

**Department of Computer Engineering**

**Academic Term: First Term 2023-24**

<b>Practical No:</b>	<b>1</b>
<b>Title:</b>	<b>Software Requirement Specification</b>
	25/7/23
<b>Roll No:</b>	9636
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**Rubrics for Evaluation:**

<b>Sr. No</b>	<b>Performance Indicator</b>	<b>Excellent</b>	<b>Good</b>	<b>Below Average</b>	<b>Total Score</b>
1	On time Completion & Submission (01)	01 (On Time )	NA	00 (Not on Time)	
2	Theory Understanding(02)	02(Correct )	NA	01 (Tried)	
3	Content Quality (03)	03(All used)	02 (Partial)	01 (rarely followed)	
4	Post Lab Questions (04)	04(done well)	3 (Partially Correct)	2(submitted)	

**Signature of the Teacher:**

**Department of Computer Engineering**

**Academic Term: First Term 2022-23**

**Class: T.E /Computer Sem – V / Software Engineering**

**Signature of the Teacher:**

Name:Ricky Rodrigues

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## Case Study 1—Requirements Specification Document

### 1 Abstract

The purpose of Training and Placement Management System is to automate the existing manual system by the help of computerized equipment 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. Training and Placement Management System, as described above, can lead to error free, secure, reliable and fast management systems. It can assist the user to concentrate on their other activities rather than concentrating on the record keeping. Thus, it will help organizations in better utilization of resources. The organization can maintain computerized records without redundant entries. That means that one need not be distracted by information that is not relevant, while being able to reach the information. The aim is to automate its existing manual system by the help of computerized equipment 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.

### 2 Introduction

#### 2.1 Purpose

Maximum work goes manually in the present placement system which makes it take time to avail changes. This includes main problems like searching for the data of students and sorting them along with it. Also, updating student data is a cumbersome job and does not have a method to notify the student in time which makes the management of the placements very difficult. In the proposed system, all of these problems become automated. The registration of the student for an upcoming placement, the addition of a new user, notifying students on various platforms such as Email and SMS, sharing information, the privacy of the student, etc is all met. The admin validates the Information and gives the student list based on the criteria required which otherwise would have been very difficult to manage.

#### 2.2 Scope

It may help collect perfect management in detail. In a very short time, the collection will be obvious, simple and sensible. It will help a person to know the management of the past year perfectly and vividly. It also helps in current work relative to the Training and

Placement Management System. It will also reduce the cost of collecting the management & collection procedure will go on smoothly. Our project aims at Business process automation, ie, we have tried to computerize various processes of Training and Placement Management System.

## 2.3 Definitions, Acronyms, Abbreviations

KPI -Key Performance Indicator

## 2.4 References

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## 2.5 Developer's Responsibilities

The developer is responsible for (a) developing the system, (b) installing the software on the client's hardware, (c) conducting any user training that might be needed for using the system, and (d) maintaining the system for a period of one year after installation.

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## 3 General Description

### 3.1 Product Functions Overview

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 company 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 its user-friendly. Training and Placement Management System, as described above, can lead to error free,

secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping.

### 3.2 User Characteristics

The main users of this system will be students applying for placement .The training and placement cell and companies that will post the jobs.

### 3.4 General Assumptions and Dependencies

Not applicable.

## 4 Specific Requirements

### 4.1 Inputs and Outputs

The system has two type of inputs and produces three types of outputs.

*Input 1:* The companies fill the application to submit jobs and corresponding application.

*Input 2:* The Students will fill the applications and submit relevant information on the job portal after signing in as students.

*Output 1:* these will be the jobs submitted by the companies , these will be available to the admin to manage and approve.

*Output 2:* these will be the applications filled by the students will be visible to both the admin to keep a track of student progress and the companies who post the jobs

## 4.2 Functional Requirements

- 1) Grant privileges to various registered users of our website and send messages to the registered users.
- 2) Grant The first 'Admin' privilege of storing and accessing the information of registered companies and students.
- 3) TPO should have similar privileges to admin.
- 4) Registration should allow students and companies to register for the process. It should give different set privileges according to the account type
- 5) Students should be able to create their profile, upload their CV, have reminders sent to them
- 6) Companies should have privileges of setting up their profile, choosing interview dates and to share their vacancies with the system

## 4.3 External Interface Requirements

User Interface: no external interface requirements

## 4.4 Performance Constraints

For Admin currently only the super admin supports user creation, blocking and deletion, the other admins only support job verification

## 4.5 Design Constraints

Software Constraints

The system is to run on laptops or computers only

Hardware Constraints

The system will run on any system that supports a basic web browser

#### Acceptance Criteria

Before accepting the system, the developer must demonstrate that the system is able to integrate the job requests from companies , applications from students together and give the control of the system to the admin

#### Postlab questions

a) Evaluate the importance of a well-defined Software Requirement Specification (SRS) in the software development lifecycle and its impact on project success.

A well-defined SRS is essential for the success of any software development project. It provides a clear and concise description of the software's requirements, which helps to ensure that the project is aligned with the needs of the stakeholders. The SRS also serves as a communication tool between the different stakeholders involved in the project, such as the developers, testers, and users. This helps to ensure that everyone is on the same page and that the project is completed on time and within budget.

A well-defined SRS can also help to reduce the risk of project failure. By clearly defining the requirements, the project team can identify any potential risks early on and take steps to mitigate them. This can help to prevent the project from going off track and ensure that it is completed successfully.

b) Analyse a given SRS document to identify any ambiguities or inconsistencies and propose improvements to enhance its clarity and completeness.

When analysing an SRS document, it is important to look for any ambiguities or inconsistencies. These can be identified by carefully reading the document and looking for any areas where the requirements are not clear or where there are conflicting requirements. Once any ambiguities or inconsistencies have been identified, it is important to propose improvements to the document to enhance its clarity and completeness. This can be done by clarifying the requirements, adding more detail, or removing any conflicting requirements.

c) Compare and contrast different techniques for requirement elicitation, such as interviews, surveys, and use case modelling, and determine their effectiveness in gathering user needs.

There are a number of different techniques that can be used for requirement elicitation, including interviews, surveys, and use case modelling. Each technique has its own strengths and weaknesses, and the best technique to use will depend on the specific project.

Interviews are a good way to gather detailed information from users. They can be used to ask specific questions about the user's needs and requirements. However, interviews can be time-consuming and can be difficult to conduct if the users are not available.

Surveys are a good way to gather information from a large number of users. They can be used to ask general questions about the user's needs and requirements. However, surveys can be difficult to design and can be difficult to interpret the results.

Use case modelling is a good way to visualize the user's interaction with the software. It can be used to identify the different scenarios that the user will encounter and the different requirements for each scenario. However, use case modelling can be difficult to understand for non-technical users.

The effectiveness of each technique will depend on the specific project. For example, if the project is complex and there are a large number of users, then a combination of techniques may be the most effective.



