

## Research Paper on Placement Cell System

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### ABSTRACT

The purpose of Placement Cell System is to automate the existing manual system by the help of computerized equipment's and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. The required software and hardware are easily available and easy to work with.

Placement Cell System, as described above, can lead to error free, secure, reliable and fast Cell system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus, it will help organization in better utilization of resources. The aim is to automate its existing manual system by the help of computerized equipment's and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. Basically, the project describes how to manage for good performance and better services for the clients.

Keywords - updating, online placement cell system, databases, students, eligibility

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## 1. Introduction

In today's world everyone is travelling for jobs after Completion of their graduation. It has become need for every student, but for that they need to travel worldwide in searching of jobs. Placement cell is responsible for providing placement to students of different courses into various companies within the industry.

The "Placement Cell System" has been developed to override the problems prevailing in the practicing manual system. This software is supported to eliminate and, in some cases, reduce the hardships faced by this existing system. Moreover, this system is designed for the particular need of the Job to carry out operations in a smooth and effective manner.

The application is reduced as much as possible to avoid errors while entering the data. It also provides error message while entering invalid data. No formal knowledge is needed for the user to use this system. Thus, by this all it proves it is user-friendly. Placement Cell System, as described above, can lead to error free, secure, reliable and fast Cell system. It can assist the user to concentrate on their other activities rather to concentrate on the record

keeping. Thus, it will help organization in better utilization of resources.

Every organization, whether big or small, has challenges to overcome and managing the information of Company, Job, Salary, Job, Qualification. Every Placement Cell System has different Job needs; therefore, we design exclusive Placement Cell Systems that are adapted to your managerial requirements. This is designed to assist in strategic planning, and will help you ensure that your organization is equipped with the right level of information and details for your future goals. Also, for those busy executive who are always on the go, our systems come with remote access features, which will allow you to manage your workforce anytime, at all times. These systems will ultimately allow you to better manage resources.

## 2. Existing System

The existing system for job placements relies solely on manual processed, but in proposed system we have to computerize using the web application.

- Lack of security of data.
- More man power.
- Time consuming.
- Consumes large volume of pare work.
- Needs manual calculations.
- No direct role for the higher officials

## Proposed System:

The aim of proposed system is to develop a system of improved facilities. The proposed system can overcome all the limitations of the existing system. The system provides proper security and reduces the manual work.

- Security of data.
- Ensure data accuracies.
- Proper control of the higher officials.
- Minimize manual data entry.
- Minimum time needed for the various processing.
- Greater efficiency.
- Better service.
- User friendliness and interactive.
- Minimum time required.

## 3. Preliminary and Problem Formation:

The first step in the system development life cycle is the preliminary investigation to determine the feasibility of the system. The purpose of the preliminary investigation is to evaluate project requests. It is not a design study nor does it include the collection of details to describe the business system in all respect. Rather, it is the collecting of information that helps committee members to evaluate the merits of the project request and make an informed judgment about the feasibility of the proposed project.

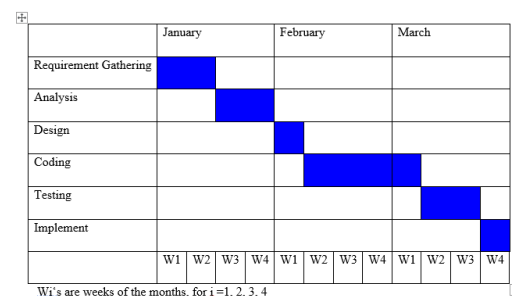
## Project Planning:

Software project plan can be viewed as the following:

- 1) Within the organization:** How the project is to be implemented? What are various constraints (time, cost, staff)? What is market strategy?
- 2) With respect to the applicant:** Weekly or timely meetings with the customer with presentation on status reports. Applicant feedback is also taken and further modification and developments are done.

## 3) Project Scheduling:

An elementary Gantt chart or Timeline chart for the development plan is given below. The plan explains the tasks versus the time (in weeks) they will take to complete.



### Software Requirements:

Name of component	Specification
Operating System	Windows 98, Windows XP, Windows7, Linux
Language	PHP Runtime Environment
Database	MySQL Server
Browser	Any of Mozilla, Opera, Chrome etc
Web Server	Xamp
Software Development Kit	Xamp
Scripting Language Enable	PHP
Database JDBC Driver	MySQL Jconnector

### Hardware Requirements:

Name of component	Specification
Processor	Pentium III 630MHz
RAM	128 MB
Hard disk	20 GB
Monitor	15" color monitor
Keyboard	122 keys

## 4.1 LITRATURE SURVEY

A literature survey on placement cell systems would involve reviewing relevant research papers, articles, and publications that discuss various aspects of placement cell systems in educational institutions.

The placement cell system is a crucial component of educational institutions that helps students in finding

suitable job opportunities and assists employers in recruiting talented individuals. This literature survey aims to provide an overview of existing research and developments in the field of placement cell systems, highlighting key features, challenges, and potential improvements.

### 1. Role and Functions of Placement Cell Systems:

- Gupta, A., & Sharma, R. (2017). Placement Cell Management System. International Journal of Advanced Research in Computer Science, 8(3), 687-691. This paper discusses the role and functions of a placement cell system in educational institutions, including student registration, employer database management, job posting, and placement event organization.

### 2. Automation and Data Management:

- Singh, G., & Verma, N. K. (2018). Automated Placement Cell Management System. International Journal of Innovative Research in Computer Science and Engineering, 5(7), 438-443. The authors propose an automated placement cell management system that utilizes data management techniques to streamline the placement process, including student and employer profiles, job matching algorithms, and interview scheduling.

### 3. Recommender Systems for Job Matching:

- Gupta, N., & Bhattacharya, S. (2019). A Hybrid Recommender System for Job Placement. 2019 4th International Conference on Intelligent Computing and Control Systems (ICICCS), 547-551. This

research paper introduces a hybrid recommender system that combines collaborative filtering and content-based filtering techniques to match job requirements with student profiles, improving the accuracy and efficiency of the job placement process.

#### 4. Enhancing Communication and Collaboration:

### 5.1 Implementation Methodology:

Model View Controller or MVC as it is popularly called, is a software design pattern for developing web applications. A Model View Controller pattern is made up of the following three parts:

### 5. Modules of Placement Cell System:

- **Job Cell Module:** Used for managing the Job details.
- **Qualification Module:** Used for managing the details of Qualification
- **Job Module:** Used for managing the details of Job
- **Company Cell Module:** Used for managing the information and details of the Company.
- **Applicant Module:** Used for managing the Applicant details
- **Login Module:** Used for managing the login details
- **Users Module:** Used for managing the users of the system

### 5. Database

The database section in a placement cell system is responsible for managing and organizing the data related to students, employers, job openings, and placements. It serves as a central repository of information that facilitates the functioning of the placement cell and helps streamline the placement process.

Here are some key aspects and functionalities of the database section in a placement cell system:

1.Student Profiles: The database section stores detailed profiles of students, including their personal information, academic records, skills, and achievements.

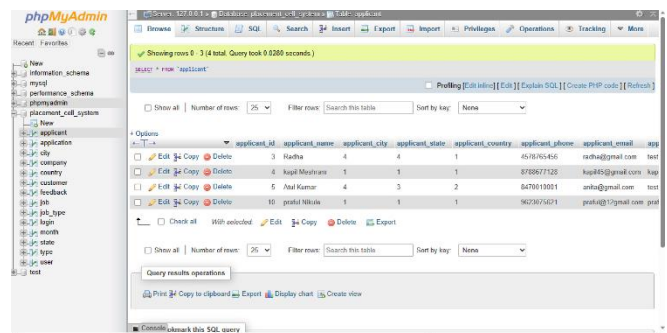


Fig. Applicant Database

2.Application Tracking: The database keeps track of the applications submitted by students for various job openings.

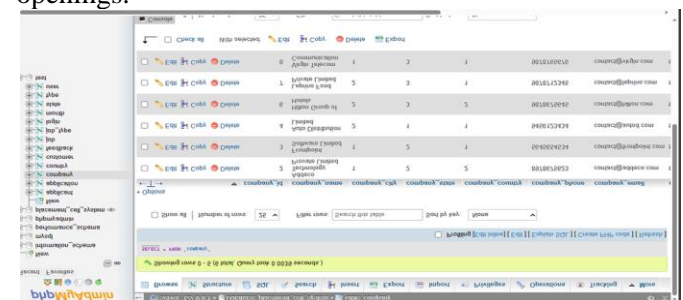


Fig. Company Database

3.Job Openings: The database section maintains a record of job openings from different companies. It includes job descriptions, required qualifications, salary details, and any additional criteria specified by the employers.

## 6.2 Diagrams:

In the placement cell system, the diagrams section could provide tools or features that help analyze and visualize various aspects related to placements. Here are some possible interpretations.

**Use cases:** A UML use case diagram can create a broad, high-level view of the relationship between use cases, actors involved, and systems being performed.

- Students can VIEW Companies.
- Students can VIEW the Jobs by the company.
- Students can apply for Jobs.
- Students can VIEW the Jobs applied.

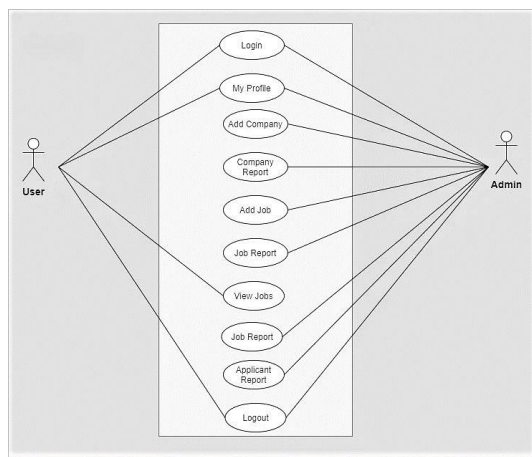


Fig. Use case

- Students can change their password.
- Students can VIEW/UPDATE Profiles.
- Admin will be responsible for maintaining the system. Admin will be keeping a check on the companies and management of the system,
- Admin can add/remove/update companies from lists, add jobs, view applicants' reports, etc.
- Admin can add companies. Admin can view job list.

**Data flow:** A data flow diagram represents the flow of information for any process or system.

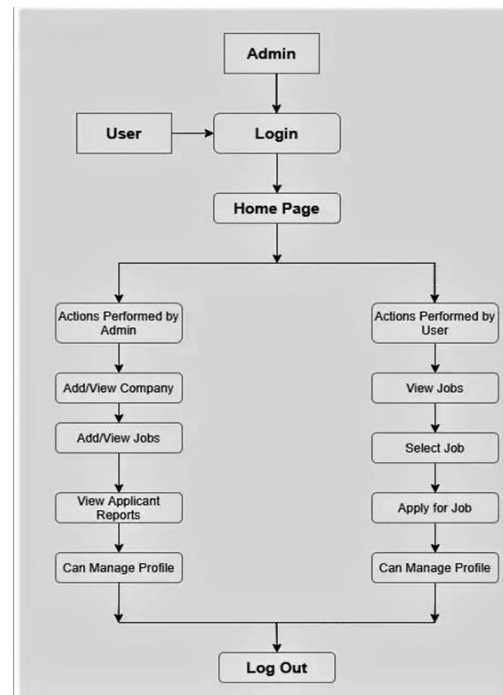
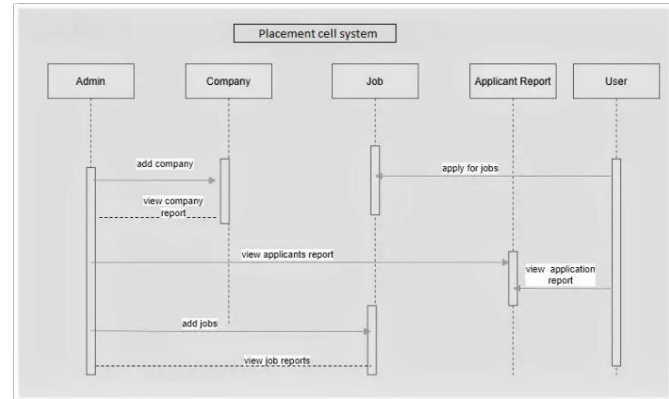


Fig. Data Flow

It shows the system with its relationship to external entities.

- Admin can ADD/VIEW/UPDATE/DELETE Company.
- Admin can ADD/VIEW/UPDATE/DELETE Jobs.
- Admin can VIEW/UPDATE/DELETE Students registered.
- Admin can VIEW the Jobs applied by Students.
- Admin can change Password. Admin can VIEW/UPDATE Profile.



**Fig. Sequence diagrams:**

On the other hand, users can view different companies and apply for jobs. Users can view jobs applied.

## SCREENSHORTS:



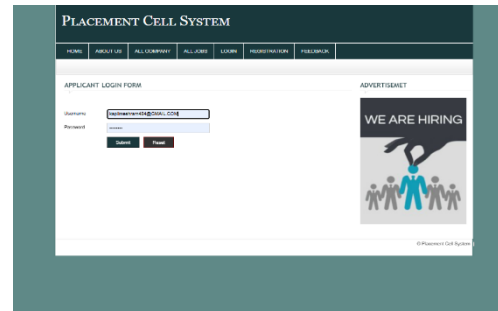
### 1. Home Page



## 2. About us

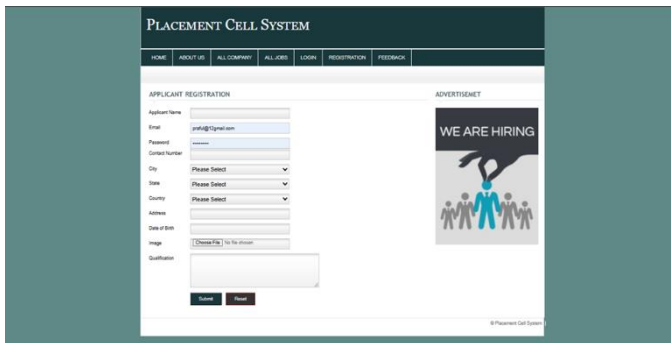


## 5. Applicant Login

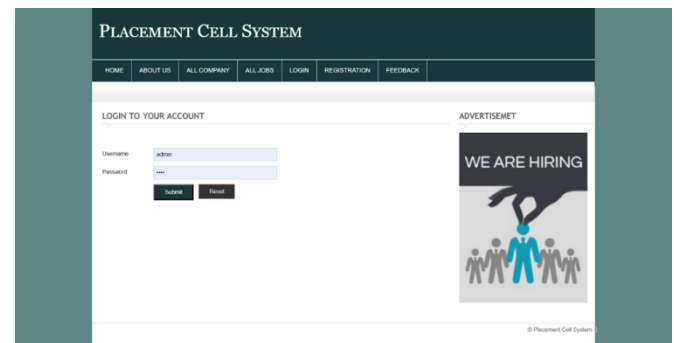


## 3. Applicant

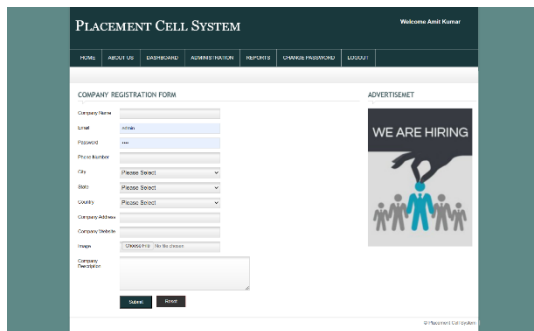
## 3.Registration



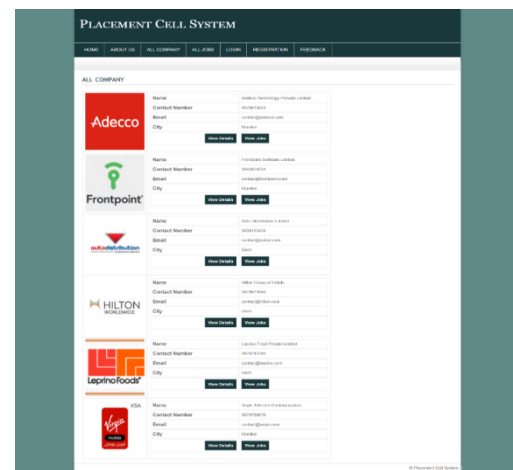
## 6. Admin Login



## 4. Company Registration

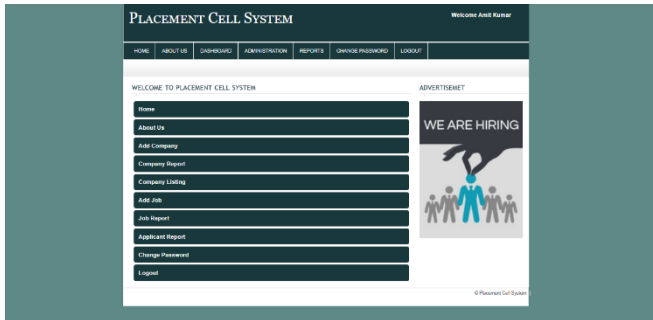


## 7. Company list

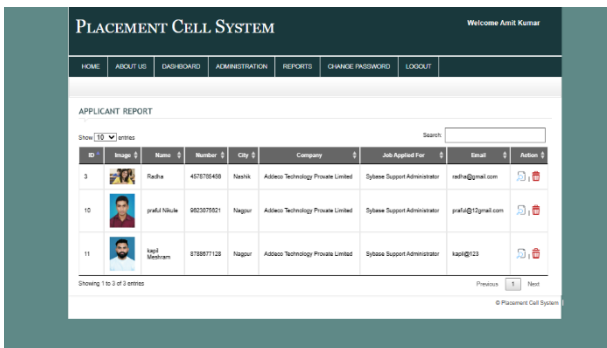




## 8. Admin Dashboard



## 9. Applicant Report



## Conclusion

Our project is only a humble venture to satisfy the needs to manage their project work. Several user-friendly coding has also adopted. This package shall prove to be a powerful package in satisfying all the requirements of the school. The objective of software planning is to provide a frame work that enables the manger to make reasonable estimates made within a limited time frame at the beginning of the software project and should be updated regularly as the project progresses.

At the end it is concluded that we have made effort on following points...

- A description of the background and context of the project and its relation to work already done in the area.
- Made statement of the aims and objectives of the project.
- We define the problem on which we are working in the project.
- We describe the requirement Specifications of the system and the actions that can be done on these things.
- We understand the problem domain and produce a model of the system, which
- We included features and operations in detail, including screen layouts.

## Future Scope of the Project:

- We can give more advance software for Placement Cell System including more facilities
- We will host the platform on online servers to make it accessible worldwide
- Integrate multiple load balancers to distribute the loads of the system
- Create the master and slave database structure to reduce the overload of the database queries
- Implement the backup mechanism for taking backup of codebase and database on regular basis on different servers

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- <http://www.javatpoint.com/java-tutorial>
- <https://docs.oracle.com/javase/tutorial/>
- <http://www.wampserver.com/en/>
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