

# Development of Training and Placement Module and Chat Bot system for College Management Portal



Mr. Roshan S.Bhanuse  
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Publication Partner: IJSRP INC.

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## **Preface**

Portal is a specially built website which helps bring together information from various sources in a uniform manner. This Web portal is designed to make it easier for users to access different activities. Web services have brought with them extreme changes in the field of development of web application in recent years. This development of application provides a widespread method for tracking the various works a college is doing to handle it. "College management portal" offers a simple Student Information Management Interface. This application can be used by institutes or colleges to maintain records of student. Creating and maintaining up-to-date information, reliable knowledge about student's academics is of extreme importance in the institutes.

This portal provides services with all kind of student records, course records, college records, academic related reports, curriculum, batch records, placement records and other resource related records too[1]. It also has student records in all strands, notifications sending to the students and also updation of student's status by the Training and Placement Officer (TPO) is possible. Different analyzes can be made on the basis of statistical data, contact on the Chat bot network can be made possible; users can get updates of warnings. Training and Placement Officer (TPO) is able to view information of the student and collect their resumes and so many ad-on functionalities.

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### **ABSTRACT**

Portal is a specially built website which helps bring together information from various sources in a uniform manner. This Web portal is designed to make it easier for users to access different activities. Web services have brought with them extreme changes in the field of development of web application in recent years. This development of application provides a widespread method for tracking the various works a college is doing to handle it. "College management portal" offers a simple Student Information Management Interface. This application can be used by institutes or colleges to maintain records of student. Creating and maintaining up-to-date information, reliable knowledge about student's academics is of extreme importance in the institutes.

This portal provides services with all kind of student records, course records, college records, academic related reports, curriculum, batch records, placement records and other resource related records too[1]. It also has student records in all strands, notifications sending to the students and also updation of student's status by the Training and Placement Officer (TPO) is possible. Different analyzes can be made on the basis of statistical data, contact on the Chat bot network can be made possible; users can get updates of warnings. Training and Placement Officer (TPO) is able to view information of the student and collect their resumes and so many ad-on functionalities.

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# **CHAPTER 1**

# **INTRODUCTION**

## **1.1 Overview**

In modern years, usage of web portals has increased significantly. Our aim is to develop web portal at institutional level with some ad-on features which are not yet in existence [22]. The placement portal is a gateway to connect many web applications which is useful for doing placement activities. Replacing the existing paper records is developing and implementing a thorough college management application with reliable user interface. This management portal is developed in asp.net programming language. In this application, the front-end is built with HTML pages using the Bootstrap system for validation of client side with Java Script, asp.net language resides in the middle layer and as all business logics are. Database third layer communicates with first and second layer, which is MySQL database.

College Management Portal is a web-based program designed to support all requirements. It reduces the workload, contains a secure database and contains all the functionality used in colleges to manage the activities related to the placement. It includes various basic features and ad-on features that are still in existence so far. The program uses user authentication, showing only required details for personal duty. Furthermore, the authentication of each system or sub-system allows users who are authorized to create or update record in the system. All data on the server is thoroughly reviewed and validated before actual alteration of the record occurs. Administrator manages SQL server where data is securely stored which gives highest level of security of data. This portal report a vigorous logging system for monitoring user's access and certify compliance with guidelines of accessing the data, which look forward to upgrade the throughput of record management at institutes, thusly reducing the working time which is needed to access and distribute student's data to users.

## **1.2 Background**

College management platform for educational institutions is a web-based online ERP software solution. The platform is extremely scalable, and serves a traditional

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educational institution's end to end business functions. The network operation of college institutions is highly adaptive. The ERP solution is used for every form of institution of specific education program, of minimal customizations. It is highly versatile and configurable, able to meet the needs of different curriculum, syllabus and test formats and to incorporate business processes seamlessly. The development of application spaces for various organizations within the same business group is efficient enough. In other words, various institutions with individual data sets may use a single installation of the College management portal. The system provides adequate measures for keeping separate institutional data.

### **1.3 Problem statement**

To develop an application which is purely internet based and which focuses at serving information within an institute as well as throughout the world. In this paper, features such as chat bot system, statistical data representation, alert notification and student assignment conduction is addressed. This system (TPCMP) also provides TPO with features such as viewing student details, updation of student placement status, it also will provides graphical representation of student placement details, according to department as well.

### **1.4 Aims and Objectives**

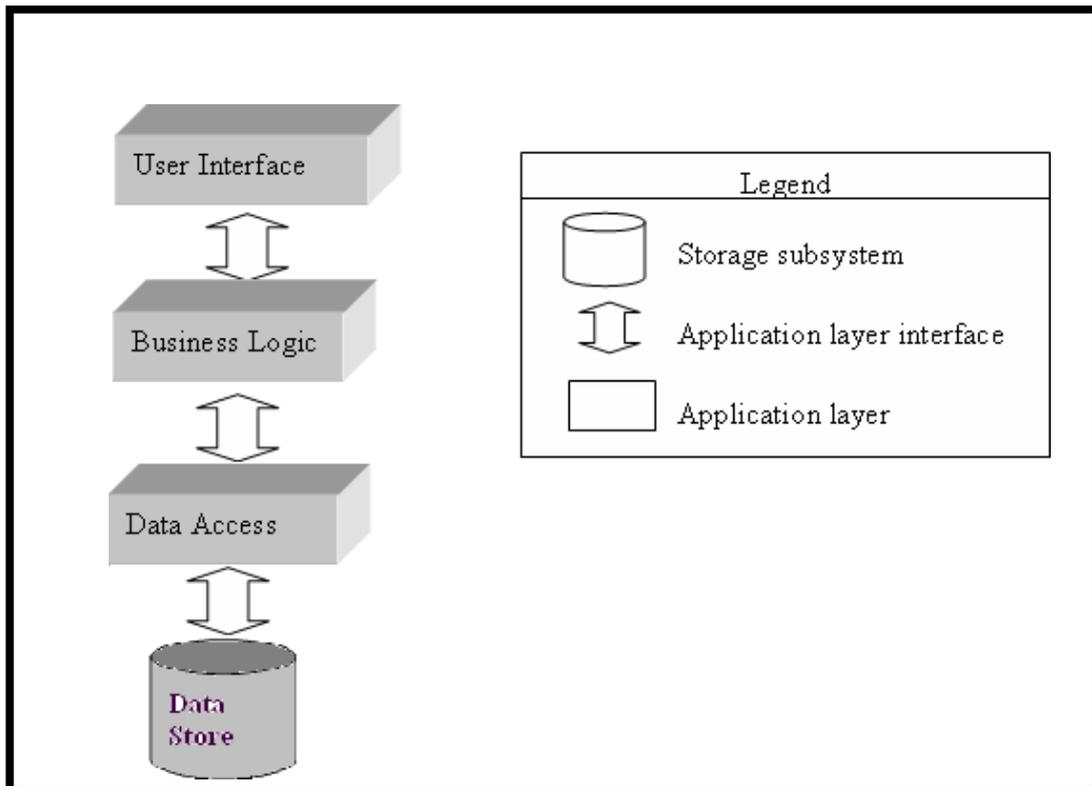
This web-application points at scanning and therefore diminishing the load of work that is put in managing all the records by an institute [6] and to develop a web application to mechanize the work of some modules in the system- student and TPO.

Main objectives of building this application are as follows:

- Manage student record to enhance management level.
- Graphical analysis for decision purpose.
- Enhance communication between users using chat bot system
- Manage student's placement related activities.

## 1.5 Logical View of the system

Logical view offers the users an abstract view of the features of the overall framework. It is used to make the user's life easier. Figure 1.5 represents logical view in a simple term, which only allows the user to see the things required for their particular task. The logical view is a rational view of the recipient of the database.



**Figure 1.5: Abstract view of an application**

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# **CHAPTER 2**

# **LITERATURE REVIEW**

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In paper [1], Tejaswini Chavan, Deb Dutta, Michelle Gomez and Alvino Vaz proposed different kind of reports related to academic, student records, college records, course records, curriculum activities, student's detail since the date of joining the course to the termination of the course, this can be used for reporting, tracking of attendance, upcoming semester year curriculum details and many more. They have done this by make separate divisions of each module. This system was asynchronous.

Hemn Barzan Bdalla<sup>2</sup> and Wu Fei<sup>1</sup> [2] proposed Student Information Management System (SIMS) in which two modules were used namely Bulletin Board Module and Skill Reports Module. Intranet based Student information management system was developed for computerizing system of student management. Due to this, it allows students to compare and show student's data in a vital way.

An application was developed to follow an algorithm is used for identifying answers based on user submitted query. Developed a database in which all the needed data are stored and developed a web user interface. The interface developed by these authors consists of two parts- first for normal users and second for the administrator. Also they built a database that stores data which are based on questions, answers, keywords, logs and feedback messages. They also used Facebook messenger API and integrated it with Python backend. Besides, Webhook and WIT.AI were also used. [3]

Thulasi Krishna NP [4] proposed a web application which is mainly focused on one who are trying to learn known as students and the one who trying to teach a learner known as teachers. The members in this portal can exchange information in different formats such as video, images, pdf etc. It provides services like, online book shop, online courses, forums, communities, study materials, news and events. PHP CodeIgniter architecture is used.

K. Rajakumari, V. Aswini priya, J. Mahesh Kumar, N. Rathiesh [5] expresses an inclusive construction for the staffs to keep track of the student advancement and

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other attribute details. HTML, CSS, Javascript and Sql are the technologies used to build this application. It allows a staff for observing their student's advancement in "Revature". Brilliant decisions by the management can be taken by using the details stored in the database.

"Multi-Platform College Management Framework (MP-CMF)" provides the users with an attendance system, an online exam paper correction system, and a digital notice board. Additionally it supports in preserving and improving data of student with very less efforts of human. The system is also featured with an API which gives it a compatible entity. Essential task of the system integrates guide system with the modern and efficient ways of managing activities [6].

Lalit Mohan Joshi [7] proposed an application for institution or a specified department which is completely based on Intranet. This application focuses on giving meaningful information to all the extents of management within an organization. For college related activities, this application can be purposed as an information management system. Any technical or non-technical staff or student can use the application to upload or download any information from the database. Java Archives (JAR's) contains used Java JRE 1.5 and also some higher compiled files and defined in the CLASSPATH environment variable.

In paper [8], the main intension of the authors started with the contingency theory and to develop an application which is an information system to solve the purpose of academics and graduation education which is completely depended on studying the local academics. The developed system noticed some sub-functions in the system which consist management related activities such as management of academic record, management for preparing plan of action, planning for single person in the system, appropriately selecting course, management of degree awards, management of each user. The authors had also observed that improvement of mission performance is not equal to the traditional match of "mission technique". It should use the match of "organization-technique".

Aditya Adagale, Dewang Agrawal, Sachin Dane [9] authors developed an application that keeps the detail record of a student since the date of joining of the course to the

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end of the course. This data can be used for many purposes such as reporting student's performance, recording attendance, and advancement in the course. All this records can be accessed through an online interface which is provided in the college portal. Data which is stored in repository can help in taking decisions by the management.

Jhon O. Inoco, Alexander A. Hernandez [10] developed real-time system named Electronic Student Information Portal of Davao Oriental State College of Science and Technology that focuses to give direction to students to easily retrieve their data such as grades, profiles, academic details, class timetable and subject offerings. To understand the characteristics of the eSIP system, the system is build by using the Delone and Mclean information model.

The main idea behind this project is to develop android based Mobile Campus system for improving institutional and educational system. This system is developed to be used by students, guardians as well as teachers. The existing system consists of all the information which needs to be viewed and retrieved offline or on a college website. Deprecated methods as new JSON and GCM, utilizing interesting IMEI number of android gadget with the number put away at server. [11]

In paper [12], the system is proposed for the students to view their details such as attendance or percentage of attendance, internal as well as external marks, and results and also to download study materials using Android phones. This data is saved in the college server. This system contains five sub-systems or modules, they are- 1.Student 2.Admin 3.DEO 4.HOD 5.Faculty. This system clarifies and gear up the result composition and operation activity.

The system proposed in this paper expresses the architectural design and system functional interface and highlight the system's component, design of database and different functional sections. Global variables and popular functions etc could be saved in general module for the complete project in Visual basic. The system pivots on the function description and analysis of the system, and gives access to the database using ODBC (Open Database Connectivity). [13]

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JinMei-shan, QiuChang-li, LiJing [14] introduced the B/S structure in order to develop a system for student information and describes the system design, planning of system's structure, the functional module of information system according to existing system and future needs. This system provided an interactive students management interface for big number of student's data management.

The system is developed for managing student information that needs to be used in Faculty of Electronics & Computer Engineering (FKEKK) and is known as the Student Information System (SIS). The system aims on noting down and manipulating student's related information. The system also delivers the reports for professor who wishes to check student status. Here Rapid Application Design (RAD) methodology is used. A prototype is build before developing a complete system to signify what the software is all about. [15]

LAN Ruile [16] inspected the structure, practical function and development methodology for managing college related or university related activities, for managing service network, taking service desk and incident management module. Three sub-divisions of role are-service desk personnel, processing personnel, and person in charge of process. The service desk and incident management module for an example are used to explain specific design and implementation of the system.

Shraddha S. Chawhan, Mangesh P. Girhale and Gunjan Mankar [17] worked on MPBAS from the existing system E-Beat. In the system named "Mobile Phone Based Attendance System (MPBAS)" professors can mark attendance of students using smart phone. The system is based on J2ME technology and also studied E – Beat and Mobile Phone Based Attendance System in J2ME.

In paper [18], "Smart Connect" provides a simple interface for maintenance of student information. Smart Connect deals with all kind of student details, academic related reports, college details, course details, curriculum, batch details, placement details and other resource related details too. Different reports and queries can be generated based on vast options related to students, batch, course, faculty, exams, semesters and certification and even for the entire college.

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This proposed system provides a general interface for maintaining student information. It also gives flexibilities for storing student's exam or test results and other academic scores, planning schedules for students, tracing attendance of students and can also manage other student related information. It also gives a simple interface for maintenance of student information. [19]

S.R.Bharamagoudar, Geeta R.B., S.G.Totad [20] focuses in self-regulating the existing manual system. The proposed application emphasizes on taking good care of student related information and also managing placement department information, professor information, exam related information, related information of an institute. All the users of this system can retrieve data quickly without any delay. This type of system is necessary in the colleges or universities.

The paper explains how to develop a Chat bot interface Bot on the Twitter social network for entertainment and viral advertising using a database and a simple algorithm. Having as a main theme a successfully implementation of a Chat Bot preventing people classify it as SPAM, as a result of this a Twitter account (@DonPlaticador) which runs without any person's intervention and everyday more followers was gained. A web server with Internet access, PHP 5+, MySql and access keys to the Twitter API were used. [21]

Sunantha Krishnan and Viraj V. Harmalkar [22] develop a web portal to automate the work of three entities in the system- Project Co-ordinator, Project guide and Project group. Automated the work of three entities- The project co-ordinator, Project guide and project group. Technologies used were Bootstrap 3, MySQL database using Xampp, Javascript, PHP and HTML5.

The paper describes how to save faces in the database which can be used for face recognition. It can be done using a hardware chip using VHDL hardware description language called as Very High-Speed Integrated Circuit (VHSIC). By simulating data early and fast, system can manage complexity. Data in the database can be saved in text and view format as well. [23]

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# **CHAPTER 3**

# **WORK DONE**

## **3.1 Development Environment**

Technologies: HTML, CSS, Javascript, jQuery, MySql, Bootstrap

Tools: Visual studio, Microsoft Sql server

Language: Visual C#

Frameworks: .Net

### **3.1.1 Technologies:**

#### ***a. HTML:***

HTML is a hypertext markup language that literally is the main foundation of any website. Any website cannot be sorted without the knowledge of HTML. While developing any website, one cannot use just HTML. Along with HTML, CSS or Javascript can be used to make the page look more attractive. Therefore, HTML is used with different tools to make the web pages more effective and efficient.

#### ***b. CSS:***

CSS stands for "Cascading Style Sheet". This sheeting is used for formatting layouts of web pages. CSS can also be used to explain table sizes, text styles and other features of Web pages that could be before described in HTML of any page. The main aim of CSS to distinct the main content of a web page from its presentation.

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***c. Javascript:***

Javascript is known to be the most popular scripting language since time. It is also known to be the World Wide Web Scripting Language. Its main purpose is to add various functionalities to the web, validating web forms, detecting browsers, creation of cookie and various other features. As it is known to be the most common scripting language, it is used in almost all web browsers today such as Firefox etc [9]. It is reviewed as the most powerful scripting language.

***d. jQuery:***

JQuery is a lightweight, JavaScript Library, "write less, do more." The main goal of it is to make the use of Javascript easier. It make different tasks much easier in a single line of code such as any simple task can be obtained easily which may include some lines of Javascript code and can wrap up into a single line of code. It also clarifies many Javascript related affair such as AJAX calls and DOM manipulation. Its syntax is designed to make navigating a document easier, select DOM elements, create animations, handle events, and develop Ajax apps.

***e. SQL:***

SQL stands for Structured Query Language. It allows us to access and update database. SQL is an ANSI (American National Standards Institute) standard [9]. It can run queries against a database, access data from database, insert data into database, manipulate data in the database, delete data from the database, create fresh database tables, allows us to store procedures of database, create views of database, set tables, view permissions and procedures.

***f. Bootstrap:***

Bootstrap comprises a system which is tactful and mobile first fluid grid which scales suitably till twelve columns that of the size of the device rises. It consists of prearranged categories for making the layout options easier and for making it more powerful for layout creation. It is a smooth, inbuilt, and powerful first front-end mobile platform for faster, easier web creation. It uses Javascript, HTML, CSS.

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### **3.1.2 Tools:**

#### ***a. Visual Studio***

Visual Studio is the introduced by Microsoft and is an environment which is strong for development and is a software which is used for creation of various projects or applications. It has a decent programming language graphical user interface. The language which is used in this application is Visual C# in asp.net framework. Developers can finish the design by dragging and falling, and also simplifies the process of interface design and also reduces workload considerably.

#### ***b. MySQL Server***

In this application, database framework used is a relational one. SQL Server (Structured Query Language) will be used SQL is a modern of Microsoft-introduced data management and analytics software. It is a thorough, united, end-to - end data solution. The main purpose of establishing communication and interacting with different databases. Use of WAMP with SQL server is made.

### **3.1.3 Framework:**

#### ***.Net:***

.Net system is a Microsoft-developed software development platform. It can be used to create both Form-based and Web-based applications. This architecture can also be used to build web services. The platform also supports various programming languages including Visual Basic and C #.

So, Visual C# programming language has been chosen. ASP.NET provides a programming model and thorough infrastructure for software with various services which are required to build strong web applications for computer system or for mobile devices. As it is a web development platform, it operates on top of the HTTP protocol, using HTTP commands and policies to set up a mutual contact and interaction

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between client and server. Each model is appropriate for different task as the following:

1. Web Pages Model is ASP.NET Simple development of websites
2. Web Form model is the development of traditional event driven by ASP.NET.

Reuse of controls as the website evolves

3. MVC model distinguishes the Configurations, Views, and Controller web application. Element splitting into three different modules

Other than the above, ASP.NET has the following advantages:

1. Access to .NET Framework which extends the API and Reach Library for Windows.
2. ASP.NET operates on the server side, which generates HTML codes that most browsers view.
3. Supports language oriented object C #.
4. Browser independence (most standard browsers require users to access the web app.)
5. Enormous resources and part
6. Codes and controls reusable.
7. Database Configuration and Control Integration with ADO.NET and VistaDB.
8. Total XML, CSS , HTML, and AJAX support

## **3.2 Requirement analysis**

The basic requirements for the design of the SIMS are

- Each user must have his or her own identity.
- Login facility for users.
- User can manipulate personally identifiable information
- May display notifications of the note and test section etc.
- Placement cell may manipulate any of the information.

### 3.2.1 Functional Requirements

The system for student information mainly focuses to enhance the proficiency of data management at the institute or college. It also focuses on information management and preservation of the system. The two main modules and required users of this system are: student and TPO. The TPO is the Administrator of the system who is having more power than other user such as manipulating, adding or deleting student data. Any data entered will be validated to be in a correct format. If in worst case any wrong data is entered which is not in correct format then the system will ask the user to enter the correct data. Student can use the system to for any query or retrieve information and enter their information only [5].

### 3.2.2 Non- Functional Requirements

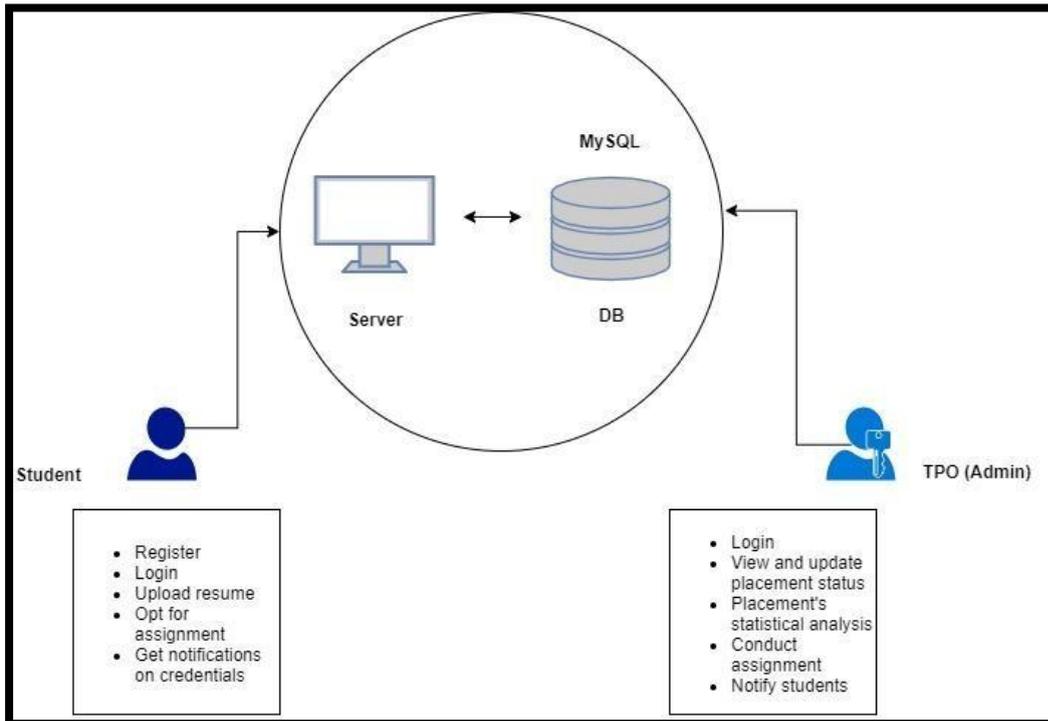
**Performance Requirements:** This developed application mainly serves as an efficient system to enhance institute's managing activities by giving better results. Therefore it was expected that the database used should be up to so that all the functions should run well.

**Safety Requirements:** Database backup is necessary [5] so that if database gets crash at any point due to any reason or failure, data should be stored in backup.

**Security Requirements:** Security is the major requirement in case of database. There are various users such as student, TPO, etc who can access data from the database. To keep data secure, access or permissions are set for different users according to the privileges. Permissions are set according to the power of the user such as TPO can modify or delete the student data but student can't. All other users have privileges to just access the database information.

## 3.3 Data flow

A Data Flow Diagram (DFD) describes the flow of College Management Portal. It can also be used for data processing envision. It depicts how outside users can interact with inside users or system. DFD stands for data flow of the system where problems can be analyzed. The context-level DFD is then "exploded" to display the device being modelled in more detail. It also focuses on how the input is processed to get the required output.



**Figure 3.3: Data flow diagram**

As shown in figure 3.3, this project mainly aims at management student data as well as college related data or information. This data is controlled and managed by the admin that is TPO. Functions of different sub-modules will be explained in detail in next section.

### **3.4 Proposed system**

The users of the system are: Training and Placement Officer (TPO) and Student.

#### **3.4.1 Training and Placement Officer (TPO):**

The administrator in this system is the TPO which has the authority to add students and provide their valid password and I d. The college's TPO provides login and password for logging on to the portal. TPO can access personal data such as student name, student address, college year of enrollment, student college I d, branch, email id, contact number, etc. after login. TPO may also view information of the student's education such as X board percentage, XII board percentage / Diploma percentage, semester percentage or pointer etc. TPO can also upload the College

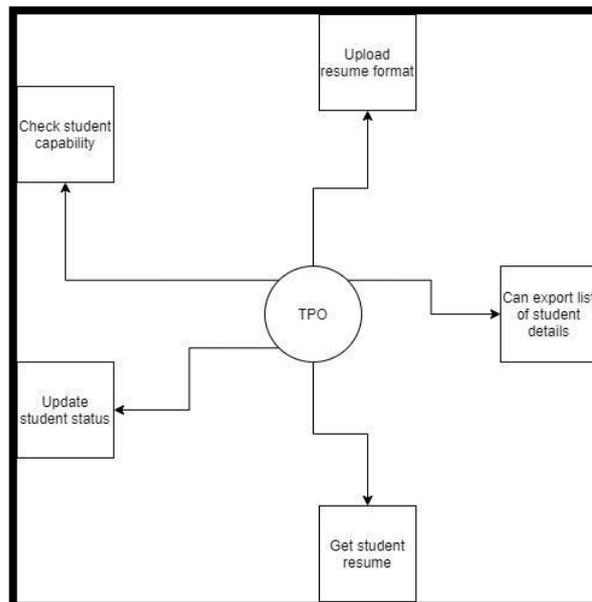
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resume format and update the student placement status and get a graphical view of the student placement status as depicted in figure 3.4.1. TPO may also notify the students of any updates to their credentials provided.

***Activities unique to Training and Placement Officer (TPO):***

- Get data from the students and resume
- Upload resume format
- Check placement status for students
- Get a graphical view of the student placement for the purpose of analysis



***Figure 3.4.1: Training and Placement Officer (TPO) activity flow***

**3.4.2 Student:**

The Student module deals with student knowledge. Students that are successfully introduced to the application by the administrator can only access the system with their correct user name and password that the administrator provides. First student should login into the system by entering their provided credentials. As shown in Figure 3.4.2 student can able to register and also upload their resume. After successfully completing the task by clicking on the Logout, students will exit the program successfully.

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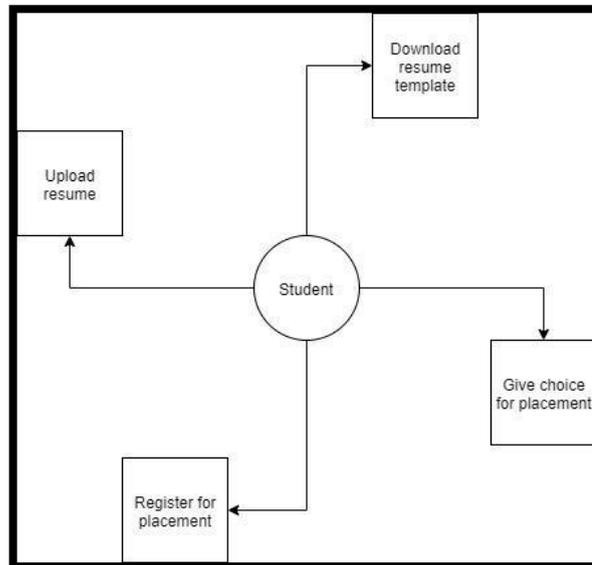
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***Activities unique to Student:***

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- Get resume format from portal
- Register for placement
- Apply for assignment that will be of interest to placement
- Receive alert notices on credentials issued



**Figure 3.4.2: Student activity flow**

## **3.5 Modules in the system**

### **3.5.1 Chat bot system:**

- Chat interface is developed using artificial algorithms which fetch the user queries, understands it through keywords and reply accordingly.
- It is a web-based application which is build to respond to user's queries.
- User need to simply chat with the bot through online interface which doesn't require for a user to follow any specific format.
- Chat bot gives appropriate answer of what is asked by the user.
- This interface is developed because a user can obtained any information related to college activity.
- The student or the user doesn't require to go personally to college and ask for a help on the helpdesk.

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- This system analyzes query using algorithm and matches the keywords with the keywords stored.
- The system responds to the students' question with the aid of artificial intelligence.
- The system responds using an innovative graphical user interface that suggests as if the user is talking to a real human.
- Users can use this web application to query college-related activities.

### **3.5.2 Alert notification**

This module works when the user has something important to be alert about. Here the user must include his / her credentials and apply for notification of the warning. When anything is changed, the notification message will immediately be sent to the user on their credentials. It is done to reduce the user's time by checking the site from time to time for different items and trying to find out if anything is being changed.

### **3.5.3 Statistical representation**

Statistical representation helps the user understand the data easily. It is represented in pie-chart, bar-graph, etc. format. Such data are reflected for annual intakes, result in each department etc. This will allow quick comparison of the data with users. Statistical analysis of complete college students or department wise can be done.

### **3.5.4 Placement cell**

- a. For internships or placements, students must upload their respective resumes on the TPO page. This would make it easier for training and placement officers to access it, rather than asking students for their curriculum vitae each time.
- b. The TPO may notify students of the placement in accordance with the eligibility criteria or their respective skill capacity. This can be achieved by conducting an online test or conducting an assignment on the basis of which

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students can learn how much, in particular, they are strong or weak. This system offers two benefits:

1. Students may see themselves in which ability they are adequately capable of, and in which they fail back. So they could be improving themselves.
2. TPO officer can decide whether a particular student is sufficiently capable of a particular recruiter, and make a decision accordingly.

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# **CHAPTER 4**

# **RESULTS**

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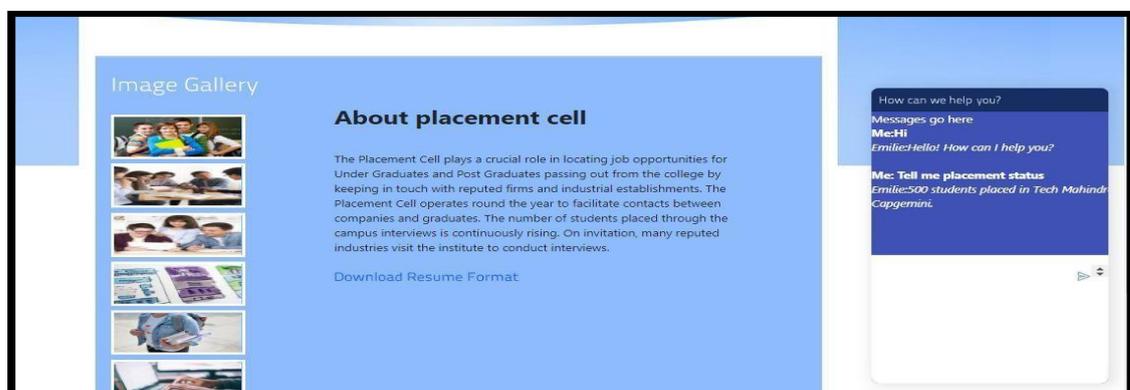
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#### 4.1 Results & Snapshots



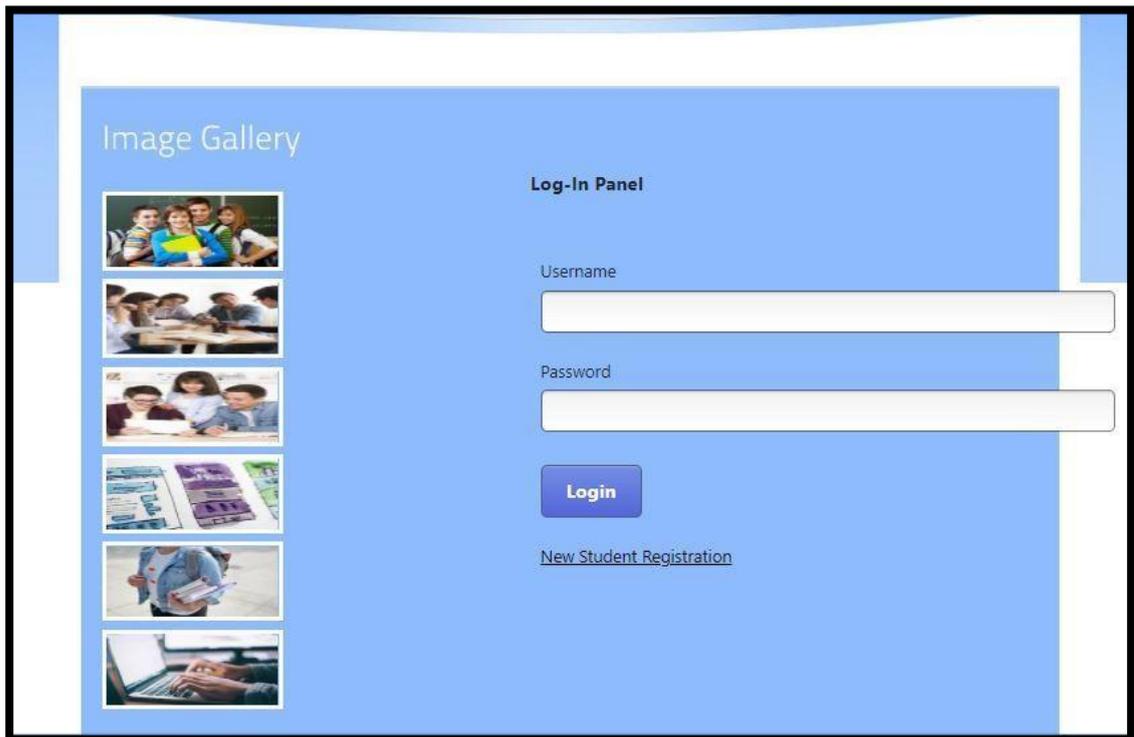
**Figure 4 (a): Home page**

The home page of Training and placement cell is shown in figure 4 (a). This page contains various tabs such as TPO login, Student login, placement status, contact and home tab.



**Figure 4 (b): Chat bot system output**

Figure 4 (b) depicts chat bot system. This system is provided on every page of an application. User can chat with Emilie who responds to user's queries. Here a provision is also given for students to download resume format of that particular college.



**Figure 4 (c) : Student login page**

Student login page is shown in figure 4 (c). Student can login through his/her provided credentials. In this page a new registration form link is provided for new student registration.

**Image Gallery**

**Student Registration**

**PERSONAL DETAILS**

Student Name:  Username:

Password:  Year:

Branch:  Is Placed:

Email:  Mobile number 1:

Mobile number 2:  Parent phone:

Home address:  Gender:

**ACADEMIC DETAILS**

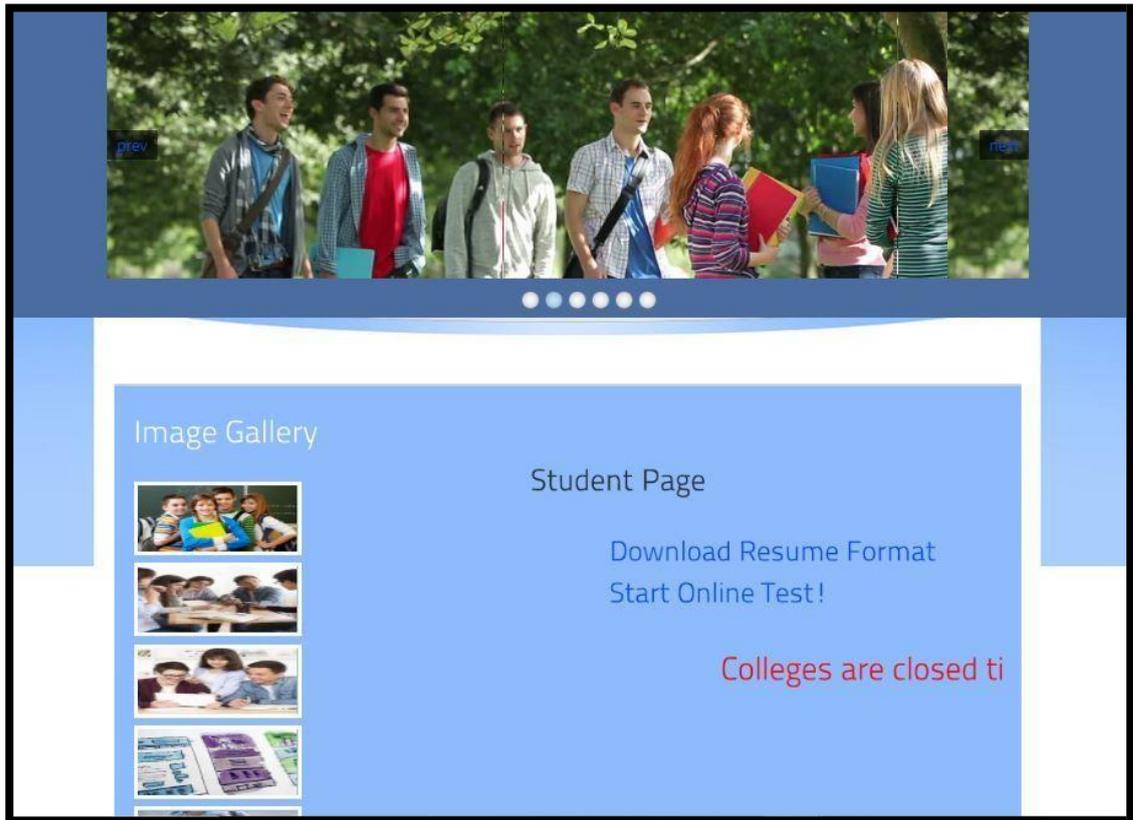
Class X Board Name:  Class X Percentage:

Class X Year of Passing:  Class XII Board Name / Diploma University:

Class XII /Diploma:  Class XII Year of:

**Figure 4 (d): Student registration page**

Student registration form is shown in figure 4 (d), where students fill the required details. Details include personal, educational as well as placement details. Students upload their resumes at the time of registration itself.



***Figure 4 (e): Student menu page***

Figure 4 (e) shows student menu page. After logging in through student login, students get this page where resume downloading option is provided followed by option to attempt for online assessment. Below in the bottom, dynamic notifications are provided.

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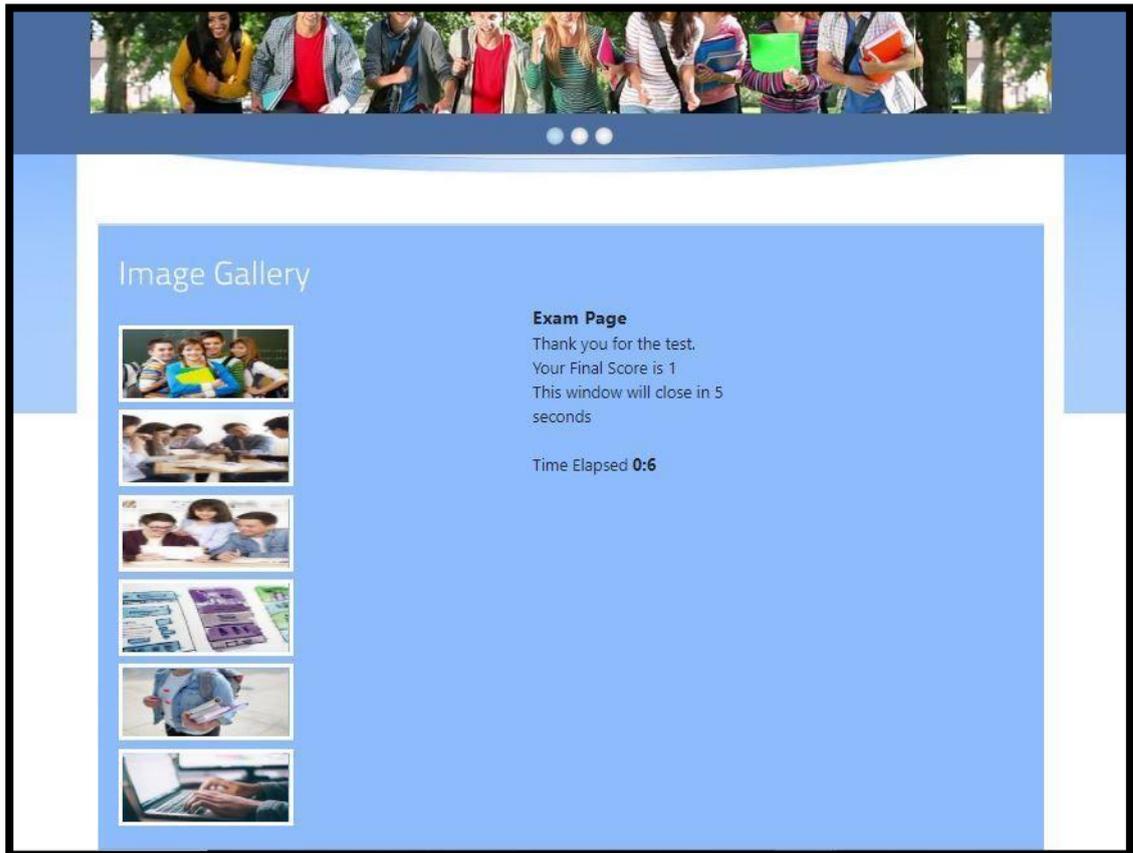


**Figure 4 (f): Online exam page**

Online assessment page for students is shown in figure a (f). Here, some questions are asked. Student needs to put a number from provided options. Clock is set for every question which calculates the time required by a student to answer a particular question.

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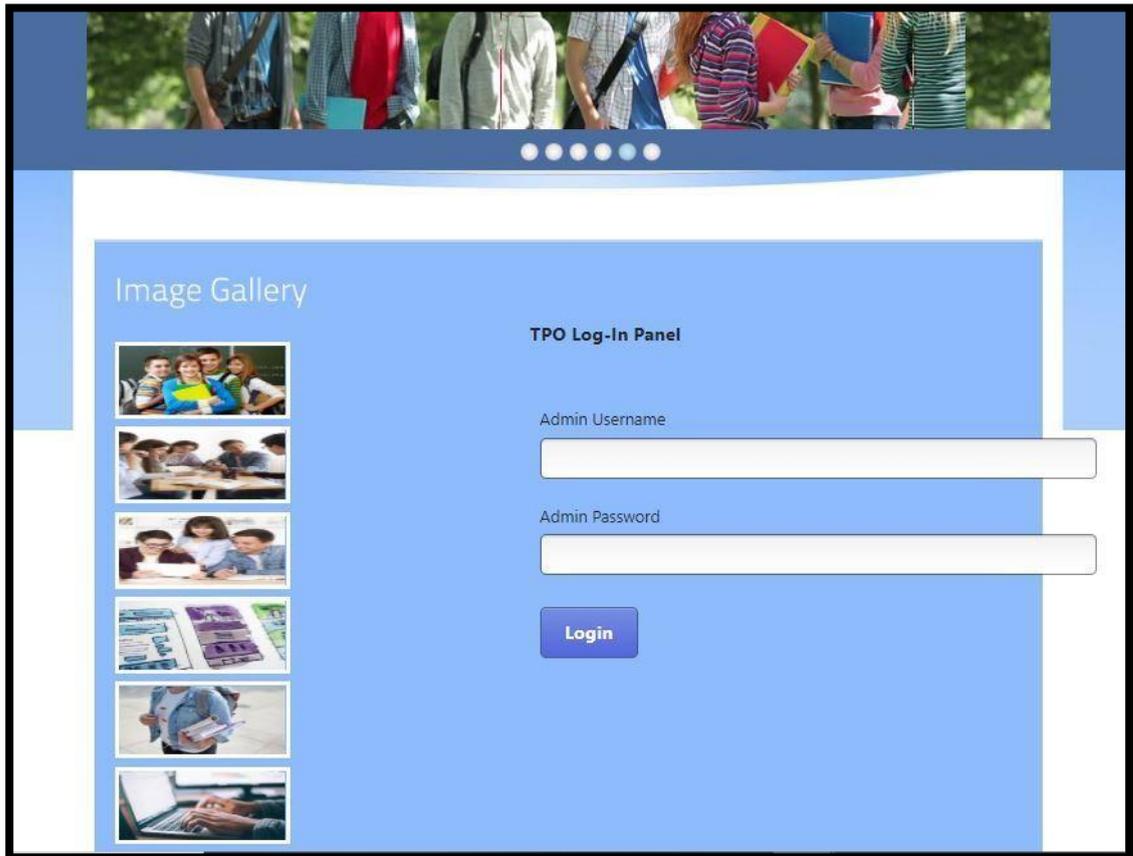


***Figure 4 (g): Online assessment result page***

Figure 4 (g) depicts online assessment result page. In this page, final score is shown. This window gets automatically close in 5 seconds.

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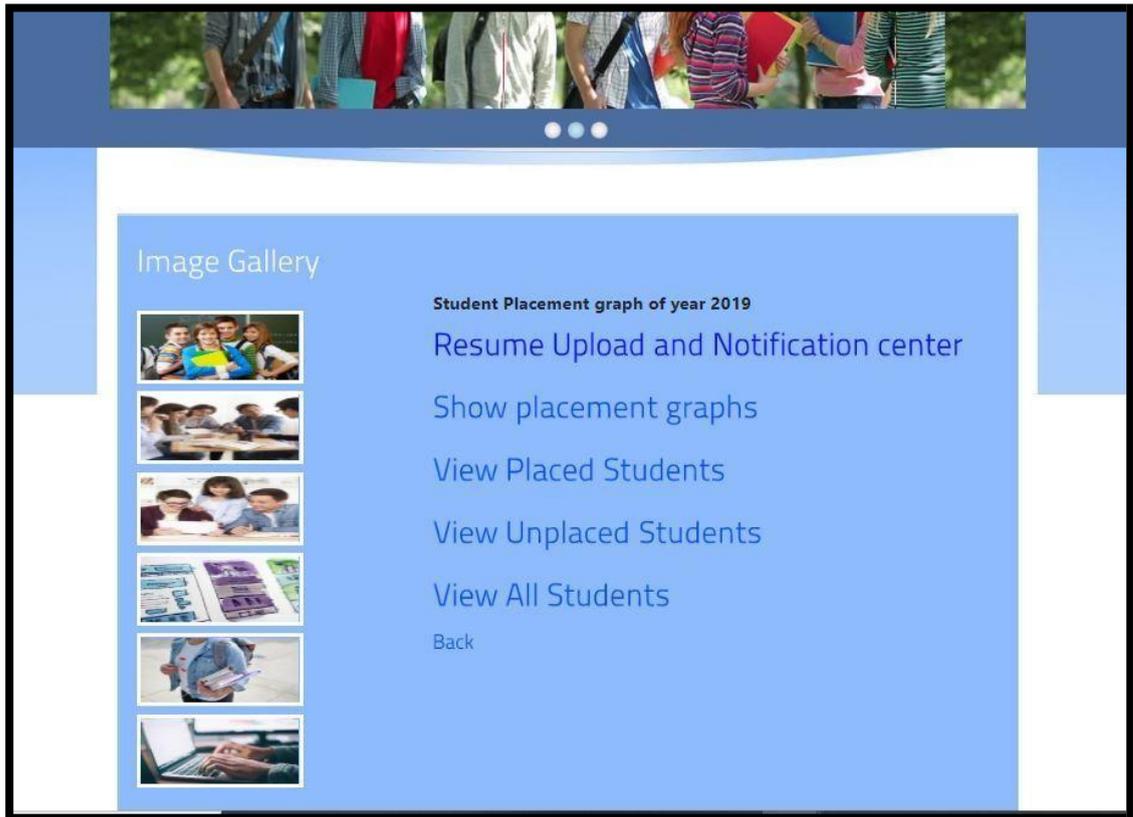


***Figure 4 (h): TPO login page***

Figure 4 (h) depicts TPO login page. Here TPO has to provide his/her login credentials to get the provision of different facilities provided by an application.

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**Figure 4 (i): TPO menu page**

TPO menu page is shown in figure 4 (i). TPO who is an admin in an application gets this view after logging in the system.

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**Figure 4 (j): Resume upload and notification panel**

Figure 4 (j) depicts the window which consists of two options- Resume format upload option and Notification panel option. In resume format upload option, TPO uploads format which will be provided on the home page of an application. Through which students can download. And in Notification panel, TPO can which notification which will be send to all the students email id as well as can be shown in Student login.

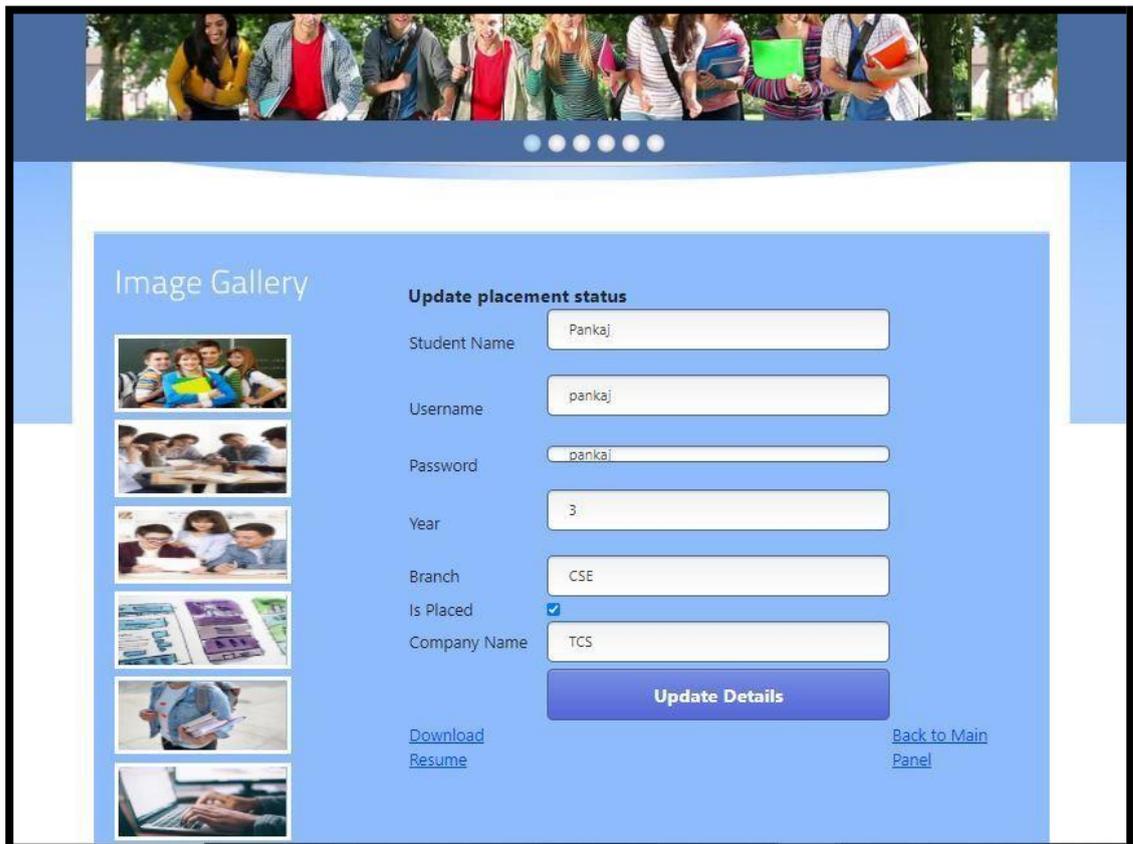


**Figure 4 (k): Placement-statistics page**

Figure 4 (k) depicts Placement statistics page where TPO can analyze placement data of complete college or department wise. These statistical graphs give the data for placed and unplaced students both.

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**Figure 4 (1): Update placement status page**

As shown in figure 4 (1), TPO can view student details whether they are placed or unplaced and at the same time, TPO can update student's placement status. And also TPO can download student's resume.

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# **CHAPTER 5**

## **SUMMARY AND**

## **CONDLUSIONS**

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### **5.1 Summary and conclusion**

There is still interest for an effective online platform for handling administrative activities. Within the current systems, intranet-based applications were developed for cell management training and selection, which has some drawbacks as well as some work such as updating the student placement program, testing student ability, solving queries by contacting users directly.

This system, Training and placement module and chat bot system for College Management Portal works by overcoming such limitations by developing internet- based system and provides automation in various processes, such as updating, searching, evaluating, chatting via the provision of internet-based application. It also provides the comprehensive solution to the problem with the current program.

### **5.2 Future work**

1.The future work for this application is whenever required to make frame for saving faces in the database which is used for face recognition, it can be done using a hardware chip using VHDL hardware description language called as Very High-Speed Integrated Circuit (VHSIC). This will manage complexity of the system by simulating data early and fast [23]. An efficient code can be developed for selective placement database management module for student by Verilog and VHDL with embedded systems that reduces storage space and improves device efficiency. In doing so, data can be stored both in text and display format.

2.We can also develop Placement Cell Management System by using the Machine Learning Python3. In doing this, different apps can be built for school, college, etc. and this can lead to improved productivity in reducing human resources.

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List of Publications

Sr. No.	Authors	Title of Paper	Name of International Journals / International Conference	Place and date of Publication with <b>Citation</b> Index
1	Surbhi Hedau, Roshni Khedgaonkar	Training & Placement Module And Chat Bot System For College Management Portal (Cmp)	International Conference on Software Engineering and Computer Science (ICSECS)	Place: Pune, Maharashtra Date: 15 <sup>th</sup> March 2020