

# Leave Management System

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## Software Requirements Specification Document

This module is a single leave management system that is critical for HR tasks and keeps the record of vital information regarding working hours and leaves. It intelligently adapts to HR policy of the management and allows employees and their line managers to manage leaves and replacements (if required). In this module, Head of Department (HOD) will have permissions to look after data of every faculty member of their department. HOD can approve leave through this application and can view leave information of every individual.

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## **1. INTRODUCTION**

The following subsections of the Software Requirements Specifications (SRS) document provide an overview of the entire SRS.

### **1.1 DOCUMENT PURPOSE**

The purpose of this document is to show the software requirements of the Leave Management software. The functionality and scope of this software are described in this SRS document.

### **1.2 PRODUCT SCOPE**

The Leave Management software aims at helping the user to address issues from multi-disciplinary angles related to Leave management and services.

The major benefits of this software are -

1. It is a unique software which helps to organize event without any paperwork.

2. It has a wide variety of Modules.

By just few clicks user can check the leave status, leave balance, notices and apply for and grant leave accordingly.

### **1.3 INTENDED AUDIENCE AND DOCUMENT OVERVIEW**

This SRS document is intended for developers, professors, students for reading. The rest of the document contains the functional and non functional requirements of Leave Management System.

### **1.4 DEFINITIONS, ACRONYMS AND ABBREVIATIONS**

LMS - Leave Management System.

LB – Leave balance.

SRS- Software Requirement Specification.

Servers: Machines that store all the information and records.

### **1.5 DOCUMENT CONVENTIONS**

The entire document is in Times New Roman font. The headings are numbered 1,2,3... and so on and sub-headings are numbered x.1,x.2.... and so on. Both headings and sub-headings are in bold.

Main title : Font Times New Roman and size 14

Sub titles : Font Times New Roman and size 14

Content : Font Times New Roman and size 12

### **1.6 REFERENCES AND ACKNOWLEDGMENTS**

Software Engineering book written by Roger Pressman, Ian Sommerville.

## **2. OVERALL DESCRIPTION**

Describes the general factors that affect the product and its requirements. This section does not state specific requirements. Instead it provides a background for those requirements, which are defined in section 3, and makes them easier to understand.

### **2.1 PRODUCT PERSPECTIVE**

It is aimed at replacing the tedious paper works that the companies or colleges currently use. The system will collect data and store it for fast and easy reference. The system will provide users with complete record of the attendance and and leaves. It will also provide information about the leave balance(availability).The system is thus helpful to reduce the time and complexity of maintaining the records.

### **2.2 PRODUCT FUNCTIONALITY**

Some major product functionalities of the system are as follows:

- Information about the employee/student/staff attendance.
- Check for leave availability.
- Maintain employee leave record.
- Display notices.
- Apply for leave.
- Approve or reject leave application.

### **2.3 USERS AND CHARACTERISTICS**

Primary users of the system will be employees working in company /students /staff, manager , HOD, Admin. Very little technical expertise is required for reading the outputted data since it is in graphical/tabular form.

Educational level of LMS computer software – Low

Experience of LMS software – None

Technical Expertise – Little

### **2.4 OPERATING ENVIRONMENT**

Open source ,HTML, windows, Ubuntu.

### **2.5 DESIGN AND IMPLEMENTATION CONSTRAINTS**

High performance, User-friendly, Security based System, validation of Users, very fast response time.

### **2.6 USER DOCUMENTATION**

A link is provided for help and very easy User Interface.

### **2.7 ASSUMPTIONS AND DEPENDENCIES**

Assume that all the information entered by the user will be correct. If any wrong information found then system will notify an alert. The system is required to save generated reports.

### **3. SPECIFIC REQUIREMENTS**

#### **3.1 External Interface Requirements**

##### **3.1.1 User Interfaces**

The User Interface Screens are described in table 1.

**Table 1: Leave Management User Interface Screens**

Screen Name	Description
Login	Log into the system.
Employee	Display attendance of employee, no.of leaves, leave balance.Add or update employee records.
Apply for leave	Display leaveavailability, application for leave, cancel application. Add or update leave allotment records
Leave records	Display leave history.
Approve/reject leave application	Display leave availability and application form. Add or update records.
Staff	Add or update staff records Create, modify, and delete staff member.
Reports	Select, view, save, and delete reports

##### **3.1.2 Hardware Interfaces**

The system shall run on :

Operating system: Any Windows OS.

Scripts which supports CGI, HTML & Javascript.

Web Browser : Google Chrome , Mozilla firefox.

##### **3.1.3 Software Interfaces**

The system shall interface with an Oracle or Access database.

To implement the project we have chosen HTML language for its more interactive and easy to understand support.

##### **3.1.4 Communications Interfaces**

This System supports Google chrome and Mozilla Firefox web browsers.

This System involves FAQ forms for the requesting information, queries and problems etc.

#### **3.2 Functional Requirements**

- System will keep Employee records
- System provides Information about the leave approval and leave availability.
- Keep staff record.
- Keep notices record.
- Display leave history.

## **4. NON-FUNCTIONAL REQUIREMENTS**

Non-functional requirements define the needs in terms of performance, logical database requirements, design constraints, standards compliance, reliability, availability, security, maintainability, and portability.

### **4.1 PERFORMANCE REQUIREMENTS**

Performance requirements define acceptable response times for system functionality.

- The load time for user interface screens shall take no longer than two seconds.
- The log in information shall be verified within five seconds.
- Queries shall return results within five seconds
- The system shall consume very little of primary memory

### **4.2 SECURITY REQUIREMENTS**

Customer Service Representatives and Managers will be able to log in to the Leave Management System. Customer Service Representatives will have access to the leave management and scheduling subsystems. Managers will have access to the Management subsystem as well as the leave management and scheduling subsystems. Access to the various subsystems will be protected by a user log in screen that requires a valid UserId.

### **4.3 SOFTWARE QWALITY ATTRIBUTES**

#### **4.3.1 Standards Compliance**

There shall be consistency in variable names within the system. The graphical user interface shall have a consistent look and feel.

#### **4.3.2 Reliability**

Specify the factors required to establish the required reliability of the software system at time of delivery.

#### **4.3.3 Availability**

The system shall be available 24\*7.

#### **4.3.4 Maintainability**

The Leave Management System is being developed in Java. Java is an object oriented programming language and shall be easy to maintain.

#### **4.3.5 Portability**

The Leave Management System shall run in any Microsoft Windows environment that contains Java Runtime and the Microsoft Access database.