
Software Requirements Specification

for

TIME CARDS SYSTEM

Version 1.0

Prepared by

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1 Introduction

TIME CARDS SYSTEM IS A TOOL TO EVALUATE THE MONTHLY BILLING OF THE EMPLOYEE BASED ON TIME SPENT ON THE PROJECT.

1.1 Document Purpose

The purpose of this document is to give a detailed description of the requirements for the “**TIME CARDS SYSTEM**” software. It will illustrate the purpose and complete declaration for the development of system. It will also explain system constraints, interface and interaction. This document is primarily intended to be proposed to a customer for its approval and a reference for developing the first version of the system for the development team.

1.2 Product Scope

Time cards System is a tool which helps organisations to keep track of their employees’ work hours. It is used to calculate the monthly earnings of employees based on the time spend by them on their projects.

Employees are required to enter their in-time and out-time while working on a project. Their salary is calculated on daily basis that is taken from the information fed by them in the software that is the number of hours worked by them on the project.

Furthermore the application also provides options for holidays, overtime hours, leaves and training.

1.3 Intended Audience

This product is intended for companies who have to keep a check on their employees’ working hours. The software would record when employees come and go, would manage paid time off and would feature a scheduling tool.

EMPLOYERS – They keep a check on the employees’ working hours.

EMPLOYEEES – Employees are required to enter their working hours in the software.

1.4 Definitions, Acronyms and Abbreviations

USER - Someone who interacts with the application.

ADMIN - Employer of the company who has the authority to manage and control the entire system.

EMPLOYEE - Someone who enters the input into the system.

PUNCH IN - Time at which the employee starts work.

PUNCH OUT - Time at which the employee leaves.

1.5 Document Conventions

This Document was created based on the IEEE template for System Requirement Specification Documents.

1.6 References and Acknowledgments

-[1] IEEE Software Engineering Standards Committee, "IEEE Std 830-1998, IEEE Recommended Practice for Software Requirements Specifications", October 20, 1998.

-[2] ForeUI Prototyping Tool (v4.503) to build prototype.

2 Overall Description

2.1 Product Perspective

The purpose of "TIME CARDS SYSTEM" software is to help company to keep track of their employee work hours. it is used to calculate the monthly earnings of employees based on the time spent by them on the projects.

2.2 Product Functionality

HOME SCREEN

- Signup function
- Navigation bar to move to other screen

LOGIN SCREEN

- Login

ADMIN Control Panel page

- Display employee information
- Delete an employee
- Displays pending leave requests

EMPLOYEE LOGIN

- Employee profile
- In/Out Punch Button
- Provision for leaves
- Check salary

SALARY INFO

- Working hours
- Overtime hours
- Rate per hour
- Leaves
- Total Pay

DOCS

- Information about how to use software

2.3 Users and Characteristics

Typical users i.e. employees ,who want to use it to know about the hours of work,the money that the company owes them etc.

Advanced users i.e.employers,who are interested in knowing how much time employee spend to the assigned work,the amount payable on the basis of his work time etc.

2.4 Operating Environment

-Browser supporting JS functions(Chrome,Firefox,Safari,etc.).

-Runs on Windows/Linux/Mac OS

2.5 Design and Implementation Constraints

This is web based app which implements JavaScript to write scripts . HTML,CSS is used to make the user interface for this web based app. The app is connected to the MongoDB database to store and read data of the employees .

To run this application user needs a web browser which supports ECMS5 code or above .

2.6 User Documentation

An about section is implemented in the application which the users can see to know about the functioning of the application.

2.7 Assumptions and Dependencies

Time cards system is developed in Java Script and therefore requires a web browser which supports ECMS5 or above to be installed on the user's system. This applies to Windows , Linux and Mac OS .

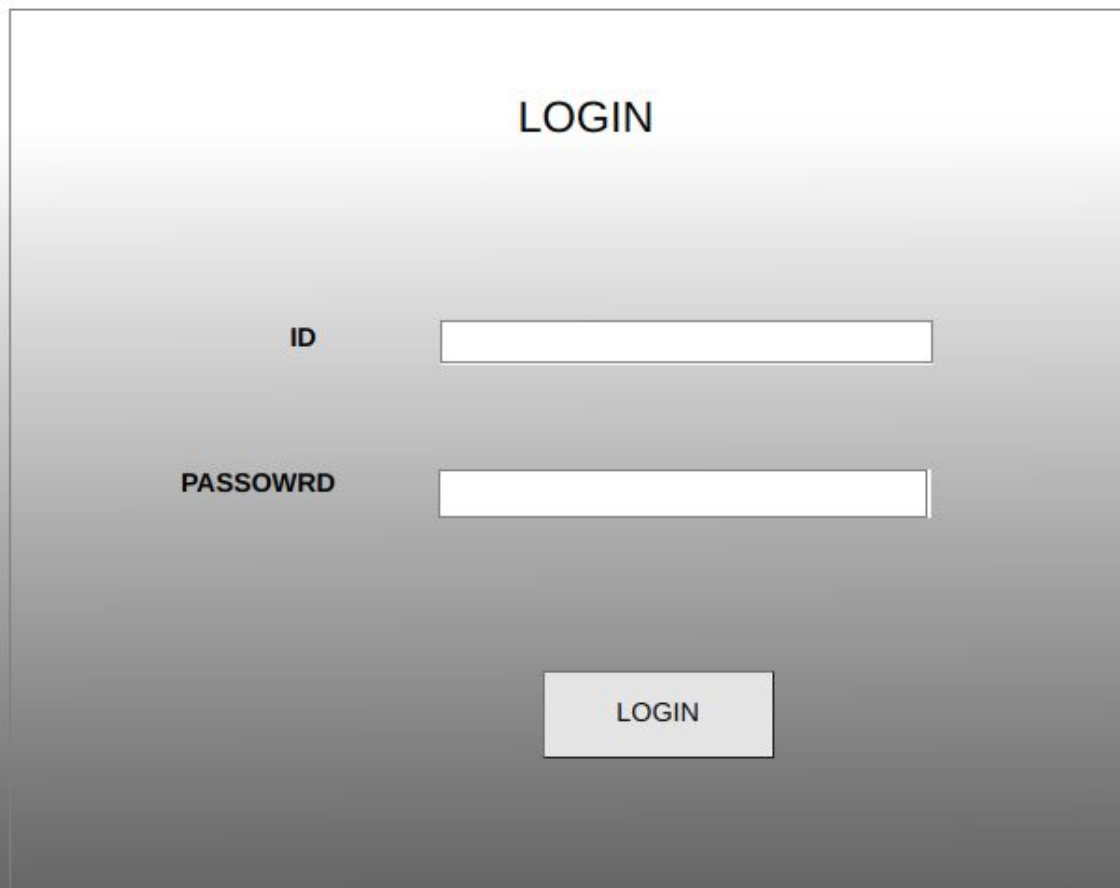
3 Specific Requirements

3.1 External Interface Requirements

3.1.1 User Interfaces

- 1.
2. Login Page (Home page) :

TIME CARDS SYSTEM



The diagram illustrates the login page of the Time Cards System. It features a central rectangular box with a light gray background. At the top of this box, the word "LOGIN" is displayed in a bold, black, sans-serif font. Below this title, there are two input fields. The first field is preceded by the label "ID" in a bold, black, sans-serif font. The second field is preceded by the label "PASSOWRD" in a bold, black, sans-serif font. Both input fields are represented by white rectangles with thin black borders. At the bottom center of the box, there is a rectangular button with a light gray background and a thin black border, containing the word "LOGIN" in a bold, black, sans-serif font.

2. Admin Login :

COMPANY NAME

COMPANY INFO

LOG-OUT

WELCOME ADMIN

EMPLOYEE INFO

ADD/EDIT EMPLOYEE

DELETE EMPLOYEE

[illegible]

4. Employee Sign Up Screen

BACK

ADD EMPLOYEE

EMPLOYEE ID

NAME

ADDRESS

E-mail

CITY

STATE

HIRE-DATE

BIRTH-DATE

CANCEL

SAVE AND EXIT

5. Delete Employee :

BACK

CONFIRM DELETE

CONFIRM DELETE

6. Employee login Screen :

EMPLOYEE NAME

JOB

LOGOUT

DATE DAY-MONTH-YEAR

TIME 00:00:00

IN-PUNCH

OUT-PUNCH

LEAVES

REASON

SELECT REASON ▼

REQUEST LEAVE

CHECK SALARY

7. Check Salary information :

SALARY INFO

REGULAR WORKING HOURS

RATE PER HOUR

OVERTIME HOURS

RATE PER HOUR

LEAVES

TOTAL PAY

3.1.2 Hardware Interfaces

Minimum requirements required to run a web browser.

Recommended- 1GHZ processor ,512MB and above RAM.

3.1.3 Software Interfaces

Time cards system is developed in Java Script and therefore requires a web browser which supports ECMS5 or above to be installed on the user's system. This applies to Windows , Linux and Mac OS .

3.1.4 Communications Interfaces

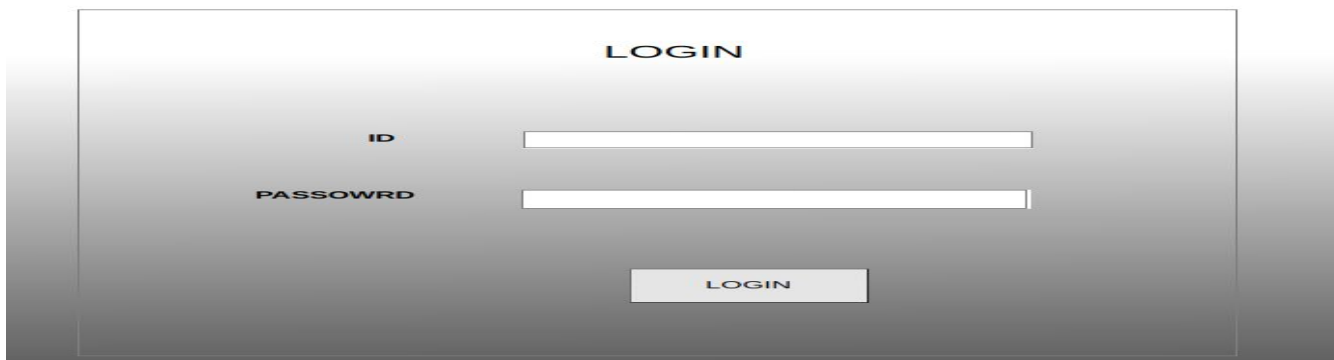
A working internet connection is required to run the app . The connection could either be through ethernet module or wireless module .

3.2 Functional Requirements

1. LOGIN SCREEN (Home Page) :

The login page is the main homepage from where the user can have access to the software by entering one's correct login credentials. The login page allows both employees and the admin(employer) to log into the website. The employee and the the admin both are however directed to their respective different login screens.

TIME CARDS SYSTEM



LOGIN

ID

PASSOWRD

LOGIN

2. ADMIN Login :

-The admin login screen has three main functionalities for admin's use that are it provides admin access to the database where all employees' information is stored and this helps the employer(admin) to keep a check on the payments to be made to the employees.

Following functionalities are present on the login screen :

COMPANY NAME

LOG-OUT

COMPANY INFO

WELCOME ADMIN

EMPLOYEE INFO

ADD/EDIT EMPLOYEE

DELETE EMPLOYEE

- a) **Employees Info** : This functionality will let the admin view all the employees' details like the current total number of working hours, overtime hours worked by them , salaries calculated based on them working, their job profiles in the company at a glance.

[BACK](#)

COMPANY INFO

[illegible]

It lets the employee register with the software for the company its working with.

[BACK](#)

ADD EMPLOYEE

EMPLOYEE ID	<input type="text"/>		
NAME	<input type="text"/>		
ADDRESS	<input type="text"/>		
E-mail	<input type="text"/>		
CITY	<input type="text"/>	STATE	<input type="text"/>
HIRE-DATE	<input type="text"/>	BIRTH-DATE	<input type="text"/>

[CANCEL](#)[SAVE AND EXIT](#)

c) Delete Employee : This functionality lets the admin delete an employee record from the database.

BACK

CONFIRM DELETE

3. EMPLOYEE LOGIN :

This employee login screen is opened when an employee enters his or her credentials into the main login portal(homepage). The page has the following functionalities:

1. **Punch in** : This functionality would record the time into the software at which the employee starts his work.
2. **Punch out** : This functionality would record the time into the software at which the employee ends his work.
3. **Request Leave** : This functionality would let the employee apply for leave which would lead admin to get leave requests.
4. **Check Salary** : This function would open the other page where the employee can check his salary details.
5. **Logout**: This will let the employee logout from the software and it would open the homepage.

EMPLOYEE NAME

JOB

LOGOUT

DATE	DAY-MONTH-YEAR
TIME	00:00:00

IN-PUNCH

OUT-PUNCH

LEAVES

REASON

REQUEST LEAVE

CHECK SALARY

4. SALARY INFORMATION :

This page would display all the salary details of the employees.

SALARY INFO

REGULAR WORKING HOURS	<input type="text"/>	RATE PER HOUR	<input type="text"/>
OVERTIME HOURS	<input type="text"/>	RATE PER HOUR	<input type="text"/>
LEAVES	<input type="text"/>		
TOTAL PAY		<input type="text"/>	

4 Other Non-functional Requirements

4.1 Performance Requirements

Time Cards System is not heavy on the hardware requirements. The recommended are Single Core 1Ghz,web browser, 10GB of free memory and 512MB of RAM. These

requirements will be more than sufficient to ensure that the program runs efficiently on the system.

4.2 Safety and Security Requirements

- Safety is taken care by login functionality. Only admin can access the information of its employees once logged in.
- Details of the company and its employees are safe and secure on the server as the server is password protected and only admin can access those details .
- Passwords are hashed and encrypted so no other user can access the details of a company.
- The reliability of the overall program depends on the reliability of the separate components.

4.3 Software Quality Attributes

Time Cards system is a user friendly application which is developed in such a way that anyone can use it without any additional knowledge other than knowing the basics of using a computer.

The functions are simple and the users will not feel any kind of difficulties in using the application.