Software Requirements Specification

Placement Coordination System

Version 1.0

02-10-2019

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Revision History

Date	Description	Author	Approver	Comments
<date>	<Version 1>	<Your Name>	<Approver's Name>	<First Revision>
02-10-2019	Version 1	Ninaad		

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1. Introduction

The goal of this SRS document is to list out all the requirements for building a web based application for the task of placement coordination. This document will be an outline for the collaborators to meet the specifications and guidelines for the intended audience.

1.1 Purpose and Intended Audience

The purpose of this product is to make the entire process of placements unhindered, organised and efficient. This product aims to automate the process of placements with features like one-click registration, seating information for a particular test, placement related events using a calendar and an administrator side which provides features like sending out details, scheduling events and sending out notifications for any last minute changes.

The intended audience are all students, the placement cell of a particular college and the various associated companies.

1.2 Scope

Placement Coordination System is a web-based application that will streamline the entire process of placements from the commencement of a particular company's arrival to its selection of desired applicants.

The proposed system would let students register for the placement cycle and create their profile by filling their academic and other professional details which would be used to process and check the number of eligible students according to the job description.

- Major features are:
    - one-step registration
    - keeping track of companies and students
    - maintaining a scheduling system for managing the placement drive

We aim to deploy this application in PES University and later expand it to other colleges.

1.3 Definitions, Acronyms, and Abbreviations

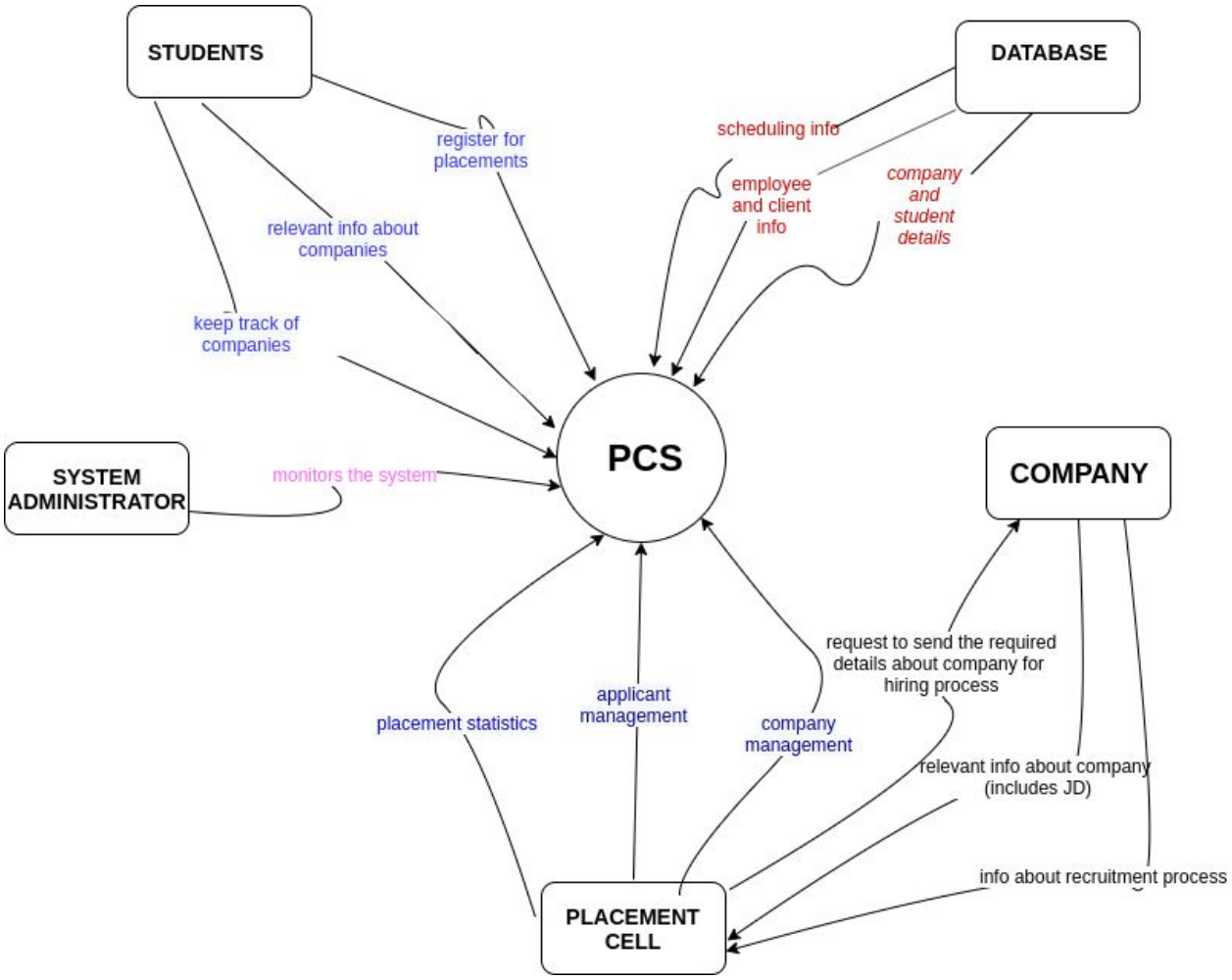
PCS - Placement Coordination system.
GUI - Graphical User interface.
Client-Server model - a distributed application structure that partitions tasks or workloads between the providers of a resource or service, called servers, and service requesters, called clients.
Portal - a website or web page providing access or links to other sites.
AWS - Amazon Web Services
System refers to the placement coordination system.
CTC - Cost to company details often used to indicate the package offered by the company.
USN - User Serial Number often given to students by the college authorities to access the college facility.

Push Notification - an automated message sent by an application to a user when the application is not open.

2. General Description

2.1 Product Perspective

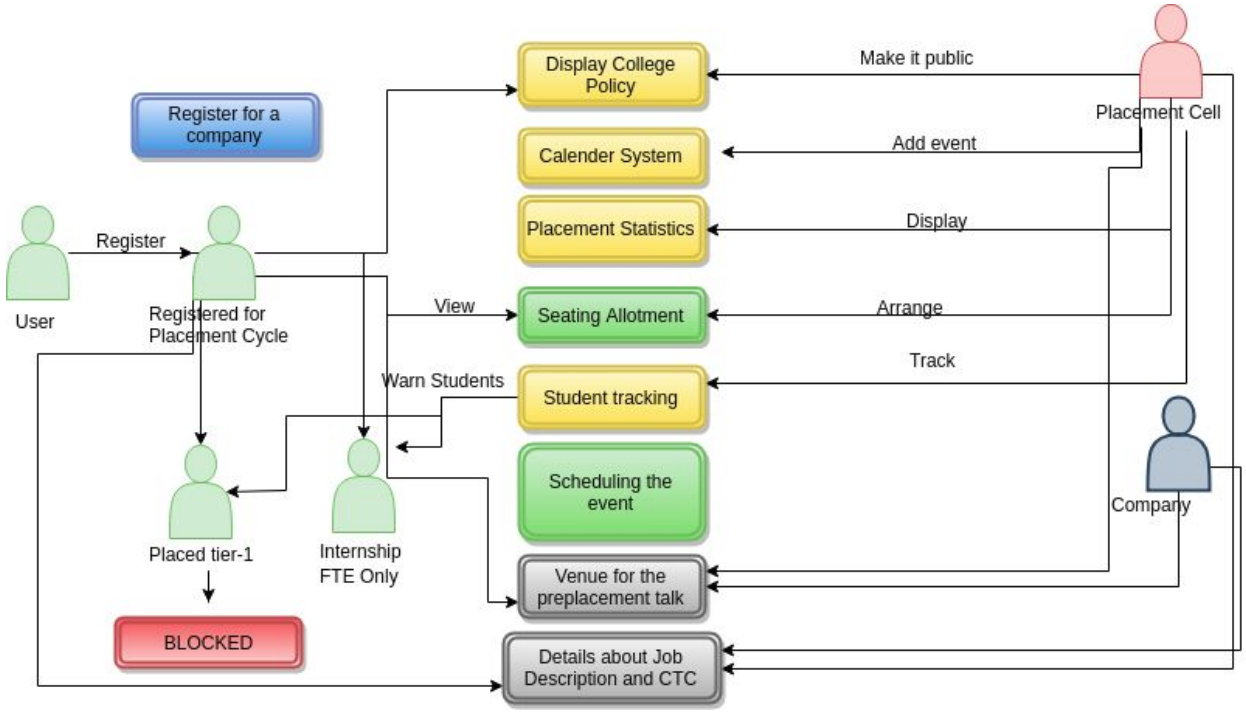
PCS is an application that replaces the current infrastructure which relies on a mail based mechanism. It is a web based system implementing client-server model. This portal provides platform that students can rely on completely for all things related to placements.



2.2 Product Features

FE-1 : Registration for Placement Cycle.
FE-2 : Displaying College policy for students to be aware of.
FE-3 : Registration for a particular company.
FE-4 : Keeping Track of companies.

FE-5 : Maintaining a calendar system for students.
FE-6 : Seating allotment for shortlisted students.
FE-7 : Venue for the Pre-Placement Talk/Interviews.
FE-8 : Displaying Placement Statistics.
FE-9 : Company Information and Job Search Filter.
FE-10 : Keeping track of students who are already placed/have an internship.
FE-11 : Keeping track of the right branches to be informed.
FE-12 : Making sure there is no overlap in any of the events of various companies.



2.3 User Characteristics

System Administrator	System administrator is a body that monitors the health of the website.
Student	Student is a person who is taking part in the placement season, with the goal of finding a job or an internship. The student will use the system to keep track of the companies visiting the campus based on his/her desired job profile, and also registering for those desired companies.
Placement Officer	Placement Officer is a person who is in charge of organizing the placement season. This person will use the system to communicate with the companies, schedule the written tests/interviews with respect to time and location, alert students with the latest updates with respect to the placement season, and also view student information. The updates can be either regarding future companies

	visiting the campus (with CTC and the job profiles), or could be to send out lists of students who are selected for further rounds in a recruitment process. The placement officer may have to be trained to use the system efficiently and productively.

2.4 Operating Environment

OE-1:	System is not dependent on geographical areas.
OE-2:	System shall operate in newest versions of all web browsers.
OE-3:	There should be no constraint on users being able to access the system at a given time.
OE-4:	Data is generated by online registrations and stored in the mongoDB database of AWS.
OE-5:	Continuous service is preferred, but as long as there is no data loss, minor service interruptions can be tolerated.
OE-6:	Personal data will be stored in the mongo database, so the AWS database must be secure (The security methodology is yet to be explored).
OE-7:	React will be needed to create the user interface for the system.
OE-8:	The users will be notified via push notifications.
OE-9	Django will be used for the backend of the system.

2.5 Constraints

CO-1:	The user should have the latest browser version.
CO-2:	The AWS services for free-tier level is limited.

2.6 Assumptions and Dependencies

AS-1	No more than 3000 active users can access our system at a time. This will be worked upon after the initial version of the project.
AS-2	User's resume(pdf file) cannot be more than 10Mb in lieu of preventing excess storage usage.
AS-3	Users using this web application belong to the specific college and they have permission to access this application.
D-1	Initially, the data needs to be verified with the concerned authority to check if there is any mismatch with the data given.

3. Specific Requirements

3.1 Functional Requirements

FR1	Student Information	The system shall allow a user (limited to Placement officer) to view student information. A student's information can cover the status of the student in the placements season and academic details.
FR2	Seating Allotment Information	The system shall allow any user to view the seating allotment information for a company's written test. The allotment information includes the location and the time of the written test. The functionality shall also extend to dynamically updating the allotment information to account for last minute changes and alerting the students with the updates. The update functionality is restricted to the Placement officer.
FR3	Companies' Information	The system shall allow any user to view companies' information. The user shall be allowed to search for companies with input as specific job profiles, the CTC, and the date of visiting the campus. Editing and updating the companies' information shall be limited to the Placement officer.
FR4	Placement Statistics	The system shall allow any user to view placement statistics. The statistics can be represented graphically and numerically. These statistics are not limited to that current year's placement season, but also include previous years' placements. Editing or updating the statistics shall be limited to the Placement officer.
FR5	Placement Policies	The system shall allow any user to view the placement policies. Editing the placement policies shall be limited to the Placement officer.
FR6	Tech Events	The system shall allow any user to view the upcoming tech events in the campus. Updating, editing and adding these events will be limited to the Placement Officer. This is an additional feature that will be implemented only after completion of the placement specific functionalities.
FR7	Company's Campus Visit Information	The system shall allow any user to view a company's campus visit information. The information includes the date of visiting, the CTC and the job profiles being offered. However, this information will be sent in the form of real-time alerts to students via push notifications.
FR8	One Click Registration	The system shall allow students to register for a particular event through one click with the interaction with the database for past data
FR9	Scheduling event	The system shall allow the admin to schedule an event so that the students can have a smooth process for the same.

3.2 Non-Functional Requirements

NFR-1	Availability	The system will aim to achieve 99.9% availability using cloud services.
NFR-2	Maintainability	The architecture will be as simplified as possible to increase the maintainability of the system.
NFR-3	Performance	The product shall be web-based and has to be run from a web server. The product shall take initial load time depending on internet connection strength which also depends on the media from which the product is run. The performance shall depend upon hardware components of the client/customer. The system must support at least 1000 concurrent users at a time.

4 External Interface Requirements

4.1 User Interfaces

UI-1: Web application shall begin with a login page using Gmail account/USN and password. For new users, they will be redirected to a separate Signup Page for more information.

UI-2: Once logged in, web application will have a search functionality to aid in finding the details for a particular company.

UI-3: Web application will contain three separate navigation paths:

UI-4.1: A Company tab which displays a list of upcoming companies in decreasing order of date published.

UI-4.2: A Statistics tab which shows the general as well as company specific trends.

UI-4.3: A Profile tab which contains the information pertaining to the registered companies as well as seating allotment for the test.

UI-4.4: A Notifications tab highlighting the general updates for the students.

UI-4: For the administrator, there will exist a separate tab for uploading/updating new information of a company, as well as pre-placement and examination venue details.

4.2 Hardware and Software in terms of how they would interact or how they would be executed

4.2.1 Software Interfaces

SI-1: All students interact with the PCS to get all the relevant information like seating information, calendar of events, etc.
SI-2: Whenever a user chooses to register for a particular company, the system will communicate with the database to get all the relevant information for that user .
SI-3: The PCS shall communicate with the placement coordinator to verify the details of a particular company, to make sure if a particular detail needs to be made accessible to the students.
SI-4: The PCS will alert the placement officer if a particular candidate is already placed or if he has an internship or not.
SI-5: The system shall automatically filter students based on the eligibility criteria set by both the placement officer as well as the company.
SI-6: The system shall communicate with a database to display relevant details.
SI-7: The system shall communicate with the company for the final list of students and will help in coordinating any other additional procedure that needs to be completed for the offered students.(For example, collecting goodies, collecting the offer letter, filling any form and so on.)

4.2.2 Hardware Interfaces

Not applicable.

4.2.3 Communication Interfaces

CI-1: The system shall send a notification to the user as a reminder 24 hours prior to the events, including:

- Registration Deadline
- Pre-Placement Activities
- Placement Examinations

CI-2: In case of any changes, be it time or seating information, the user will be notified via a similar push notification.

5 Appendix A: Glossary

No glossary terms available at this time.