CS345 - CS346: Software Engineering
Placement Portal
System Requirement Specification

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1 Project Statement

During internships and placements, the students usually face a lot of confusion for the resources and experiences of their seniors. They have to approach the seniors individually for different companies, their recruitment processes, and their experiences in the companies. So, it would be really convenient, if we could consolidate all of that information in one place, where the old students could post their experiences and the current students could read them. Now, this could also be done by consolidating them in a pdf document, but if the scale of this information increases (taking into account several graduation years, and around 900 students in each year), it gets difficult to structure the information and search through it. This website would eliminate those difficulties.
Some of the features which the portal would include are:-

- A facility for the seniors to upload their preparation phase experience and their company working experience

- The current students could see the summarized statistics consolidated company wise, branch wise, year wise, and role wise.

- We could search through this data based on different criteria, such as skills required, profiles and companies etc

- With the data available we can even add further features such as personalized feeds resource recommendations etc which can be decided later

2 Purpose of Document

This Software Requirements Specification provides a description of all the functions and constraints of the Placement Helper System.The document will provide a comprehensive summary of the software's features and will be delivered to a customer for approval. It will also serve as a guide for the programmers working on the first edition of the software.

3 Scope of System and Target Audience
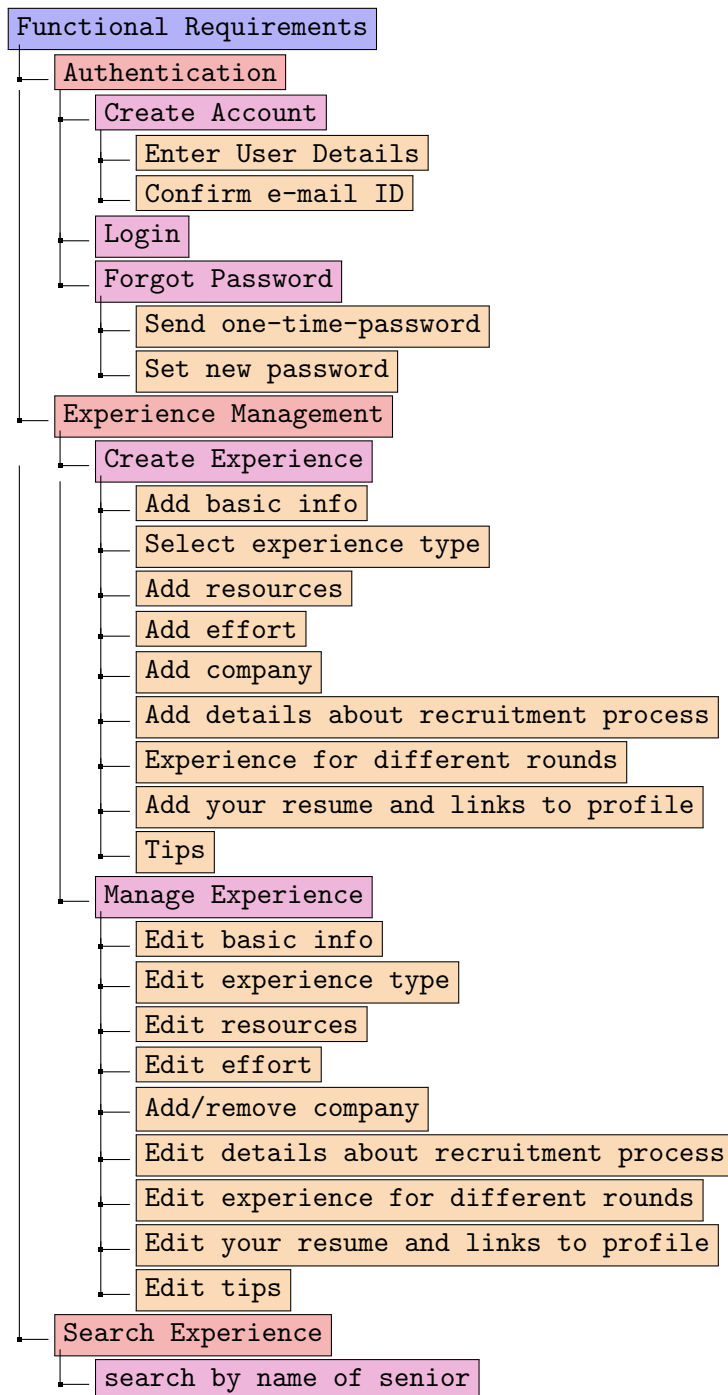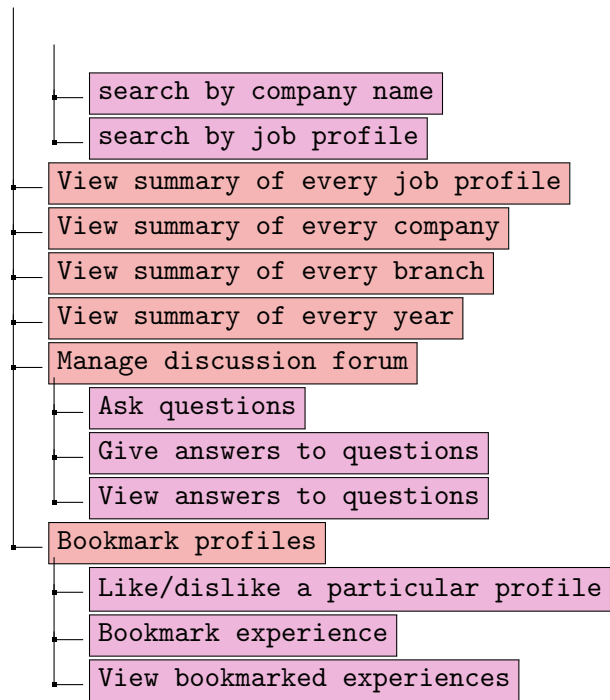
The Placement Helper is intended to be used by the students during preparation for placements and internship drives.The Placement Helper System is for the students of IIT-Guwahati to have easy access to important information and resources directly from their seniors who went through the process which will make their intern and placement preparation easier and more convenient.

4 Overview of Document

This SRS Document is organized into two sections to offer the user information about the Placement Helper application system's functional and non-functional needs. The initial portion is concerned with the collection of various functional needs and their hierarchy, which is followed by an iterative process of guessing and contextual inquiries. Furthermore, the second component addresses the collection of non-functional criteria, specifically "Usability," through Active Contextual Inquiry and the representation of our collective understanding of the user via Affinity Diagram.

5 Functional Requirements Hierarchy

```
Functional Requirements
  └─ Authentication
      └─ Create Account
          └─ Enter User Details
          └─ Confirm e-mail ID
      └─ Login
      └─ Forgot Password
          └─ Send one-time-password
          └─ Set new password
  └─ Experience Management
      └─ Create Experience
          └─ Add basic info
          └─ Select experience type
          └─ Add resources
          └─ Add effort
          └─ Add company
          └─ Add details about recruitment process
          └─ Experience for different rounds
          └─ Add your resume and links to profile
          └─ Tips
      └─ Manage Experience
          └─ Edit basic info
          └─ Edit experience type
          └─ Edit resources
          └─ Edit effort
          └─ Add/remove company
          └─ Edit details about recruitment process
          └─ Edit experience for different rounds
          └─ Edit your resume and links to profile
          └─ Edit tips
  └─ Search Experience
      └─ search by name of senior
```

- search by company name
- search by job profile
- View summary of every job profile
- View summary of every company
- View summary of every branch
- View summary of every year
- Manage discussion forum
  - Ask questions
  - Give answers to questions
  - View answers to questions
- Bookmark profiles
  - Like/dislike a particular profile
  - Bookmark experience
  - View bookmarked experiences

6 Functional Requirements

R.1 Authentication

R.1.1 Create Account

R.1.1.1 Enter user details
- **Input:** User information
- **Output:** One-Time-Password
- **Description:** Send a One-Time-Password to the user's email for confirmation

R.1.1.2 Confirm email ID
- **Input:** One-Time-Password sent to the user's email
- **Output:** Verification confirmation verdict
- **Description:** Create a new account from the user's details and display account creation message

R.1.2 Login
- **Input:** User credentials
- **Output:** Login status
- **Description:** Verify user credentials and provide access to user data.

R.1.3 Forgot passowrd

R.1.3.1 Set one-time-password
- **Input:** User ID
- **Output:** One-time-password
- **Description:** A one-time-password is sent to the user's email.

R.1.3.2 Set new password
- **Input:** One-time-password received by the user and the new password
- **Output:** Password change verdict
- **Description:** Update the password to that entered by the user by authenticating with OTP

R.1.4 Logout
- **Input:** User Permission
- **Output:** Message displaying successful logout and home page loaded
- **Description:** Terminates the current user's session

R.2 Experience Management

R.2.1 Create Experience

R.2.1.1 Add basic info

- **Input:** User information
- **Output:** Success / Error
- **Description:** procures user information for experience

R.2.1.2 Select Experience type
- **Input:** Placement / Internship
- **Output:**Success / Error
- **Description:** Nature of user's experience

R.2.1.3 Add resources
- **Input:** resources used
- **Output:** Success / Error
- **Description:** User mentions the resources he/she used while preparing for the recruitment process

R.2.1.4 Add Effort
- **Input:** days of preparation, hours given per day
- **Output:** Success / Error
- **Description:** User mentions amount of effort put in.

R.2.1.5 Add Company
- **Input:** Company, Job Profile
- **Output:** Success / Error
- **Description:** The user mentions the company and job role for which he wants to share his/her experience.

R.2.1.6 Add Details about recruitment process
- **Input:** Number of tests , Number of interviews, selected or not
- **Output:** Success / Error
- **Description:** User mentions the number of processes he/she goes through during the recruitment process.

R.2.1.7 Experiences for different rounds
- **Input:** Nature of round, topics of questions, tips or comments, overall difficulty
- **Output:** Success / Error
- **Description:** User mentions his/her experience of every round individually.

R.2.1.8 Add your Resume and Links to your Profile
- **Input:** resume and links
- **Output:** Success / Error
- **Description:** User shares his resume and social links like github, linkedin, etc.

R.2.1.9 Tips

- **Input:** tips and comments
- **Output:** Success / Error
- **Description:** User can share final comments or tips for the recruitment process of the particular company.

R.2.2 Manage Experience

R.2.2.1 Edit basic info

- **Input:** Changed details of the user
- **Output:** Success / Error
- **Description:** Changes the information filled in basic info by the user

R.2.2.2 Edit Experience type

- **Input:** Placement / Internship
- **Output:**Success / Error
- **Description:** Edit the experience type field for an experience

R.2.2.3 Edit resources added

- **Input:** Updated resources
- **Output:** Success / Error
- **Description:** Changes the information filled in the resources section

R.2.2.4 Edit Effort

- **Input:** Updated information about efforts put in
- **Output:** Success / Error
- **Description:** Changes the information filled in the efforts section

R.2.2.5 Add/ remove company profiles

- **Input:** Updated company profiles
- **Output:** Success / Error
- **Description:** Changes the information filled in company profiles by the user

R.2.2.6 Add Details about recruitment process

- **Input:** Updated information about recruitment process
- **Output:** Success / Error
- **Description:** Changes the information filled in the recruitment process section

R.2.2.7 Edit experiences for different rounds

- **Input:**Updated information about experiences for different rounds
- **Output:** Success / Error
- **Description:** Changes the information filled in the experiences for different rounds section

R.2.2.8 Edit resume your profile links
- **Input:** Updated links to user's various profiles
- **Output:** Success / Error
- **Description:** Changes the information filled in the profile links section

R.2.2.9 Tips
- **Input:** Updated Tips and comments
- **Output:** Success / Error
- **Description:** Changes the information filled in in the tips section by the user

R.3 Search Experiences

R.3.1 Search by name of senior
- **Input:** Name of senior
- **Output:** Experiences of the senior selected
- **Description:** Show the experiences of selected senior if found

R.3.2 Search by company name
- **Input:** Name of company
- **Output:** List of candidates selected in the company
- **Description:** Show the list of shortlisted candidates in the company selected

R.3.3 Search by Job Profile
- **Input:** Job profile
- **Output:** List of candidates selected in the job profile
- **Description:** Show the list of candidates of the profile selected

R.4 View Summary of Job Profile
- **Input:** Job profile
- **Output:** Various features related to Profile.
- **Description:** It will include different sections for various features such as various resources for preparing for the profile, companies visiting for that profile.

R.5 View Summary of Company
- **Input:** Company
- **Output:** Various features related to Company
- **Description:** It will include different sections for various features as different profiles for which company hire and CPI cut offs and some experiences of seniors joining the company

R.6 View Summary of every branch

- **Input:** Branch
- **Output:** Various statistics of the selected branch
- **Description:** t will include different statistics for the branch like total selections in different companies, total selections in different roles, etc.

R.7 View Summary of every year

- **Input:**Year
- **Output:** Various statistics of the selected year
- **Description:** It will include statistics of students placed in the selected year.

R.8 Manage Discussion Forum

R.8.1 Ask questions

- **Input:** User's question
- **Output:** Confirmation of the question posted on forum
- **Description:** Post question asked by the user on the forum available to everyone for viewing and answering

R.8.2 Give answers to questions

- **Input:** User's answer
- **Output:** Confirmation of the answer posted on the forum
- **Description:** Post answer provided by the user on the forum

R.8.3 View answers to questions

- **Input:** Question
- **Output:** All answers to the selected question
- **Description:** Shows all answers to the question asked in a new page

R.9 Bookmark profiles

R.9.1 Like/Dislike a particular profile

- **Input:** Like/Dislike
- **Output:** Updated count for likes/dislikes
- **Description:** Update the like/dislike count for a particular candidate's profile selected by the user

R.9.2 Bookmark experiences for viewing later

- **Input:** Experience to be bookmarked
- **Output:** Confirmation of bookmarking the experience

- **Description:** Add the chosen profile to bookmarks for the user's account

R.9.3 View bookmarked experiences

- **Input:** User Permission
- **Output:** List of all the bookmarked experiences
- **Description:** Load the bookmarked experience's page for the logged in user

7 Report on Contextual Inquiry

7.1 Method of Conducting

Each of our group members discussed their internship preparation experience, while the others observed what he said and noted the difficulties he faced in obtaining necessary information, such as details about interviews and experiences from seniors who have gone through a similar process in the previous years. Later, we combined all the inconveniences faced by all the members. We followed the affinity diagram model and grouped the notes from all the members. From these, we highlighted the critical observations described in the report.

Questions asked during the interview

Set 1: Q.1 What were the main resources and means you used to obtain information about internships from your seniors?

Q.2 How helpful were these resources and what were the main problems you faced in getting information through these methods?

Q.3 Do you feel if you could get these resources easily and in a higher number then would it help in your intern/placement preparation?

Set 2: Q.1 How did you pass-on your experience to the next batch and how did you feel about it?

7.2 Observations

Users found it difficult to search through scattered resources (shared PDFs, different websites and blogs) for different years that are not organized with no experiences available for some companies

Most of the users felt that if we could get experiences in a more,accessible and organized way then it would highly help them in preparing for internships and placements

Users complained about no guided resources specific to a particular job profile.

There was no definite format for sharing their experiences therefore, users found it difficult and discouraging to share their experiences.
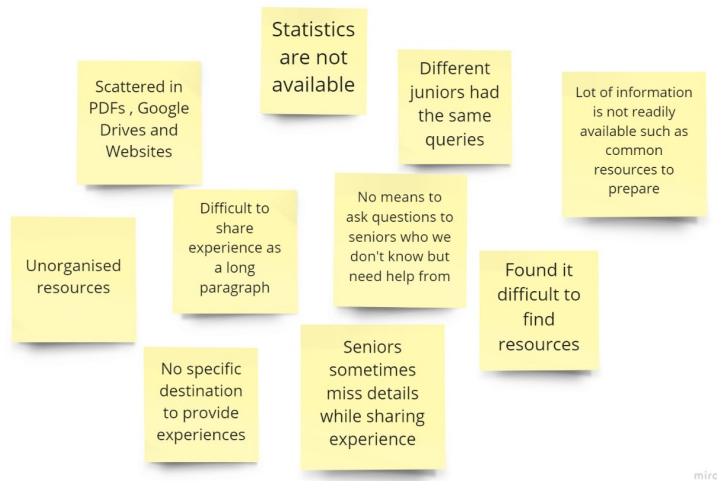
7.3 Functional Requirements from Usability Requirement

1. View summary of Companies, job profiles, branches, yearwise :- R.4, R.5 R.6, R.7
   Users wanted statistics and organized resources and experiences.

2. Experience management :- R.2
   Users desired a definite format for sharing their experiences.

8 Affinity Diagram

Display Ideas

Sort Ideas, Header Cards, Finished Affinity Diagram