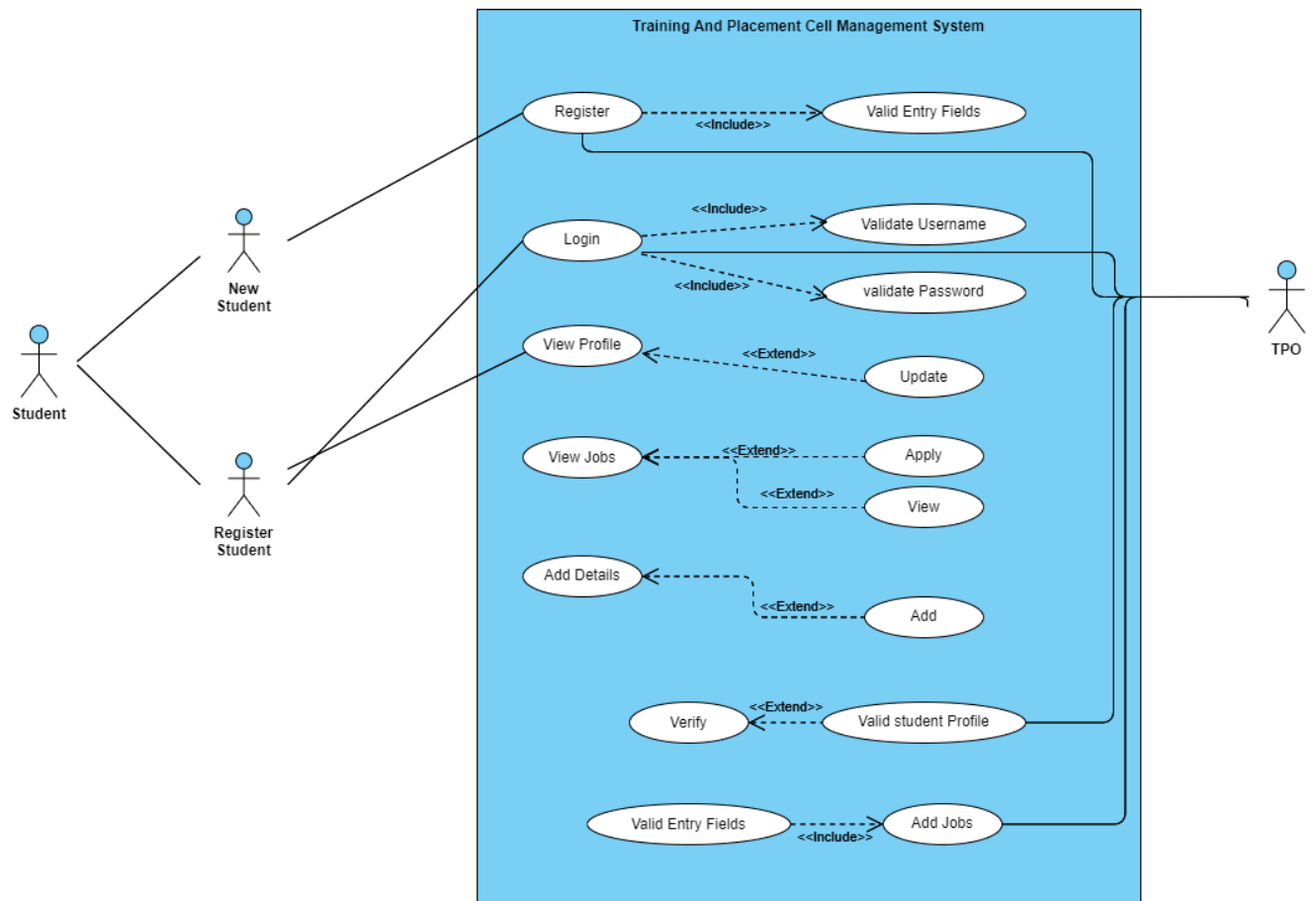## 4.2 System Block Diagram /Architecture Diagram
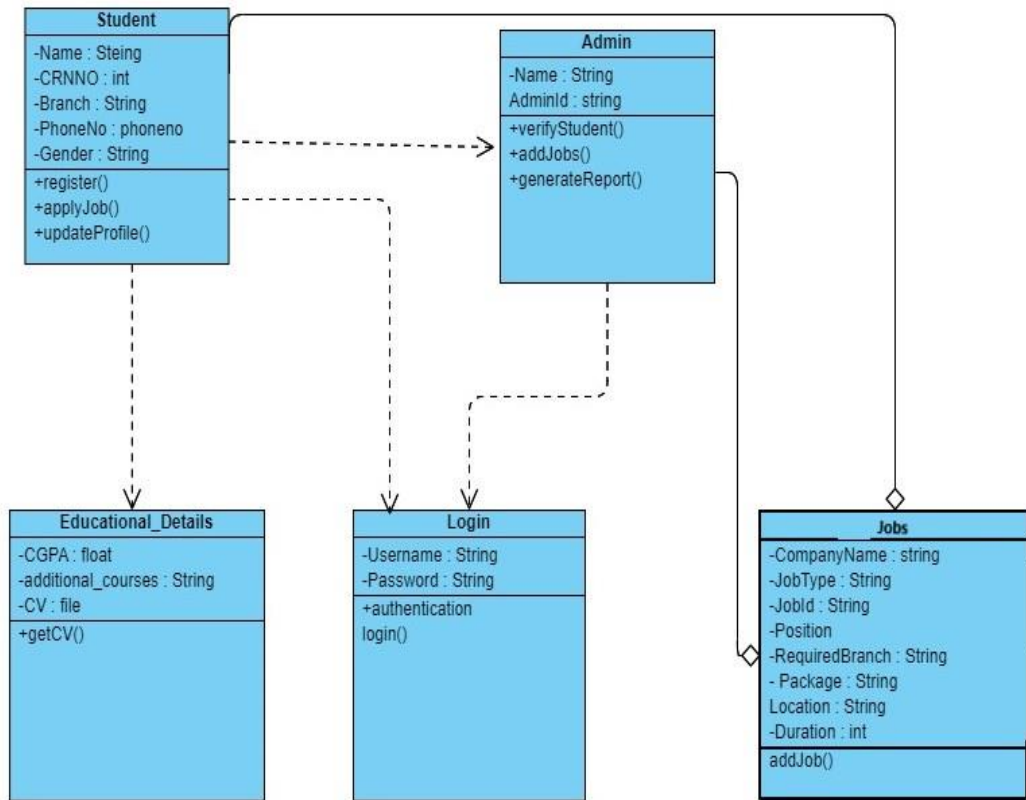
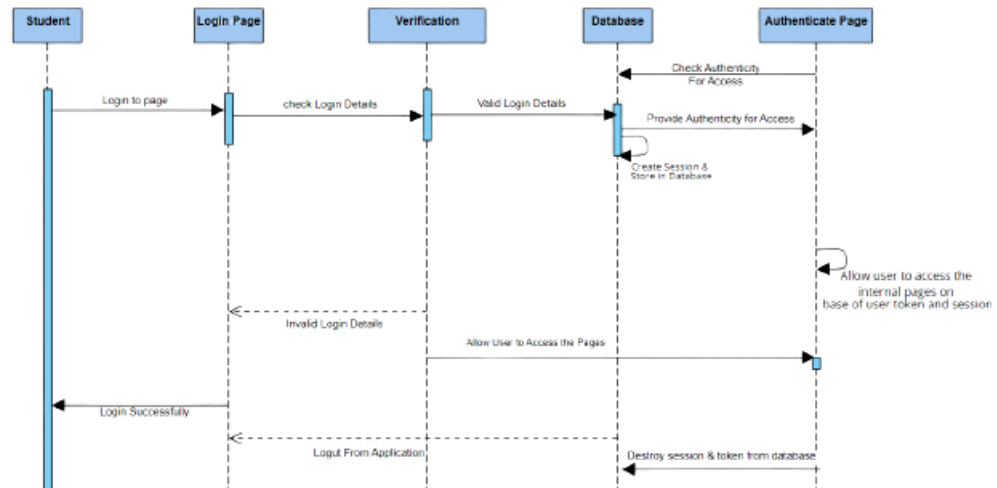## 4.3 UML Diagrams / ER Diagram:

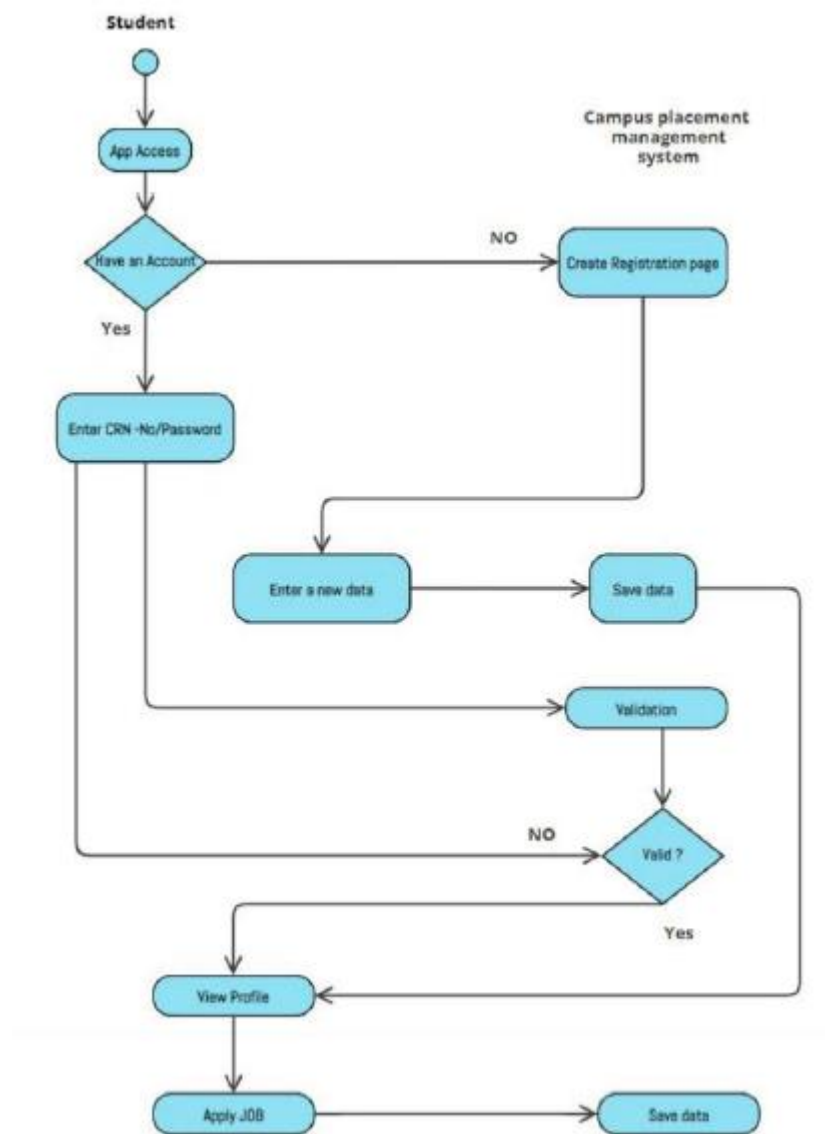### 4.3.1. ER Diagram:

## 4.3.2. Use Case Diagram

### 4.3.3. Class Diagram

**Student**
| |
|---|
| -Name : Steing |
| -CRNNO : int |
| -Branch : String |
| -PhoneNo : phoneno |
| -Gender : String |
| +register() |
| +applyJob() |
| +updateProfile() |

**Admin**
| |
|---|
| -Name : String |
| AdminId : string |
| +verifyStudent() |
| +addJobs() |
| +generateReport() |

**Educational_Details**
| |
|---|
| -CGPA : float |
| -additional_courses : String |
| -CV : file |
| +getCV() |

**Login**
| |
|---|
| -Username : String |
| -Password : String |
| +authentication |
| login() |

**Jobs**
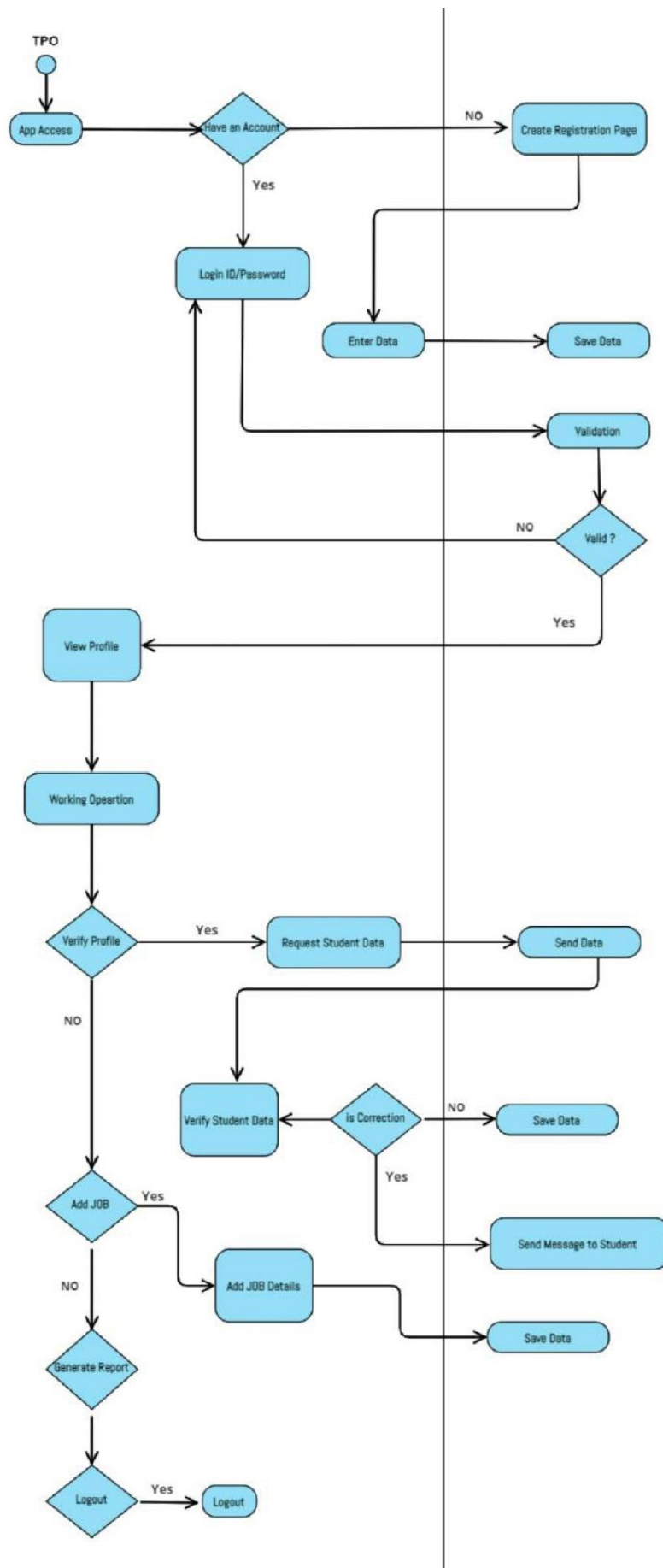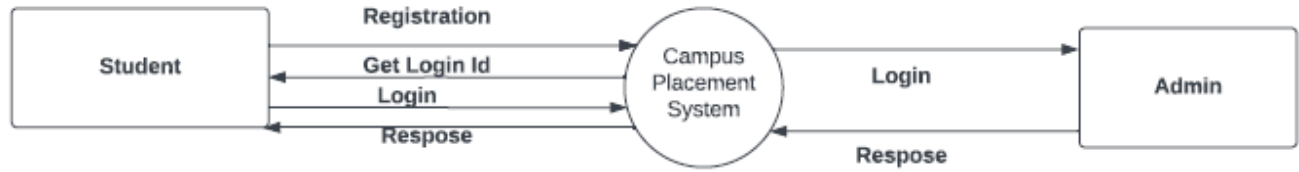| |
|---|
| -CompanyName : string |
| -JobType : String |
| -JobId : String |
| -Position |
| -RequiredBranch : String |
| - Package : String |
| Location : String |
| -Duration : int |
| addJob() |

### 4.3.4. Sequence Diagram:

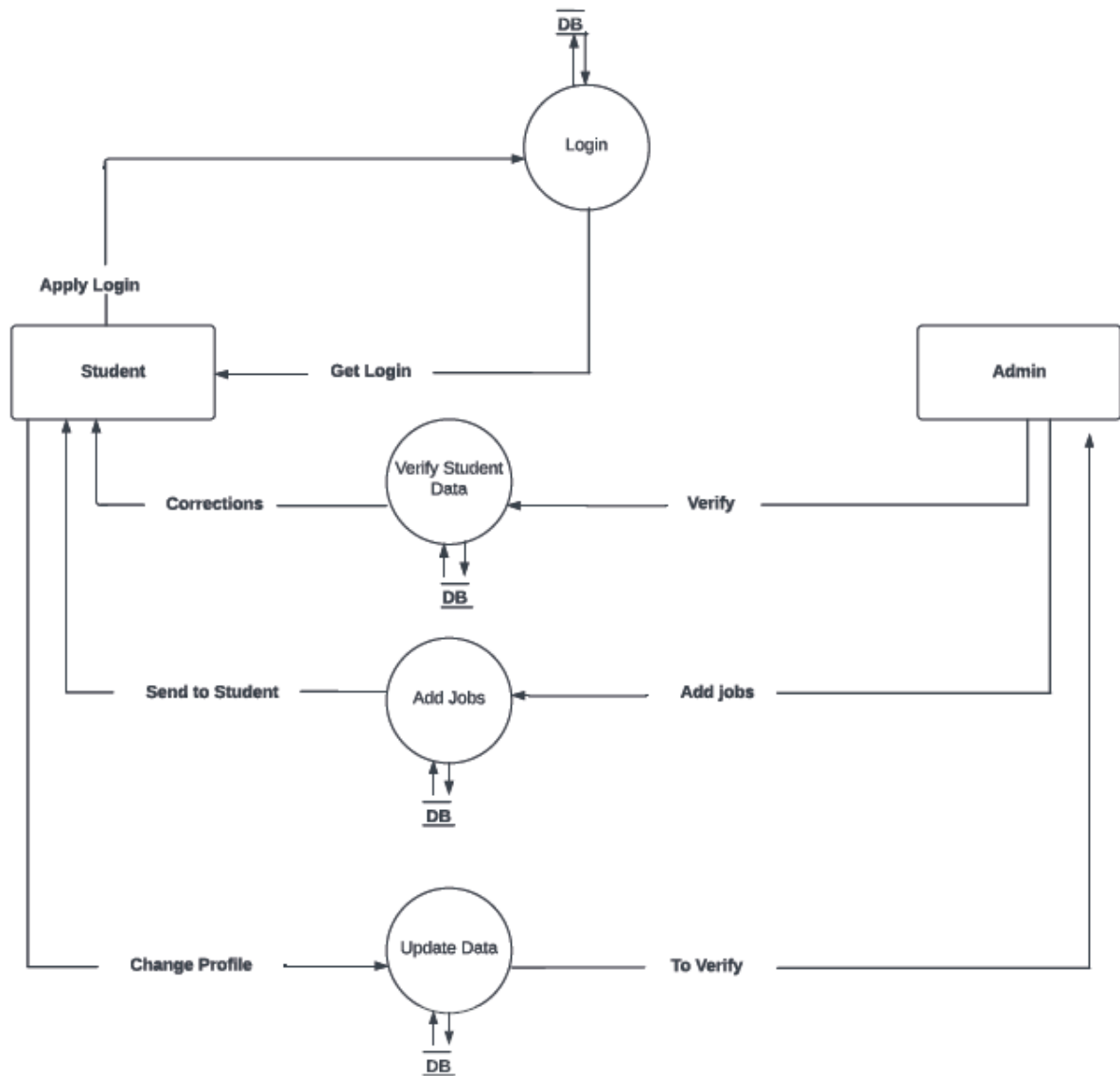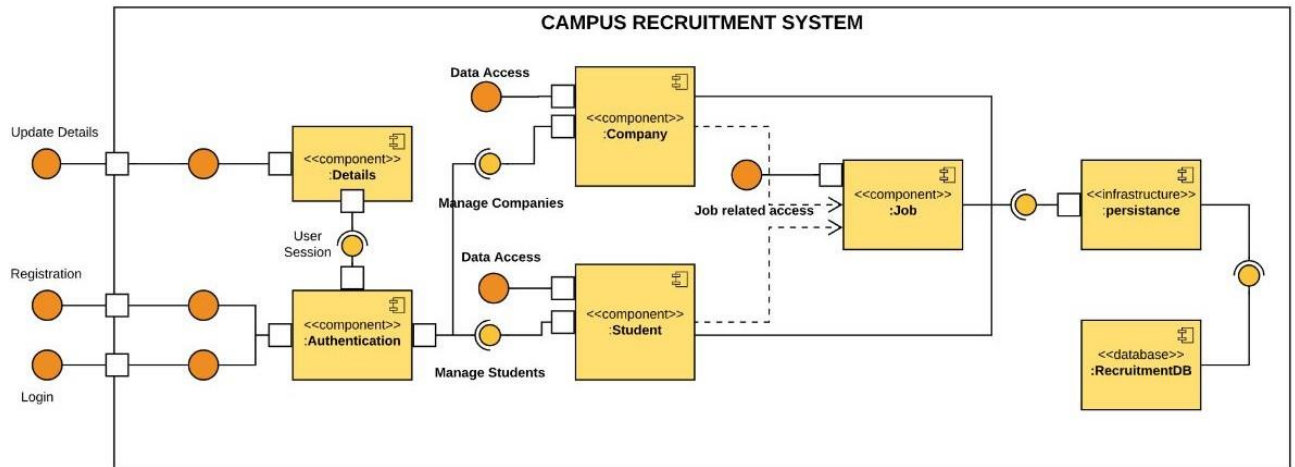### 4.3.5. Activity Diagram:
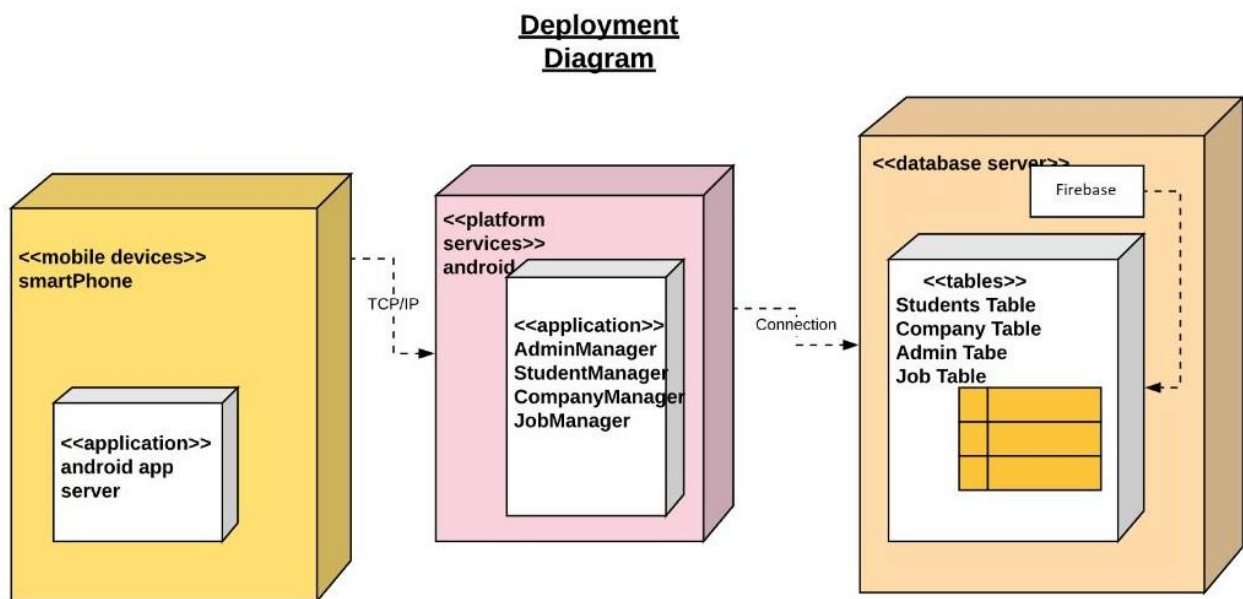
### 4.3.6. Data Flow Diagram:

**Level 0:**



**Level 1:**
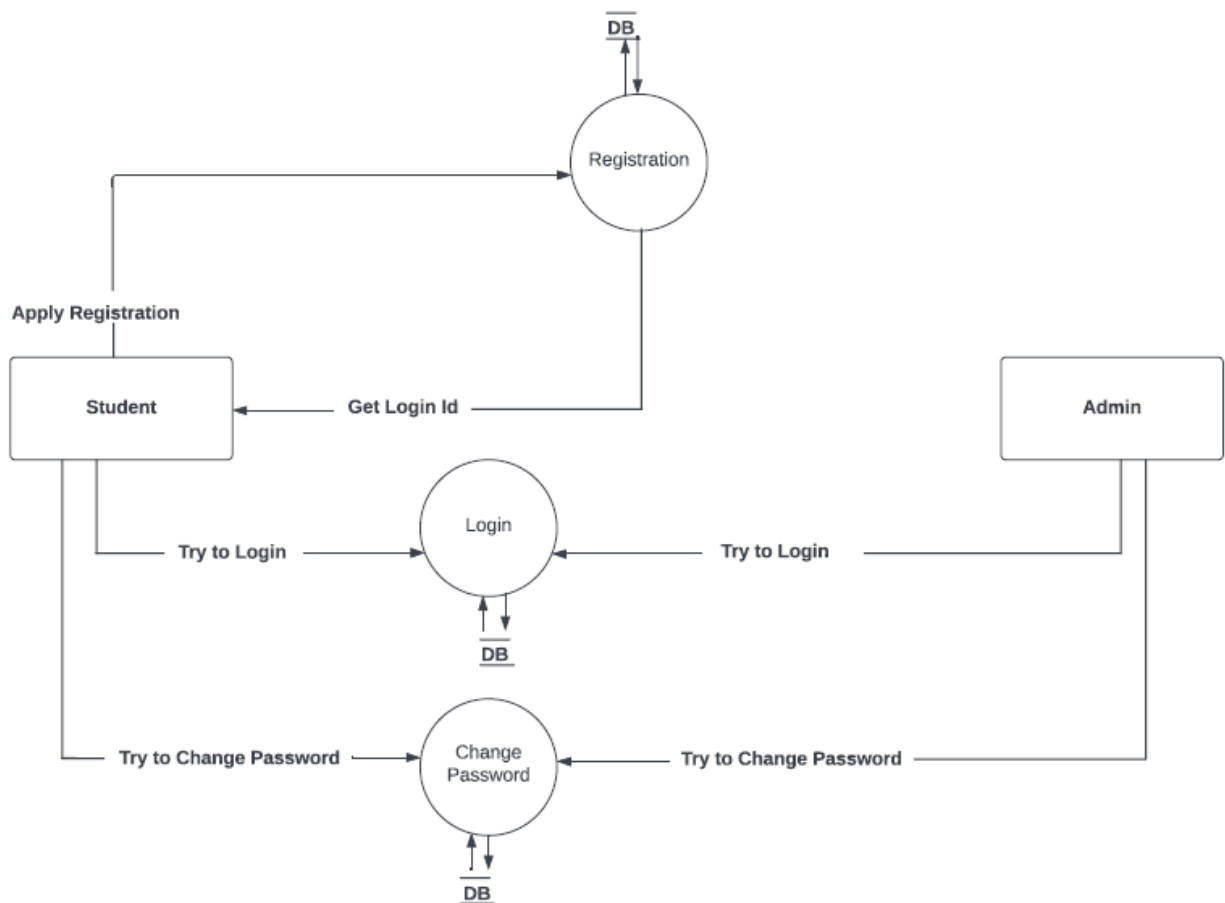
**Level 2:**

### 4.3.7. Component Diagram:



### 4.3.8. Deployment Diagram:

**4.4. Use Case Scenario**

1. **Use Case:** Sign up

   **Author:**

   **Date:**

   **Purpose:** To sign up into the app

   **Overview:** The use case starts when the student visit app and click for sign up. System request to enter all the details. When student enter all the details system generate login ID and password.

   **Alternative 1:** If Student already have an account, system send message and do not generate login ID and password

2. **Use Case: Use Case:** Sign in

   **Author:**

   **Date:**

   **Purpose:** To sign in into the app

   **Overview**: Use Starts when the Student/TPO visit the apps and click for sign it system request to enter login ID and password

   **Alternate 1:**

   If user enters the wrong password request for change password through mail

   **Alternate 2:**

   If they do not have any account request for sign up

3. **Use case:** Student actions

   **Purpose:** Perform various task

   **Overview:** The use case starts when the student visits the app and clicks on login

   When student gets into the system student can see the;

   - Job notification
   - TPO messages
   - If there is a correction error they have to correct their entries
   - They can apply for jobs / internship

| Student Actions | System Actions |
|---|---|
| 1.Begin when student visit application | |
| 2.Student Sign up in the application | |
| | 3.TPO Verifies the data |
| | 4.System generate the account |
| | 5.If data correct send verified message |
| | 6.Otherwise send message for correction |
| 7.Get Login id & password | |
| 8.Get verified unverified mess | |
| 9.If need correction then control it | |
| 10.See job notification if they want then can apply | |

4. **Use case:** TPO actions

**Purpose:** Perform various task

**Overview:** The use case starts when the TOP visits the app and clicks on login

When TPO gets into the system/TPO can;

- Verify student

- They can add jobs / internship

- Generate report

| TPO | System |
|---|---|
| 1.Begin when TPO visit application | |
| 2.TPO Login | |
| 3. TPO check student data and remark | |
| | 4.System send message to student |
| 5.TPO add job notification and sort student to send message | |
| | 6.System update job notification |
| 7.TPO generate report | |

**4.5. Implementation Details:**

1. **Application:**



We are using Android Studio to develop the desired application. In this we can design and launch an android application with ease.

Android Studio is an Open-Source Android Application Development Tool with which you can develop an Android Application with the help of Java / Kotlin at the backend.

You can generate interesting GUIs with the help of XML files.

a. **XML Files:**

- XML (eXtensible Markup Language) is a markup language that is designed to store and transport data in a structured format. An XML description refers to an XML document that provides a structured representation of data or information.

- XML descriptions can be used to exchange data between different systems or applications, as they provide a standardized way of representing information. XML is also widely used for configuration files, web services, and data storage, among other purposes.

- It's important to note that XML itself does not define the meaning or semantics of the data. Instead, it provides a structure for organizing and representing data, which can be defined and interpreted by different applications or systems as per their specific requirements.

b. **Java Files:**

- In Android Studio, Java is the primary programming language used for writing Android apps. It is the official language for Android app development and has been used for many years by developers to create Android applications.

- Java in Android Studio allows developers to leverage the extensive Android SDK (Software Development Kit) and take advantage of the platform-specific features and APIs provided by Android. With Java, developers can build interactive and feature-rich apps by writing code that interacts with the Android operating system and various device functionalities.

- Android Studio also supports other programming languages like Kotlin, which has gained popularity in recent years. Kotlin offers modern features and syntax that can enhance the development process. However, Java remains a fundamental and widely used language in Android development, and it continues to be extensively supported by the Android platform and Android Studio.

## 2. Database:

We are using Firebase as our Database.

Firebase is a set of backend cloud computing services and application development platforms provided by Google. It hosts databases, services, authentication, and integration for a variety of applications, including Android, iOS, JavaScript, Node.js, Java, Unity, PHP, and C++. Figma offers a range of features that facilitate the design process, such as vector editing tools, design components, libraries, and the ability to create responsive designs. It allows designers to create and manage design systems, ensuring consistency across different screens and projects. Additionally, Figma supports interactive prototyping, where designers can create clickable prototypes to demonstrate user flows and interactions.

One of the key advantages of Figma is its cloud-based nature, which allows users to access their designs from anywhere with an internet connection and collaborate seamlessly with team members. It also provides version control and commenting features, enabling designers to track changes, leave feedback, and iterate on designs more effectively.

## 3. Graphical User Interface:

Figma offers a range of features that facilitate the design process, such as vector editing tools, design components, libraries, and the ability to create responsive designs. It allows designers to create and manage design systems, ensuring consistency across different screens and projects.

Additionally, Figma supports interactive prototyping, where designers can create clickable prototypes to demonstrate user flows and interactions.

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# 5. GRAPHICAL USER INTERFACE



College ID

Password

LOGIN

Forgot Password ?

New Register !

**Splash Screen**                    **Login Page**

**Find your account**

Enter your college mail id or phone
number linked to your account

College id or phone number

Next

Send an email

Send an SMS

Can't reset your password?

**Forgot Password**

**OTP Request**

## PERSONAL DETAILS

Import

**Name :** Enter Full Name

**College ID :** College E-Mail ID

**Mail ID :** Mail ID

**PRN No:** PRN Number

**Mobile No :** +91

OR

+91

**Gender :** ◯ Male ◯ Female ◯ Others

**DOB:** DD/MM/YYYY

**Address 1:** Current Address

**Address 2:** Perment Address

◉ ◯ ◯

**Student Personal Details**

## ACADEMIC DETAILS

**C.G.P.A :** C.G.P.A Import

☐ *If you completed your 12th*

**HSC :** Enter your marks Import

☐ *If you completed your Diploma*

**Diploma :** Enter your marks Import

*Required field is compulsary*

**SSC :** Enter your marks Import

Semester wise marklist's

**I SEM :** Enter your marks Import

**II SEM :** Enter your marks Import

**III SEM :** Enter your marks Import

**IV SEM :** Enter your marks Import

**V SEM :** Enter your marks Import

**VI SEM :** Enter your marks Import

◯ ◉ ◯

**Student Academic Details**

**Set Password Page**

# 6. FUTURE ENHANCEMENTS

1. In future modules, we can add an aptitude test module, which will help Training & Placement officer to further examine the student's ability to be placed for the job.
2. Further, we can add a training module to the app which will help the student which has been recruited to the company to be trained according to company requirements.
3. Practice/ Mock Interviews/ Group Discussions can also be taken through the app in the future.
4. Company and HR modules can also be added in the future who can login and do their appropriate actions as Student and Training & Placement Officer has.
5. Guidance Sessions can also be arranged in the app from Industry Experts to help the students.

# 7. CONCLUSION

In conclusion, the Campus Placement Application Project is a comprehensive solution that streamlines the entire placement process for educational institutions. By leveraging the power of technology, this application simplifies the job search process for students. The project aims to provide a user-friendly platform for students to upload their resumes, search for job openings, and apply for relevant positions.

Overall, the Campus Placement Application Project is a valuable tool for educational institutions that want to improve their placement process and help students secure promising career opportunities. By providing a seamless experience for both students and the training and placement officer, this application can lead to more efficient recruitment process.

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