



PLACEMENT MANAGEMENT SYSTEM

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Abstract

Placement is the crucial part of any educational institute in which most of the work till now is being done manually. The management of Placement is supported by paper-based systems, database, spreadsheets and E-mail communications. The aim of this project is Automation of Placement unit of NSRIT (Nadimpalli Satyanarayana Raju Institute of Technology). This will include minimum manual work and maximum optimization, abstraction and security. This is a web application which will help students as well as the administration authority to carry out each and every activity in this department. The system is an application that can be accessed throughout the organization with proper login provided and can be used as an application for the Training and placement officers (TPO) of the college to manage the student information with regard to placement. The key feature of this project is that it is a onetime registration. Students logging should be able to fill the registration form. The application provides the facility of maintaining the details of the students and also provides a requested list of candidates to recruit the students based on given query. Administrator logging in may also search any information put up by the students. This will also help in fast access procedures in placement related activities.

Keywords: Placement management system, Educational institute, Training and placement officers, students, Administrator.

1. Introduction

Placement Cell is a total management and informative system, which provides the up-to-date information of all the students in a particular college. **TPC** helps the colleges to overcome the difficulty in keeping records of hundreds and thousands of students and searching for a student eligible for recruitment criteria from the whole thing. It helps in effective and timely utilization of the hardware and the software resources. The home page contains various links such as links to login, various services like Events happened, achievements and recruiter details etc.. The administrator will create the users and the users will use the accounts created by administrator. When the user enters into his respective page he can update his details, and the details are to be approved by the administrator. All the users have some common services like changing password, updating details, searching for details, checking the details, mailing to administrator,

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and reading the material uploaded by admin if the user is a student. Administrator has the services to add events and achievements and he can reply to the mails sent by users. He can upload materials, search for student details, and he has the right to approve the students.

Synopsis

Training and Placement Cell is a total management and informative system, which provides the up-to-date information of all the students in a particular college. **TPC** helps the colleges to overcome the difficulty in keeping records of hundreds and thousands of students and searching for a student eligible for recruitment criteria from the whole thing. It helps in effective and timely utilization of the hardware and the software resources.

Problem Definition

Now a day's campus placement are conducted in all colleges. Various software and other sector companies are conducting campus selections for selecting merit candidates. When campus selections are conducted the students should provide their curriculum vitae to the concern officer for attending the campus interviews. This routine process is maintained manually, like maintenance of their resumes in papers. This can be automated by designing software.

Existing System And Its Drawbacks

The earlier system is not computerized. All transactions in the system are done manually maintaining records. To make this laborious job simple the clients have to computerize the system.

The management and all the departments that have been carrying out this job using manually makes the job more complicated and tedious most of the times. So, the best way is computerize computerization of the current environment.

For example, in the earlier system placement officer has to collect student details for placements. Approving those student details takes lot of time. Placement officer and students have to consult each other directly if any information is needed. If any new company come for placements, placement officer and his staff has to search the student details and they have to find the eligible candidates for that particular company placement.

Here searching for eligible candidates takes lots of time. And some times some candidates' details may be missed.

Drawbacks Of Existing System

- It takes so much time for a placement officer to collect students' details and approving the details provided by them.
- Poor communication between students and placement officer, so here intimating about new placements is a hard task.
- Students may not know about company details. Here also poor communication provides a problem.
- Candidate may not get required information if concerned TPO is not at the desk.



Proposed System and Merits

The proposed system is fully computerized, which removes all the drawbacks of existing system. Proposed 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. Students 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.

The home page contain various links such as links to login ,various services like events happened, achievements and recruiter details etc., .The administrator will create the users and the users will use the accounts created by administrator. When the user entered into his respective page he has to update his details. And the details are to be approved by the administrator.

All the users have some common services like changing password, updating details, searching for details, checking the details, mailing to administrator, and reading the material uploaded by admin if the user is a student. Administrator has to do the services like adding events, achievements and he can reply to the mails sent by users. He can upload materials, search for student details, and he has the right to approve the students.

Advantages of The Proposed System

- Placement officer can easily collect student' details, and approve the details provided by them.
- As it is an online application, communication with placement officer is easy to students and recruiters, so here intimating about new placements very easy task.
- Students can know about company details through the details provided by Placement officer and through the websites provided by him at *recruiters'* option.
- Here recruiters can also search for the details provided by students on the basis of their percentage.
- Placement officer can send required materials used for placements preparation to students. With this option preparation for placements becomes easy.

Project Modules

There are mainly 3 modules in the project "Training and Placement Cell" They are:

- Student module.
- Administrator module.
- Recruiter module.

Student module consists of services like:

- **Update details:** This service provides the user to update their details.
- **Check details:** This service provides the user to check his details.
- **Material:** This service provides the user to check for materials uploaded by administrator



- **Mailing:** This service provides the user to mail to administrator.
- **Change password:** This service enables the users to change password

Administrator module consists of services like:

- **Update details:** Allows administrator to update his (college) details.
- **Update statistics:** Allows administrator to insert/update statistics like no.Of students selected etc.
- **Add student:** Allows administrator to add a student to database.
- **Add event:** Allows administrator to add/insert an event.
- **Approve:** Allows administrator to verify the details of the student, and to Approve him to the application if they are correct.
- **Student details:** Allows administrator to search for student information According to eligibility criteria for recruitment process.
- **Upload material:** Allows administrator to upload material for students.
- **Mailing:** Allows administrator to reply for the mails sent by users.

TPO module consists of services like:

- **Update details:** This service provides the user to update their details.
- **College details:** This service provides the user to check the college details.
- **Student details:** This service allows recruiter to search for student

information according to eligibility criteria for recruitment process.

- **Mailing:** This service provides the user to mail to administrator.
- **Change password:** This service enables the users to change password.

2. Hardware and Software Specification Hardware Specifications

Processor: Intel Pentium or more, IBM Cyrix (Intel compatible)

Hard Disk: 100 GB hard disk

Ram: Minimum 1 GB ram Recommended for data processing.

Software Specifications

Operating System: Microsoft Windows 7

Programming Environment: php

Style Sheets: CSS

Database: mysql

Web server: WAMP server

Web browsers: Internet Explorer

Scripting language: Java Script

Database Drivers: Jdbc/Odbc Drivers (Type 1)

3. System Analysis Feasibility Study

All projects are feasible – given unlimited resources and infinite time! Unfortunately, the development of computer-based system or product is more likely plagued by a scarcity of resources and difficult delivery dates. It is both necessary and prudent to evaluate the feasibility of a project at the earliest possible time. Months or years of effort, thousands or millions of dollars, and untold professional embarrassment can be averted if an ill-conceived system is recognized early in the definition phase.



Technical Feasibility

It is technically feasible to design the project as; the entire modules described in the modules description can be created using Front-End interaction HTML and back end database oracle.

Advantages of ORACLE

1. Oracle is a large database and several functional programs.
2. Oracle is pure database software. In our project we maintain database, so we selected Oracle
3. It provides a set of functional programs that user can use as tools to build structures and perform tasks.
4. Oracle is highly secured software.
5. Oracle contains many tools like SQL,PL/SQL etc
6. SQL is a unified non-procedural language.

Operational Feasibility

In our application front end is developed using GUI. So it is very easy to the user to enter the necessary information. But the should have user has some knowledge on using web applications before going to use our application

Explain About Our Analyzed Concepts

Object oriented analysis is a method of analysis that examines the requirements from perspective of the classes and objects found in vocabulary of problem domain. Analysis is the process of extracting the needs of a system and what that system must do to satisfy the client's requirements.

Domain Analysis

Domain analysis is the process by which a software engineer learns background information, which helps to understand the problem. The word 'domain' in the case means the general field of business or technology in which the customers expect to be using the software.

4. Requirements Analysis

CODING

HOME.HTML:

```
<html>
<head>
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.1/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-+0n0xVW2eSR5OomGNYDnhzAbDsOXxcvSN1TPprVMTNDbiYZCxYbOO17+AMvyTG2x" crossorigin="anonymous">
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.1/dist/js/bootstrap.bundle.min.js" integrity="sha384-gtEjrD/SeCtmISkJKNUaaKMoLD0//EIJ19smozuHV6z3Iehds+3U1b9Bn9Plx0x4" crossorigin="anonymous"></script>
</head>
<style type="text/css">
.footer {
height: 60px;
line-height: 60px;
background-color: #0d6efd;
color:#fff !important;

```

STUDENT HOME PAGE:

```
<?
include 'includes/auth.php';
include 'includes/header.php';
include 'includes/header2.php';

```



```
include 'includes/config.php';
?>
<!-- Content Wrapper. Contains page content -
->
<div class="container">
<!-- Content Header (Page header) -->
<div class="content-header">
<div class="container-fluid">
<div class="row mb-2">
<div class="col-sm-6">
<h1 class="m-0">Dashboard</h1>
</div><!-- /.col -->
```

ADMIN HOME PAGE:

```
<?
include 'includes/auth.php';
include 'includes/header.php';
include 'includes/header2.php';
include 'includes/config.php';
?>
<!-- Content Wrapper. Contains page content -
->
<div class="container">
<!-- Content Header (Page header) -->
<div class="content-header">
<div class="container-fluid">
<div class="row mb-2">
<div class="col-sm-6">
<h1 class="m-0">Dashboard</h1>
</div><!-- /.col -->
<div class="col-md-4"></div>
<div class="col-md-2">
```

SEND MAIL:

```
<?php
if(isset($_POST['email_data']))
{
    require 'class/class.phpmailer.php';
    $output = ";
```

```
foreach($_POST['email_data'] as $row)
{
    $mail = new PHPMailer;
    $mail-
>IsSMTP(); //Sets Mailer t
o send message using SMTP
    $mail-
>Host = 'smtp.gmail.com'; //Sets the SMTP
hosts of your Email hosting, this for Godaddy
    $mail-
>Port = '587'; //Sets the def
ault SMTP server port
```

5. Testing and Debugging

Software testing is a critical element of software quality assurance and represents the ultimate review of specification, designing and coding.

Testing Objectives:

- Testing is process of executing a program with the intent of finding an error.
- A good test case design is one that has a probability of finding an as yet undiscovered error.
- A successful test is one that uncovers an as yet undiscovered error.

These above objectives imply a dramatic change in view port.

Testing cannot show the absence of defects, it can only show that software errors are present.

Test Case Design

Any engineering product can be tested in one of two ways:

White Box Testing:

This testing is also called as glass box testing. In this testing, by knowing the specified

function that a product has been designed to perform test can be conducted that demonstrates each function is fully operation at the same time searching for errors in each function. It is a test case design method that uses the control structure of the procedural design to derive test cases. Basis path testing is a white box testing.

Basis Path Testing:

- i. Flow graph notation
- ii. Cyclomatic Complexity
- iii. Deriving test cases
- iv. Graph matrices

Control Structure Testing:

- i. Condition testing
- ii. Data flow testing

Administrator Module

Test case	login
Input	Login ID, Password Checking.
Process	If Login ID and password are correct then it goes to home page, otherwise it again returns us the login screen
Output	Displays the homepage of the administrator

Test case	Update Details
Input	Click on the link
Process	Updated Values such as college name, employee id, ProcessBranch, emailed, contact no are stored in the database tables.
output	Displays whether the

	values are successfully updated or not
--	----------------------------------------

Test case	Add recruiter
Input	Click on the link
Process	Adds the Recruiter of the Company to the Database based On The Company name and Password.
Output	Displays whether the insertion is Successful or not

Student Module

TEST CASE	LOGIN
Input	Student gives unique user ID and password
Process	The student entered values are checked in the database for Validity.
Output	Allows the student to access the services if the Login ID and Passwords are correct or else displays the same login page

Test case	Update Details
Input	Click on the link
process	Updated Values are stored in the database tables based on the student ID
Output	Displays whether the values are successfully updated or not

Test case	Change password
Input	Old password and the new password
Process	The Old password is replaced with the new password
Output	Displays that the password is changed successfully

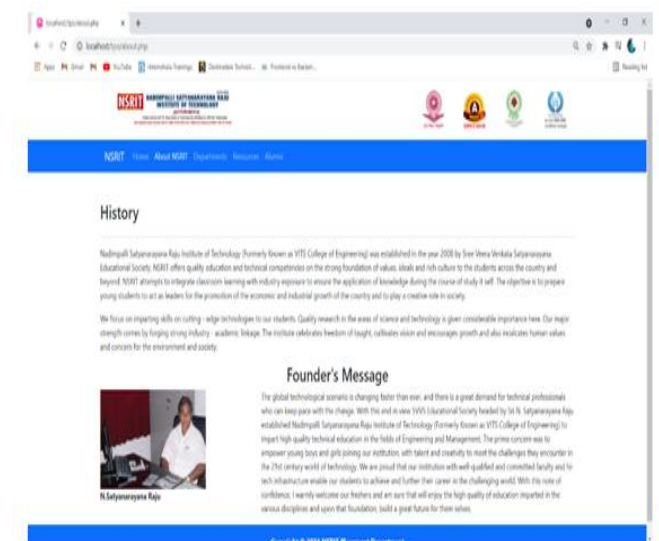
Test case	Change password
Input	Old password and the new password
Process	The Old password is replaced with the new password
Output	Displays that the password is changed successfully.

TPO Module

Test case	Login
Input	Login ID, Password Checking
Process	If Login and password are correct then it goes to the Tpo homepage, otherwise it again returns us the login Screen
Output	Tpo Homepage

Test case	Student Details
Input	Click on the link
Process	Views the Student details
Output	Displays the student details

Test case	Mailing
Input	Click on the link.
Process	The Tpo can send mails to the Student
Output	Displays whether the mails has been sent successfully or not.



NSRIT Home About NSRIT Departments Resources News

Diploma

S.No	Branch	Intake
1	Electrical & Electronics Engineering	50
2	Mechanical Engineering (ME)	50

UG Courses

S.No	Branch	Intake
1	Electrical & Electronics Engineering (EEE)	30
2	Mechanical Engineering (ME)	40
3	Electronics and Communications Engineering (ECE)	100
4	Computer Science and Engineering (CSE)	100
5	Civil Engineering (CE)	30
6	Computer Science & Engineering (AI & ML)	30
7	Computer Science & Engineering (DS)	30

PG Courses

S.No	Branch	Intake
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Registration Panel

Registration

Student Name: 100%

ID Number: 100%

Password (8 Characters minimum): 100%

Phone number: 100% / 100%

Email: 100% / 100%

Select Branch: 100% / 100%

Select Batch: 100% / 100%

Address:

Profile Picture: No file chosen

Resume: No file chosen

Resources

Logical Reasoning
Coding - Decoding
Shortcuts, Tips and Tricks

BA T
C B U

Gopgemin Gopinath
based Aptitude Test Questions
Free MasterClass on
tch 2021

Documents

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NSRIT Student Home Student Details Update Details Change Password Logout

Dashboard

DETAILS

CHANGE PASSWORD

Student Panel

Sign in to start your session

Student ID Number:

Password:

[If you are new Register Here](#)

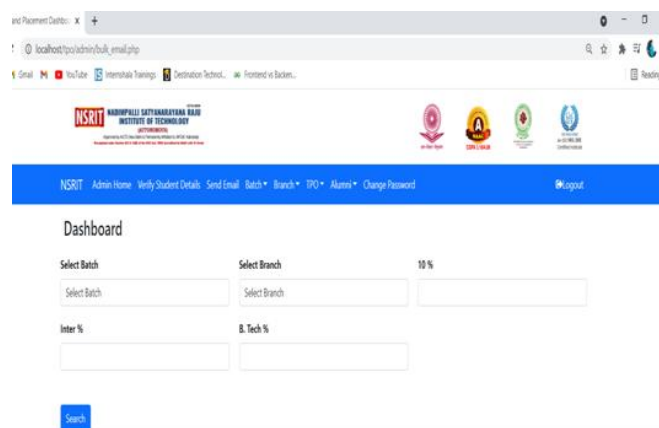
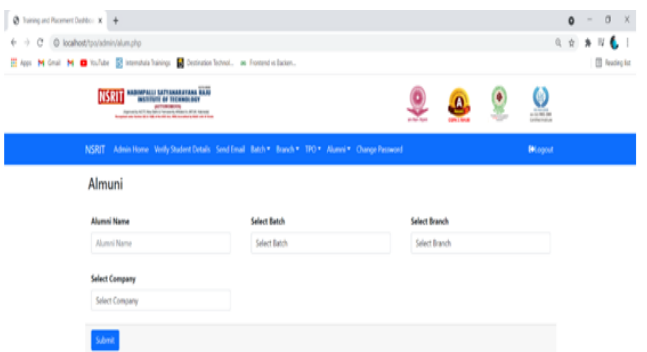
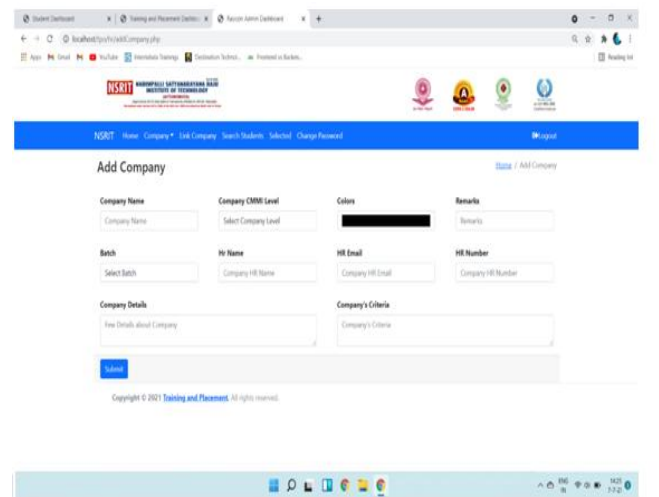
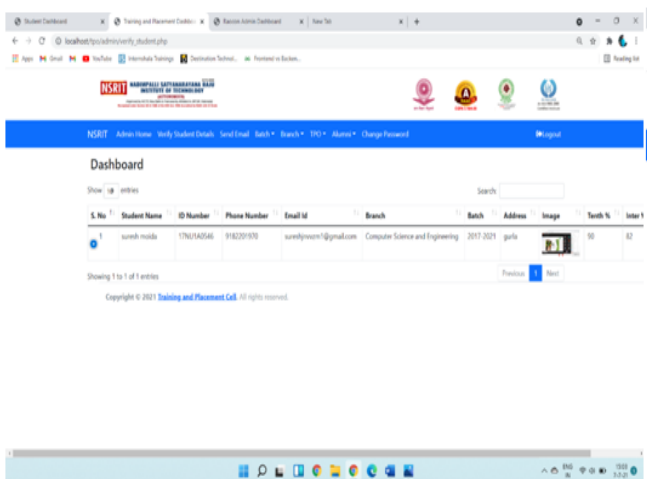
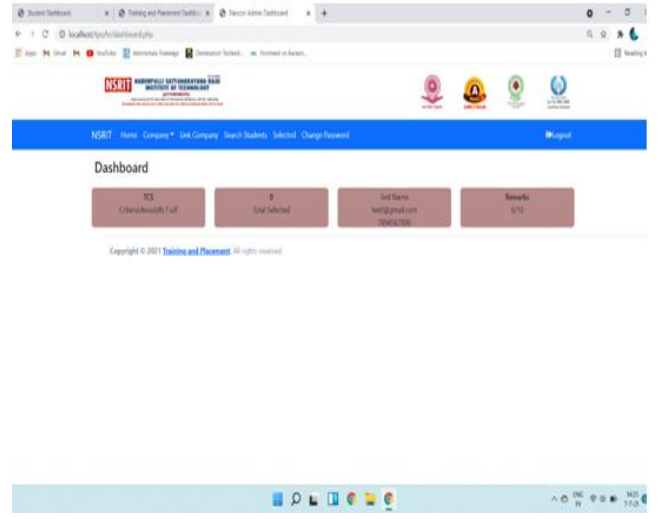
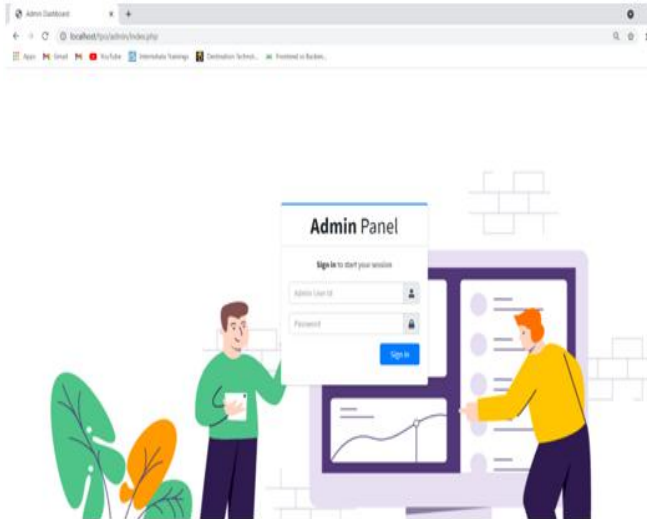
Change Password

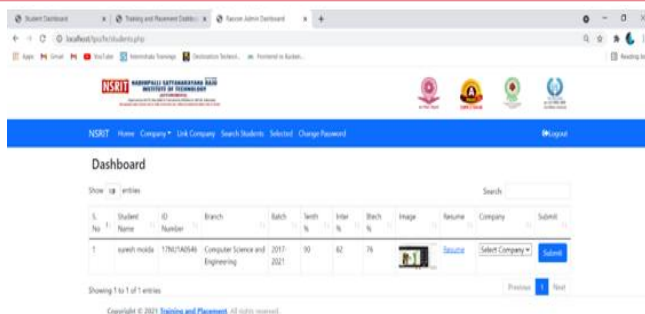
Old Password:

New Password:

Confirm Password:

Admin module





6. Conclusions

Presently we designed our Training & Placement Cell to be very User Friendly. Many features are enhanced to the present Training & Placement Cell. With this Training & Placement Cell most of the TPO's time is saved. The features of the system can be further enhanced in many ways. The documentation that has enclosed can enable even a person with minimum knowledge to understand it well.

Performance

Training & Placement Cell which is developed in JSP technology is a versatile product and is platform independent. The features provided by the Training & Placement Cell makes it one of an interactive online platform for Placements.

Enhancements

- Admin module to be developed, there by automating the services of the Admin resulting in continuous flow of records from database.
- Conducting mock tests is to be added

7. Bibliography

- Roger S Pressman, "Software Engineering – A Practitioner's approach" McGraw – Hill International Editions, Fifth Edition, 2001.
- Henry F Korth, S. Sudharshan, "Database System Concepts" McGraw – Hill International Editions, Fourth Edition, 2002.
- George Koch, Kevin Loney, "Oracle – The Complete Reference", Tata McGraw Hill, Third Edition, 2001.
- Herbert Schildt & Patrick Naughton, "Java2 Complete Reference", Tmh 3/e, 1999.
- James Jawroski, "Mastering Java Script", Tmh 3/e, 2000.

URL'S:

www.roseindia.net/jsp/jsp.html
www.w3schools.com
www.jsptut.com
www.htmlref.com