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# **Software Requirements Specification**

**for**

## **Placement Management System**

**Version 1.0 approved**

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**11<sup>th</sup> December, 2014**

# **1. Introduction**

## **1.1 Purpose**

This Software Requirements Specification provides a description of all the functions and constraints of the Placement management System, developed for various colleges' placement cell.

The Placement Management System is for the students and companies which maintains the database for the students where all the students' records are entered including their academic details and their personal details. It will also manage the data of the Company which would comprise of the profile of the Company, eligibility criteria and the facilities or the package it provides etc.

The System would provide the facility of viewing both the personal and academic information of the student and company; it would also search for eligible students and Company and deal with the insertion and deletion of records.

## **1.2 Document Conventions**

Heading:       Font Size: 16  
                  Font Style: Bold  
                  Font : Times New Roman

Sub Heading:   Font Size: 14  
                  Font Style: Bold  
                  Font: Times New Roman

Content:       Font Size: 12  
                  Font: Times New Roman

## **1.2 Intended Audience and Reading Suggestions**

The intended audience of this document includes faculty members in the Department of T.P.O, the developers and the students looking for On-Campus placements. This will be knowledgeable to company HR to understand the college efficiently. Information displayed, and other statistical information will attract new admission and a clear picture with records will be maintained with this portal.

Blog and news section will be helpful to students to get notified and plan accordingly.

The audience precisely will be:-

- Students of college where portal is implemented
- Faculty and management of college to get statistical view.
- Companies HR which are coming for recruitment purpose
- Students aspiring to get admission to college

### **1.3 Product Scope**

The System would store all the academic as well as personal details of the students who wish to be placed and the Companies who offer jobs to the students.

The details of the Companies as well as the students may be updated or modified or deleted to keep the information up to date.

Also notifications would be sent to the students about the Companies i.e. details like the Company profile, eligibility criteria for the job profile etc. Also the information regarding the Placement activities or procedure for a particular Company i.e. the selection rounds or procedure.

### **1.4 References**

The documents and websites referred to, are as follows:



## **2. Overall Description**

This project is to facilitate students in college, company to register and communicate with Placement Office. The users can easily access the data and it can be retrieved easily in no time.

### **2.1 Product Perspective**

In various colleges, training and placement officers have to manage the students' profiles and the documents of students for their training and placement manually.

Also Placement Officers have to collect the information of various companies who want to recruit students and notify students time to time about the placements.

Placement Officer also have to arrange profiles of students according to various streams and notify them according to company requirements. If any modifications or updates are required in the profile of the students or the Company, it has to be searched and done manually.

Hence the Placement Management System would maintain a huge database for the complete details of the students as well as the Companies in the Placement process which would help to save time and effort.

## 2.2 Product Functions

The Placement Management System is to be developed as an attempt to take a record of Companies and students by restricting a large database that would be used for each.

The System would provide the facility of viewing both the personal and academic information of the students and also the company.

The System would also be able to search for eligible students and company with respect to their specifications and requirements.

The eligible students would receive an email including the details of the Company, placement procedure and other details.

## 2.3 User Classes and Characteristics

The major User classes in the System would be :

### 1. Student

- New Student needs to sign up or register giving complete details
- They can submit resume and update profile information.
- They can register for a particular Company.

### 2. Administrator

- The Admin has the supreme power of the application
- Admin provides approval to the Student and the Corporate registration
- Admin is responsible for maintaining and updating the whole system.
- Admin has the responsibility to notify the Company for any application from a student.
- Admin has to notify the students regarding any changes in the procedure or selection.

### 3. Company

- The Company has to notify the Admin or the Placement officer.
- The Company initially has to sign up.
- The Company may shortlist the students who applied. They may use their details( academic as well as personal).

The other classes would be:

### 1. Database

- It needs to be updated regarding any new additions i.e. of Company and students.
- It has to be updated regarding any notifications from the Company.
- Once the selection procedure is complete, the redundant data of the Company as well as the students is to be deleted.

### **3.1 Operating Environment**

*This web application can be deployed on linux or window machine with Apache Server and MySQL server.*

- *Minimum RAM 512MB*
- *20GB Storage Space.*
- *Intel Dual Core Processor*
- *Internet Connectivity with Ports configured*

*This application can be accessed by user through a machine having any web browser with html javascript support and flash to get video content. The client devices must preferably have browsers like IE9 or above, Mozilla firefox (version 3.5 or above) or Opera 10 or chrome (version 29 or above) or safari installed in their OS and must have enabled flash content to get videos output. Specified versions are preferred to get HTML 5 output.*

*The portal can be accessed through a mobile or PDA with internet access and a web browser supporting html javascript output.*

### **3.2 Design and Implementation Constraints**

*Design Constraints:*

*1. Security:*

*The files in which the information regarding securities and portfolios should be secured against malicious deformations.*

*2. Fault Tolerance*

*Data should not become corrupted in case of system crash or power failure.*

### **3.3 User Documentation**

*User documentation components such as user manuals, on-line help, and tutorials will be delivered along with the software. Manual can be downloaded along the CMS package. Other tutorials and support form will be made available in case to report any bug or other support related issues. A simple how it works page will be included in package in html static page format.*

### **3.4 Assumptions and Dependencies**

- We are assuming that the user should have some basic knowledge of computer.
- Jobseeker should be from any fields.

### **External Interface Requirements**

### **3.5 Software Interfaces**

The software interface uses a LAMP (Linux, Apache, MySQL and PHP) set-up.

Operating system: Debian Linux 4.0

Web Server: Apache 2.2.4

Database: MySQL 5.0

Scripting Language: PHP: Hypertext Preprocessor and JavaScript

Web Browser: Mozilla Firefox

The product will host a local Apache web server where the user interface will be displayed via the Mozilla Firefox web browser. The scripting language PHP will define image placement, size and overall set-up. PHP will also be used to create background colors, border colors and text display. JavaScript will be used to control client-side interactions (i.e. sound output when image is clicked). The MySQL database will store the images and sounds to be displayed at the output. All images are in jpeg format..

### **3.6 Hardware Interfaces**

The program will communicate with hard drive(the filesystem and database) via the appropriate PHP code. The user can communicate through browser using keyboard and a display through graphical interface displayed on user's screen.

### **3.7 Communications Interfaces**

The requirements associated with any communications functions required by this product, including e-mail, web browser, network server communications protocols, electronic forms, and so on. Communication standards that will be used, such as FTP or HTTP. Communication security or encryption issues will handle by using java scripts.

## **4. System Features**

### **4.1 Notice Boards with Placement Notifications**

The Notice Boards section is the more important module of the System as it provides updates to the students regarding the Companies that would come to Campus or that would be coming in the next few weeks.

It would also provide brief information about the Company and also the details of the Job profile, package etc. The details of a particular Company would be given later or in another section. This section would just provide the necessary details to let the students know the Company.

Priority: It has a very high priority because only if it is available and the details of the upcoming Companies are mentioned, only then will the students be able to apply for them.

Benefit: The benefit of this would be that the students would be aware of the upcoming Companies and be able to apply for them.

### **5.2. Register**

The College or students and the Companies have to register with all their documents that the Administrator would verify. Only after thorough verification would the college or student and the Company be allowed to register.

These documents would also be maintained by the Administrator for future reference. The documents should be maintained at least till the placement activities of the particular company or students are not completed.

While registering the company and students should give their complete details i.e. academic or professional and personal details.

### **5.3. Login**

#### **5.4. Videos**

#### **5.5. Upcoming Placement Activities**

#### **5.6. Managing queries**

#### **5.7. Report generation**

#### **5.8. Registration**

#### **5.9. Maintaining Statistics**

#### **5.10. Report Generation**

#### **5.11. Blog to manage posts and updates**

## 4.2 System Feature 2

This section tell some unique features of our project.

- a) Links= In our project links provide to user to read about how it get hire to specific companies.
- b) Books= Online important books provide to user , which user can easily download directly from the our website.
- c) News = The latest news about that in which company what requirement available ,there availability and when they come for specific job.
- d) Advertise= We try to advertise other important links about job but we not sure to do this but we think on that.
- e) Speed= Because we use oracle the speed to extract and transate data is become very fast and become very flexible.
- f) Expertise article= We also publish latest articles by expertise on the latest trend and on the latest technologies .

## 5. Other Nonfunctional Requirements

### 1. Usability

- a. The software must have a simple and User friendly Interface.
- b. The navigation to various pages should make it more convenient to the users so as to save time and confusion.

2.

### 5.1 Performance Requirements

- The users must get the response within seconds. i.e. the response time of a particular function should be minimum.
- Completely separate business login at server side from the student interface ensures good performance.
- The system would exhibit high performance because it would be well optimized. The business logic would be clearly separate from the User Interface.

### 5.2 Safety Requirements

*<Specify those requirements that are concerned with possible loss, damage, or harm that could result from the use of the product. Define any safeguards or actions that must be taken, as well as actions that must be prevented. Refer to any external policies or regulations that state safety issues that affect the product's design or use. Define any safety certifications that must be satisfied.>*



### 5.3 Security Requirements

*<Specify any requirements regarding security or privacy issues surrounding use of the product or protection of the data used or created by the product. Define any user identity authentication requirements. Refer to any external policies or regulations containing security issues that affect the product. Define any security or privacy certifications that must be satisfied.>*

### 5.4 Software Quality Attributes

*<Specify any additional quality characteristics for the product that will be important to either the customers or the developers. Some to consider are: adaptability, availability, correctness, flexibility, interoperability, maintainability, portability, reliability, reusability, robustness, testability, and usability. Write these to be specific, quantitative, and verifiable when possible. At the least, clarify the relative preferences for various attributes, such as ease of use over ease of learning.>*

## 5.5 Business Rules

### 6.5.1. Business Rules for Master CV and Verification

- The eligible students are required to fill in the Training and Placement Master CV and also upload their photograph in the space provided in the form.
- It is expected that a student does not add any ambiguous or fraudulent information in his/her resume. Resume checks will continue throughout the placement process. If, on verification, any discrepancies are found, the student would be de-barred from placements. Also strict disciplinary action may be taken.

### 6.5.2. Application Rules

- All applications to the companies are to be made only through online system of the Training and Placement System. If a student does not apply on website for a particular company, he/she will not be allowed to participate in the selection process of that company.
- A student can apply to a maximum of 10 companies (default) on campus. A warning would be issued as one crosses 8 applications.
- After a student has exhausted his/her quota of 10 applications and desires to make further applications:
  - a. He/she will be required to approach his/her concerned authority and Head & obtain in writing a letter certifying the need of the student to obtain more applications in a standard format.
  - b. Only on receipt of such a request, would T&P consider and add 5 more applications to the student quota of applications.

### 6.5.3. Business Rules for Withdrawing an Application

The student may withdraw his/her application from a company on campus subject to the following rules and regulations:

- The student can withdraw his/her application to a company only if the last date of application to that particular company is not over.
- The student may withdraw from any or all companies without any limits, but only before the last date of application to company/companies concerned.
- The student may also reapply to a company that he/she had earlier withdrawn from, provided he/she has not exceeded his/her application quota & application deadline for the company is not over.

#### **6.5.4. Business Rules for Selection Process**

- One student is allowed to secure only one job if the gross package is more than 4 lakh per annum. If the gross amount offered is less than or equal to 4 lakh per annum, he/she is eligible to apply for a company whose gross amount is more than 4 lakh per annum. And therefore after one secures a job with gross greater than 4 lakh per annum, one would be automatically deregistered from that day onwards.
- As more than one company would be visiting the campus, there may be a possibility that one student secures more than one job on the same day. Therefore:
  1. Each eligible student will be required to fill up his/her individual preferences in advance for each placement day, ranking the companies he/she has applied to/ has been shortlisted on a particular day, in the descending order of his/her choice. The preferences are editable till a day before by 23:59 hrs.
  2. These preferences shall be used in case:
    - i. The student gets selected in more than one company on the same placement day.
    - ii. Company wants to make an on-the-spot offer to the student before the selection procedure for the day is over.
  3. In case a student gets selected in 2 or more companies on the same day, then the company ranked higher in the preference order of the student will be the one where the student would be finally considered placed.
  4. In case a company decides to offer the student an on-the-spot job offer before the entire placement process for that day is over then he/she will not be allowed to appear further for the placement process of the other companies which were ranked lower in preference than the company that made on-the-spot offer. The student will, however, be allowed to appear in such company/companies, which were higher in preference order than the one which offered the job.
  5. In case a student does not fill the preference order for a placement day, then the allotment will be down by the electronic system and he/she will not be allowed to continue to appear for the placement process of the other companies.

- In case a company does not give its final selection list on the same day it visits the campus, then the students will be allowed to appear in other companies visiting on subsequent days till they finally get selected. However, if a student has already been selected by a company that came on the subsequent day & the company that deferred its decision also makes an offer to him/her later on, then:
  1. In case more than one result of selected student(s) comes on the same day, then the student will be given an option to choose between company of the previous day and the company of the day.
  2. In case the result of the company (which deferred its selection process) gives its result on a day later than the day when the student was selected by another company, this late offer will be rejected and the company would be informed.

#### **6.5.5. Pre Placement Offers policy**

- All pre placement offers extended to any student have to be routed through the placement cell. If one likes the offer, one is advised to accept the offer. Such students who accept it would be deregistered from the on-campus placement process.
- In case the candidate rejects the offer within one week of the release of PPO, he/she is treated as a normal candidate.
- In case the candidate neither accepts nor rejects the PPO within one week of the release of PPO, he/she would be allowed to appear for the on-campus placement process till such date that the company visits the campus. After that day, he/she would be deregistered.

#### **6.5.6 Student Conduct and Disciplinary Policy**

- Absenteeism rules and policy:
  1. For absenteeism in any test, interview or any selection process which an applicant has to attend as part of a company's recruiting procedure the following minimum penal action would apply:
    - Absence of first time – Fine of Rs. 1000
    - Absence of second time - Fine of Rs 2000
    - Absence of third time – Debarred from on-campus placement
- Re-registration requests would be allowed from 10 AM – 5 PM on working days only. Re-registration can take up to half a working day after receipt of the stamped payment voucher from the bank.
- A fine of Rs. 500 would be imposed on students who are absent in pre-registered placement events:
 

If for whatever reasons the student remains absent from any stage/round of selection process he/she would be immediately de-registered from T&P and would not be allowed to take part in the placements till he/she gets himself/herself re-registered.
- Impersonation in tests or any kind of malpractice is a serious offence. Such students would be de-registered immediately and also will be referred to the concerned authorities for disciplinary action.
- A list of companies coming on-campus for recruitment would be put up on the T&P website. Students must not apply to any of these companies off-campus, as under an accord of mutual understanding

between the firms, companies would notify T&P whenever they receive an off-campus application from any of the students. In all such cases suitable action as per the institute rules would be initiated apart from the candidates being deregistered.

- Students would not be allowed to appear in final selection process (test/GD/interview etc.) of companies they have not applied to through the T&P system or have not been shortlisted in those companies. Students must refrain from contacting personnel of such companies when they are on-campus. Violation of this will attract deregistration and suitable disciplinary action.

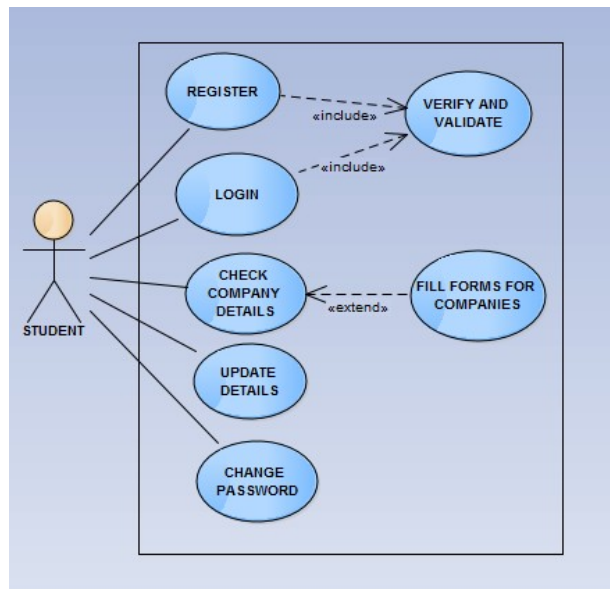
### Glossary:

SR. NO	TERM	DESCRIPTION
1.	SRS	Software Requirement Specification
2.	TPO	Training and Placement Office
3.	PPO	Pre-placement Offer
4.		
5.		
6.		
7.		
8.		
9.		

### Appendix B: Analysis Models

*<Optionally, include any pertinent analysis models, such as data flow diagrams, class diagrams, state-transition diagrams, or entity-relationship diagrams.>*

## USE CASE DIAGRAM FOR STUDENT



## USE CASE DIAGRAM FOR COMPANY