

**VESVARAYA TECHNOLOGICAL UNIVERSITY**  
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A  
Mini Project Report  
On

**“PLACEMENT CELL”**

Submitted in partial fulfilment required for award of the Graduation Degree

**Bachelor of Engineering**

in

**Computer Science and Engineering**

**5th Semester**

**18CSL58-DBMS Laboratory With Mini Project**

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**JAN 2022**

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### *Department of Computer Science & Engineering*

### *Certificate*

Certified that the Project entitled “**PLACEMENT CELL**”, carried out by **SHUBHANSHU KUMAR (1HK20CS409) & UZMA ANWER (1HK20CS410)** are bonafide students of **HKBK COLLEGE of ENGINEERING**, in partial fulfilment for the award of **Bachelor of Engineering** in **Computer Science and Engineering** of the **Visvesvaraya Technological University**, Belagavi, during the year 2021–22. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of **18CSL58–Database Management Laboratory with Mini Project prescribed** for the said Degree.

**Prof. K.S.N. Sushma**  
Guide

**Dr. Loganathan R**  
Professor & HOD

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Name of Examiners

Signature with Date

1.

2.

## *Acknowledgment*

We would like to express our regards and acknowledgement to all who helped us in completing this project successfully.

First of all we would take this opportunity to express our heartfelt gratitude to **Mr. C M Ibrahim** Chairman, HKBKGI and **Mr. C M Faiz** Director, HKBKGI for providing facilities throughout the course

We express our sincere gratitude to **Prof. Hussain Ahmed**, Principal, HKBKCE, for his support towards the attainment of knowledge.

We consider it as a great privilege convey our sincere regards to **Dr. Loganathan. R.** Professor and HOD. Department of CSE, HKBKCE for his constant encouragement throughout the course of the project.

We would specially like to thank our guide. **Prof. K S N Sushma**. Assistant Professor, Department of CSE for her vigilant supervision and her constant encouragement She spent her precious time in reviewing the project and provided many insightful comments and constructive criticism.

Finally, we thank Almighty, all the staff members of CSE Department, our family members and friends for their constant support and encouragement in carrying out the Project work.

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## **ABSTRACT**

Placement Cell is an online-based software application. so that the university site can provide the important points of their students in a database so that the companies obtain a suitable means of employment. begin the session.

The Placement Cell contains all information regarding students. The device stores all of your students' personal information, such as your personal details, your added scars, your experience and your specialized skills that may be required in the CV that will be provided to a company.

This project is aimed at developing an online application for the Placement Dept. of the college. The system is an online application that can be accessed throughout the organization and outside as well with proper login provided. This system can be used as an application for the TPO of the college to manage the student information with regards to placement. Student's logging should be able to upload their information in the form of a CV. Visitors/Company representatives logging in may also access/search any information put up by Students.

# 1. INTRODUCTION

### Introduction

Placement Cell is an online-based software application. so that the university site can provide the important points of their students in a database so that the companies obtain a suitable means of employment. begin the session.

The Placement Cell contains all information regarding students. The device stores all of your students' personal information, such as your personal details, your added scars, your experience and your specialized skills that may be required in the CV that will be provided to a company.

#### **Objective:**

The main objective of Placement Management System is to develop software which manages placement activities in college makes an interactive GUI where TPO can manage details of all students on his console, he can send mails to students informing about placement activities. Although such a project has a very wide scope, this project contains the most important part i.e., displaying the personal and academic information of a student and company. The students and companies are also provided with the facility of editing some fields like username and password. The project also allows a Data Base Administrator to enter the information of a student and company which is then stored in the corresponding tables in the main database. He can also delete the student and company information after placement is over from the main database.

#### **Constraints:**

##### **User interface Constraint**

Using this system is fairly simple and intuitive. A user familiar with basic browser navigation skills should be able to understand all functionality provided by the system.

##### **Hardware Constraints**

Database is maintained on the database server in a secure way. The system should work on most home desktop and laptop computers which support JavaScript, PHP, CSS, Bootstrap and HTML5.

##### **Software Constraints**

The system will be intended to run on Firefox 4 and above, Google Chrome 10 and above and Internet Explorer 8 and above.

## 2. REQUIREMENT SPECIFICATIONS



## **Requirements Specifications**

### **Initial investigation:**

The aim of the system is to develop an “Placement Cell” software, which automates the process to register and view students details for upcoming placements. The system is supposed to be used in an airport where multi-user functionality is required.

### **System Requirements:**

The information for the project has been collected from Google. Some information has been collected by watching certain useful videos on the related topic. Most of the things have been included with the help of our mentors. Some parts of the project is done through analysing certain other existing projects.

### **Software Requirements:**

**DBMS:** MySQL Server version: 10.4.22

**Backend:** PHP version 8.1.1

**Development tool:** Sublime Text 3

**Operating System:** Windows 11 Home Version 21H2

### **Hardware Requirements:**

- Hard Disk Drive (HDD)/Solid State Drive (SSD) minimum 15GB
- RAM 4 GB
- Processor core i7 1.8GHz

### **Language Used:**

- HTML
- CSS
- JavaScript
- PHP (main functionality)
- MYSQL

### **NOTE:**

- In PhpMyAdmin create a database by name "placement" then import database contents by clicking on Import- browse-local disk:C-xampp htdocs/placement/placement.sql click Go. Complete placement database will be created.

Internet connectivity is required.

### **Feasibility Study:**

Preliminary investigation examines project feasibility. The likelihood the system will be useful to the organization. The main objective of the feasibility study is to test the Technical, Operational and Economical feasibility for adding new modules to the system. All system is feasible if they are unlimited resources and infinite time.

### Existing system:

- Filling of forms by students.
- Here a form is given to students in which he/she has to fill with some details such as his name, roll number, contact details, percentages (from first year to till date), Intermediate particulars (name of institution, place, year of pass, percentage), SSC particulars (name of institution, place, year of pass, percentage).
- Collecting marks from green book Marks of each student are collected from green book (a book containing marks and other details maintained by each department in college).
- Preparing excel sheet from the data collected through filled-forms and green book, excel sheets are prepared. These excel sheets are used to prepare a list of students who full-fill the requirements of a company visiting the campus and these students are eligible to attend the campus placement.

### Proposed System:

- In the proposed system the Admin (Placement officer) need not do all the hectic work. he will be provided with an interface with which he can easily get his work done. The following are the facilities that are provided by the system to the Admin.

### Advantages of proposed system:

The system proposed has many advantages.

1. The proposed system is highly secured, because for login the system it requires the username and password which is different for each.
2. It maintains records for all the students.
3. Manages placement announcements.
4. The application can be put online easily and will be assessable throughout the globe.

### Notice generation:

- Here Admin (Placement officer) has to provide information to the system about company name, date and venue at which campus drive might take place. With this information the system will generate a notice which can be seen on students' account to intimate students about placement drive.

### Student list generation

- Here the Admin has to provide information to the system about the requirements of the company (such as, cut off percentage, number of backlogs allowed etc.).

### View student profile

- Here the Admin is able to view a student's profile of his interest by giving the student's roll number as input.

### **System Modules:**

The proposed project contains mainly three modules they are

- Admin module
- Student module
- Announcement module

### **Admin/Placement Officer Module features:**

- Login
- can add announcement
- can view students
- can manage students
- can delete student
- can update password

### **Student's Module Features**

- Login
- Can update details
- Can look for campus drives on a single glance

## *3. System Requirements*

## System Requirements

### Functional Requirements:

In software engineering, a functional requirement defines a system or its component. It describes the functions a software must perform. A function is nothing but inputs, its behaviour, and outputs. It can be a calculation, data manipulation, business process, user interaction, or any other specific functionality which defines what function a system is likely to perform. Functional Requirements are also called Functional Specification.

### Non-Functional Requirements:

In systems engineering and requirements engineering, a non-functional requirement (NFR) is a requirement that specifies criteria that can be used to judge the operation of a system, rather than specific behaviours. They are contrasted with functional requirements that define specific behaviour or functions. The plan for implementing functional requirements is detailed in the system design. The plan for implementing non-functional requirements is detailed in the system architecture, because they are usually architecturally significant requirements.

### Software Requirements:

Front End: HTML, CSS

Back End: PHP (PHPMYADMIN)

Database: MariaDB 10.4.22

The following operating systems are officially supported:

- Windows 7 (64-bit, Professional level or higher)
- Mac OS X 10.5.1+
- Ubuntu 9.10 (64bit)
- Ubuntu 8.04 (32bit/64bit)

### Hardware Requirements

- CPU: Intel Core I3 or Xeon 3GHz (or Dual Core 2GHz) or equal AMD CPU.
- Cores: Single (Dual/Quad Core is recommended)
- RAM: 4 GB (8 GB recommended)
- Graphic Accelerators: NVidia or ATI with support of OpenGL 1.5 or higher.
- Display Resolution: 1280\*1024 is recommended, 1024\*768 is minimum

### Introduction to Environment

#### PHP:

What Can PHP Do?

- PHP can generate dynamic page content
- PHP can create, open, read, write, delete, and close files on the server
- PHP can collect form data
- PHP can send and receive cookies
- PHP can add, delete, modify data in your database
- PHP can be used to control user-access
- PHP can encrypt data

### Why PHP?

- PHP runs on various platforms (Windows, Linux, Unix, Mac OS X, etc.)
- PHP is compatible with almost all servers used today (Apache, IIS, etc.)
- PHP supports a wide range of databases
- PHP is free.
- PHP is easy to learn and runs efficiently on the server side

### Advantages of DBMS

- **Data independence:** In DBMS, you can easily change the structure of database without modifying the application program.
- **Integration of data:** In DBMS, data in database is stored in tables. A single database contains multiple tables and relationships can be created between tables.
- **Data Consistency:** By controlling the data redundancy, the data consistency is obtained. If a data item appears only once, any update to its value has to be performed only once and the updated value is immediately available to all users.
- **Sharing of data:** In DBMS, data can be shared by authorized users of the organization. Many users can be authorized to access the same piece of information simultaneously.

### Uses of DBMS

- To develop software applications in less time.
- For uniform data administration.
- For data integrity and security.
- For concurrent access of data, and data recovery from crashes.

### Components of DBMS

- **Users:** Users may be of any kind such as database administrator, System developers or database users.
- **Database application:** Database application maybe departmental, Organizational, personal or internal.

**DBMS:** Software that allows users to create and manipulate database access.

**Database:** Collection of logical data as a single unit.

- You add, delete, modify elements within your database through PHP.
- Access cookies variables and set cookies.
- Using PYTHON, you can restrict users to access some pages of your website.
- It can encrypt data.

**CSS:** Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript. CSS is designed to enable the separation of presentation and content, including layout, colours, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple

web pages to share formatting by specifying the relevant CSS in a separate .css file which reduces complexity and repetition in the structural content as well as enabling the .css file to be cached to improve the page load speed between the pages that share the file and its formatting. Separation of formatting and content also makes it feasible to present the same markup page in different styles for different rendering methods, such as on-screen, in print, by voice (via speech-based browser or screen reader), and on Braille-based tactile devices. CSS also has rules for alternate formatting if the content is accessed on a mobile device. The name cascading comes from the specified priority scheme to determine which style rule applies if more than one rule matches a particular element. This cascading priority scheme is predictable. The CSS specifications are maintained by the World Wide Web Consortium (W3C). Internet media type (MIME type) text/css is registered for use with CSS by RFC 2318 (March 1998). The W3C operates a free CSS validation service for CSS documents. In addition to HTML, other markup languages support the use of CSS including XHTML, plain XML, SVG, and XUL.

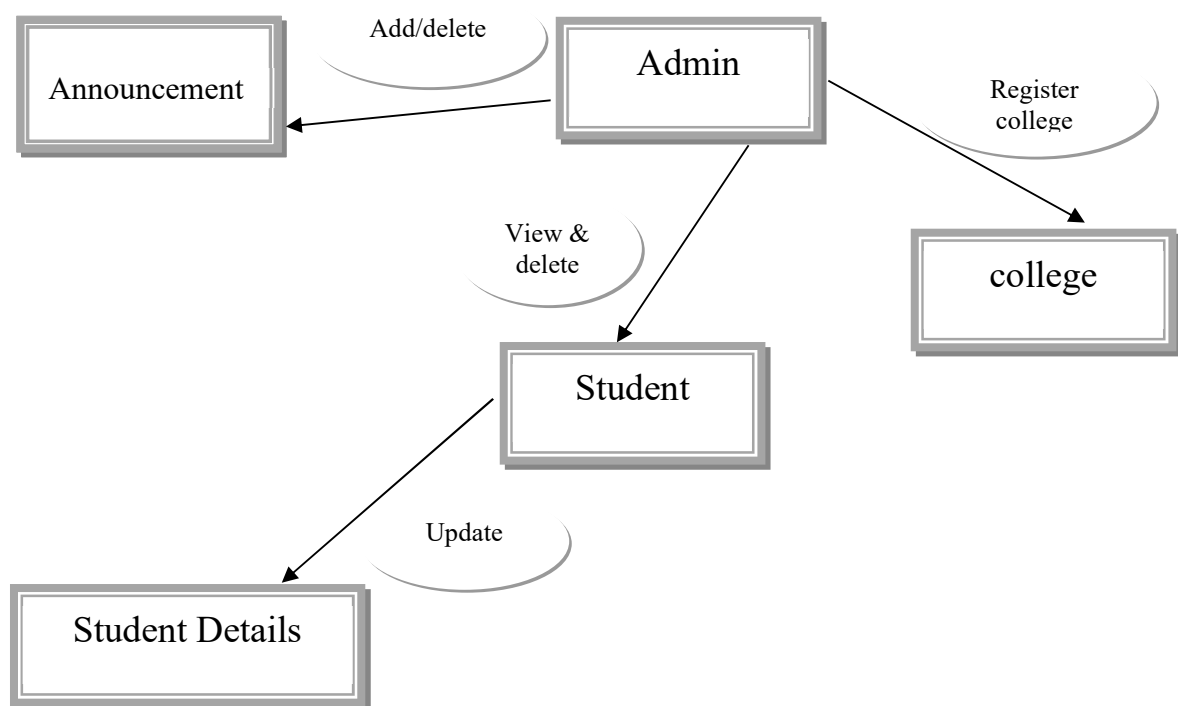
## 4. SYSTEM DESIGN



## System Design

### ER Diagram:

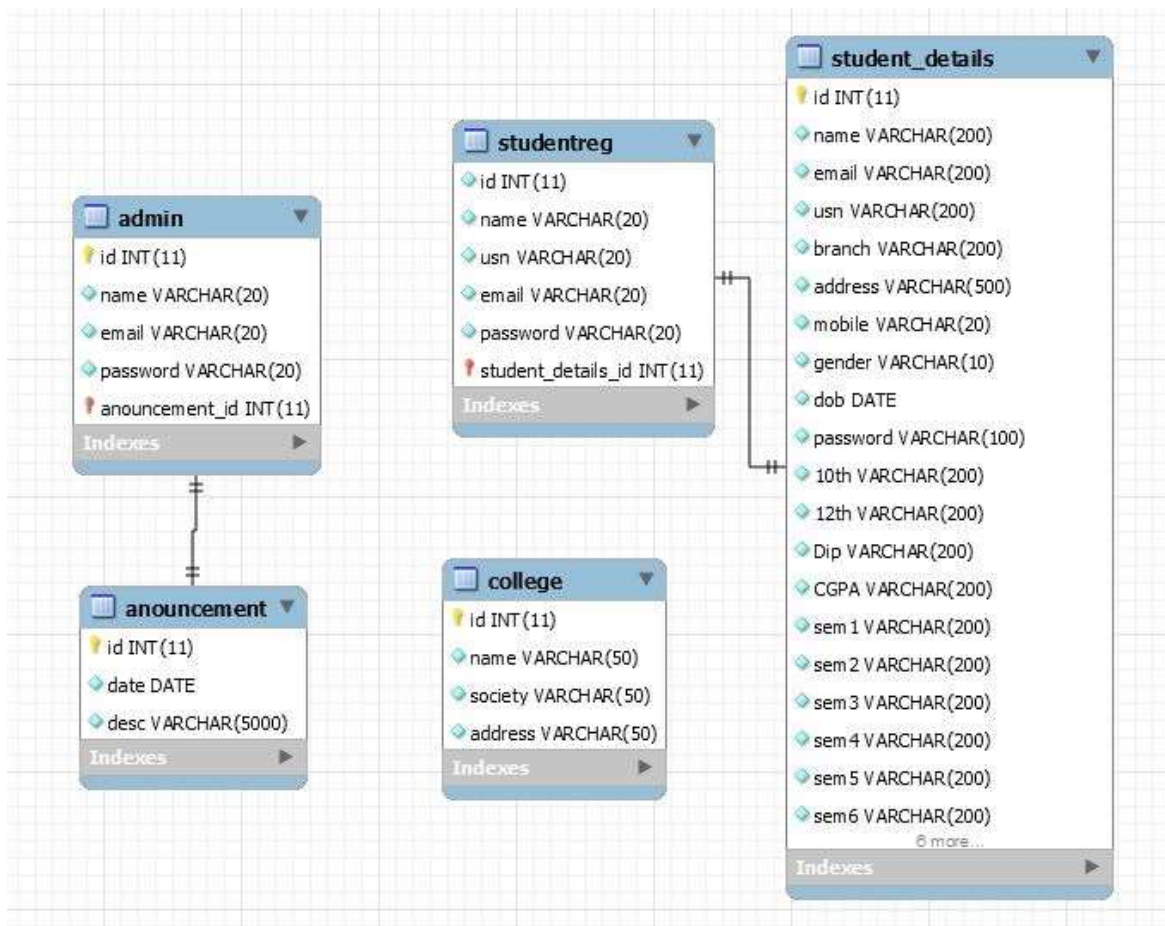
This ER diagram represents the model of Placement cell. The entity-relationship diagram shows all the visual instruments of database tables and relationship between Admin, Announcement, College, Student, Student Details etc. It uses structured data and defines the relationship between structured data groups of Placement Cell management functionalities. The main entities of Placement cell are Admin, Announcement, College, Student and Student Registration.



**Figure1: ER Diagram**

## Schema Diagram for Placement Cell:

Figure2: Schema Diagram



## S.DATA TABLES

## DATA TABLES

### 1.Admin Table

FIELD	TYPE	NULL	KEY	DEFAULT	EXTRA
ID	INT (11)	NO	PRIMARY	NULL	AUTO_INCREMENT
NAME	Varchar (50)	NO		NULL	
Email	Varchar (50)	No		NULL	
Password	Varchar (50)	NO		NULL	

### 2.Announcement Table

FIELD	TYPE	NULL	KEY	DEFAULT	EXTRA
ID	INT (11)	NO	PRIMARY	NULL	AUTO_INCREMENT
Date	Date	NO		NULL	
Desc	Varchar (50)	No		NULL	

### 3. College Table

FIELD	TYPE	NULL	KEY	DEFAULT	EXTRA
ID	INT (11)	NO	PRIMARY	NULL	AUTO_INCREMENT
Name	Varchar (50)	NO		NULL	
Society	Varchar (50)	No		NULL	
Address	Varchar (100)	NO		NULL	

### 4. Student Registration Table

FIELD	TYPE	NULL	KEY	DEFAULT	EXTRA
ID	INT (11)	NO	PRIMARY	NULL	AUTO_INCREMENT
Name	Varchar (50)	NO		NULL	
USN	Varchar (50)	No		NULL	
Email	Varchar (100)	NO		NULL	
Password	Varchar (50)	NO		NULL	

## 5. Student Table

FIELD	TYPE	NULL	KEY	DEFAULT	EXTRA
ID	INT(11)	NO	PRIMARY	NULL	AUTO_INCREMENT
Name	Varchar (200)	NO		NULL	
Email	Varchar (200)	No		NULL	
USN	Varchar (200)	NO		NULL	
Branch	Varchar (200)	NO		NULL	
Address	Varchar (200)	NO		NULL	
Mobile	Varchar (200)	NO		NULL	
Dob	Date	NO		NULL	
Gender	Varchar (200)	NO		NULL	
Password	Varchar (200)	NO		NULL	
10 <sup>th</sup>	Varchar (200)	NO		NULL	
12 <sup>th</sup>	Varchar (200)	NO		NULL	
Dip	Varchar (200)	NO		NULL	
CGPA	Varchar (200)	NO		NULL	
Sem1	Varchar (200)	NO		NULL	
Sem2	Varchar (200)	NO		NULL	
Sem3	Varchar (200)	NO		NULL	
Sem4	Varchar (200)	NO		NULL	
Sem5	Varchar (200)	NO		NULL	
Sem6	Varchar (200)	NO		NULL	
10 <sup>th</sup> year_pass	Varchar (200)	NO		NULL	
10 <sup>th</sup> school	Varchar (200)	NO		NULL	
10 <sup>th</sup> board	Varchar (200)	NO		NULL	
Pu_dip_clg	Varchar (200)	NO		NULL	
Pu_dip_board	Varchar (200)	NO		NULL	
Cet_rank	Varchar (200)	NO		NULL	

## 6. IMPLEMENTATION

## Implementation

The term **Implementation** has different meanings ranging from the conversion of a basic application to a complete replacement of a computer system. The procedures however, are virtually the same. Implementation includes all those activities that take place to convert from old systems to new. The new system may be totally new replacing an existing manual or automated system or it may be major modification to an existing system. The method of implementation and time scale to be adopted is found out initially. Neat the system is test properly and at the same time, the users are trained in the new procedure. Proper implementation is essential to provide a reliable system to meet organization requirement.

The student needs to enter his or her information required in the registration page. The page allows the user to enter the login page of the user. This is done using python programming. The usage of HTML CSS to work register these data collected. To avoid the redundancy of the data MYSQL can be used. This allows more faster and simple access of their data.

There is a few software used in this system. They are PHP used frontend as they are better in computing purposes and simple to code even being the new mode of web page development in the system and there are chances that it might improve over the courses. This develops the webpage using the Flash.

HTML is used to design the site aesthetics and simplicity of the site using CSS. MySQL is used as a database to the data stored in the site, JavaScript is linked between the front and the back end.

Moreover, we can make android systems which are used to create android apps for the site for mobile access. Hardware is an essential requirement in the development of the system in order to build the system. To do so a moderately good system is required. And software like Xampp, MySQL, PHP etc., to create this site.

### SOURCE CODE:

**Admin.php** (HTML base)

```
<html>
  <head> <meta charset="UTF-8"> <title>Login</title>
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>
  <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js"></script>
  <style>
    .divhover{box-shadow: 0px 0px 15px #003333;
      transition: all 0.5s ease-in-out;}
  </style>
</head>
```

```

<style>table tr td{font-family:sans-serif; font-size:0.6cm; color: #7B1F06}
    input{font-family:sans-serif; font-size:0.6cm; color:#003333;}
    .size21 {font-style: italic; }
</style>
<body style="background-image: url('images/bnw.jpg');background-attachment:
fixed;background-repeat: no-repeat;background-size: cover">
    <?php include 'nav.php'; ?>
    <?php
        $result1 = "";
        if(isset($_POST['email']) && isset($_POST['password'])) {
            $email=$_POST['email'];
            $pass=$_POST['password'];
            $sql = "select * from admin where email= '$email' and password = '$pass'";
            $sql=" select * from collegeInfo where id = 1 ";
            $result = $conn->query($sql);
            if(mysqli_num_rows($result)>0){
                session_start();
                $_SESSION['admin']= true;
                header('Location: admin/viewstudent.php');}
            else{ $result1 = "Invalid Credentials...Please try again.";
                }}?></div>
            <div class="row">
                <div class="col-md-4 col-md-offset-4">
                    <center>
                        <div id="adminPane" style="background:linear-
gradient(#ccffcc,003333,#003333,003333,#ccffcc)" class="jumbotron ">
                            <h3>Admin Login</h3>
                            <form action="admin.php" method="post">
                                <div><?php echo $result1; ?></div>
                                <div class="input-group" style="margin:15px">
                                    <span class="input-group-addon"><i class="glyphicon glyphicon-
envelope"></i></span>
                                    <input id="email" type="text" class="form-control" name="email"
placeholder="Email"> </div>
                                    <div class="input-group" style="margin:15px">
                                        <span class="input-group-addon"><i class="glyphicon glyphicon-lock"></i></span>
                                        <input id="password" type="password" class="form-control" name="password"
placeholder="Password"> </div>
                                    <input type="submit" value="Login">
                                </form> </div>
                                <script>
                                    $( "#adminPane" ).hover(function() {
                                        $(this).toggleClass("divhover");}); </script>
                                </center> </div>
                            </div>
                        </body></html>
Index.php
<html>
    <head>
        <meta charset="UTF-8">

```



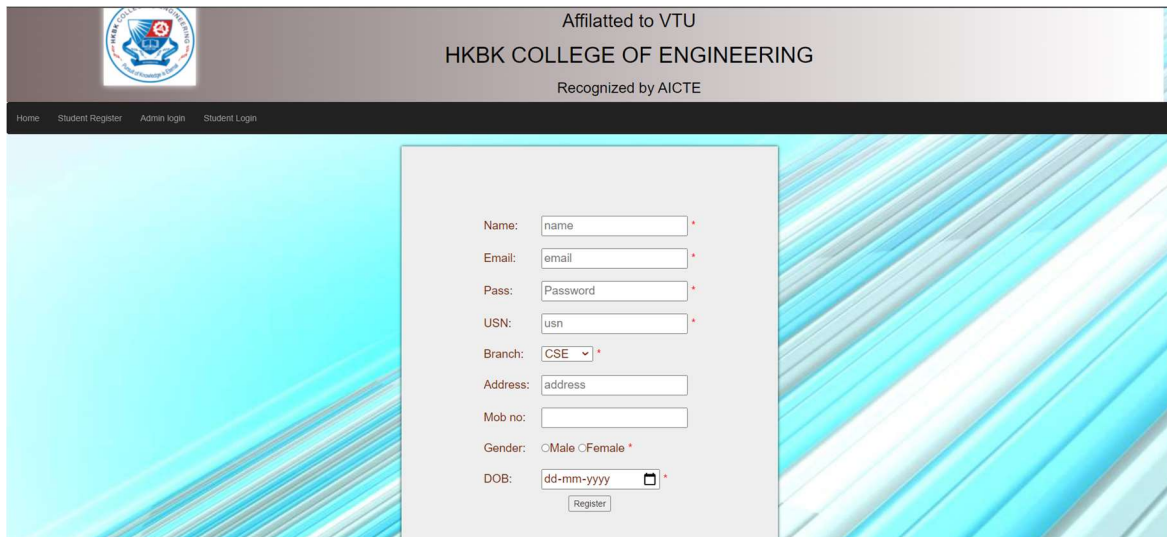
```

<title>Home</title>
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js"></script>
</head>
<body style="background: url('images/notebook-pen.jpeg');">
  <?php include 'nav.php';?>
  <div class="row">
    <div class="col-md-8">
      <div id="myCarousel" class="carousel slide" data-ride="carousel">
<!-- Indicators -->
<ol class="carousel-indicators">
  <li data-target="#myCarousel" data-slide-to="0" class="active"></li>
  <li data-target="#myCarousel" data-slide-to="1"></li>
  <li data-target="#myCarousel" data-slide-to="2"></li></ol>
<!-- Wrapper for slides -->
<div class="carousel-inner">
  <div class="item active">
     </div>
  <div class="item">
     </div>
  <div class="item">
     </div> </div>
<!-- Left and right controls -->
<a class="left carousel-control" href="#myCarousel" data-slide="prev">
  <span class="glyphicon glyphicon-chevron-left"></span>
  <span class="sr-only">Previous</span> </a>
<a class="right carousel-control" href="#myCarousel" data-slide="next">
  <span class="glyphicon glyphicon-chevron-right"></span>
  <span class="sr-only">Next</span>
</a>
</div>
</div>

```

## RESULT

The registration page for the students of the PLACEMENT CELL is shown in the Fig. 3. The student can fill this registration form and get registered to the placement department.



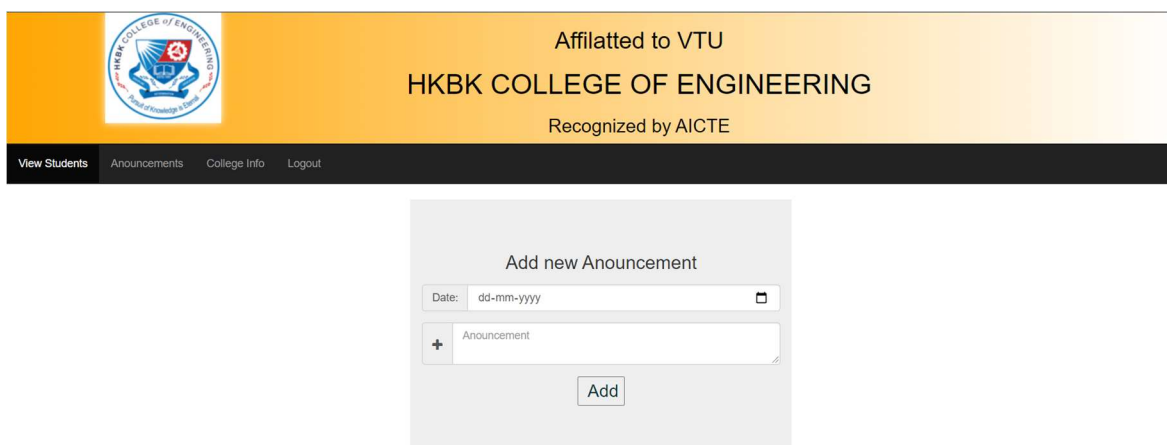
The registration page features a header with the college logo, name, and affiliations. Below the header is a navigation bar with links: Home, Student Register, Admin login, and Student Login. The main content area contains a registration form with the following fields:

- Name:
- Email:
- Pass:
- USN:
- Branch:
- Address:
- Mob no:
- Gender: ☐ Male ☐ Female
- DOB:

A "Register" button is located at the bottom of the form.

**Figure3: Registration Page**

The admin dashboard of the PLACEMENT CELL is shown in the Fig. 4. The admin can do all the necessary work in the options provided to him related to students.



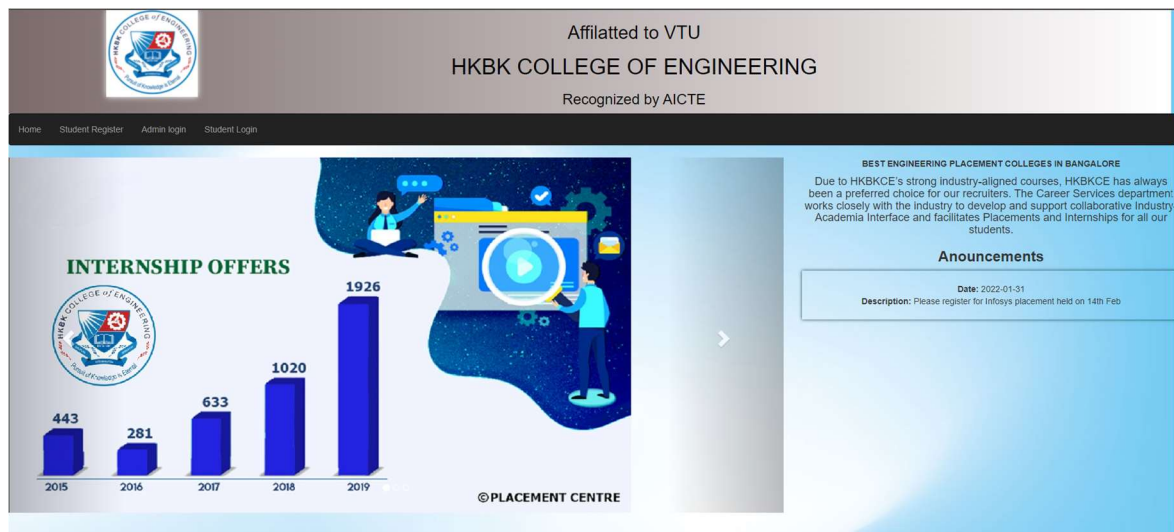
The admin dashboard features a header with the college logo, name, and affiliations. Below the header is a navigation bar with links: View Students, Announcements, College Info, and Logout. The main content area contains a form titled "Add new Announcement" with the following fields:

- Date:
- Announcement:

An "Add" button is located at the bottom of the form.

**Figure4: Admin Dashboard**

The main dashboard of the PLACEMENT CELL is shown in the Fig. 5. The admin can do all the necessary work in the options provided to him related to the company's, need to placed students, and training details.



**Figure5: main Dashboard**

## CONCLUSION

- Based on the research, even though it is an upcoming system, but with proper improvements to it, this process will get popular in the future. There are lots of procedures during a placement drive, but each section takes its own time.
- During this period, students face a lot of stress as they must face the all the round and at last face the interview, that for some students might be tough to overcome, and hence not getting the job. The stress of the student is an important factor during a placement drive. This stress is also a large reason for unemployment of educated students.
- Big Companies, during placement drive may have to be perfect to understand about how the candidate is. This is also a task because companies undergo trial and error for selection for their post. Even Though the candidate is job efficient, the integrity of the candidate is unknown. Here, the interaction between the companies and students becomes more crucial. More they understand each other, the more the efficiency of the companies and students grows and hence the society.
- The existing system works manually and there is no verification about the participants data is done. Even in the interview process the contestants must attend with hard copies of their documents, this is time consuming and energy wastage.
- A future for students with busy schedules, this project may be a time saver and become more helpful for the students and the companies together.

## **REFERENCES**

- [https://en.wikipedia.org/wiki/Main\\_Page](https://en.wikipedia.org/wiki/Main_Page)
- <https://www.w3.org/Style/CSS/>
- <https://images.google.com/>
- <https://www.w3schools.com/php/>
- <https://bootstrap.com/>
- <https://www.mysql.com/>