Software Requirements Specification

for

Time Tracker

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1. Introduction

1.1 Purpose

The purpose of the Time tracker is to track the number of hours has spent by the project members to complete the project. Daily the project member can able to monitor the number of hours spend in the single or multiple projects. The work done time status can be updated weekly once by the project members. Using this application project member can able to spend sufficient amount of time on each project to complete the project within the given time.

1.2 Project Scope

The "Time Tracking and Reporting" is a web-based application designed to help project team members monitor and report the time spent on various tasks within the project. The web portal eliminates the need for downloading any software, making it easily accessible. To use this application, a reliable internet connection is necessary for monitoring, modifying, or creating any time-related activities.

1.3 Overview

The “Time Tracker” involves creating a web application where pre-registered users can log in to submit, modify, and delete timesheet entries for the projects they have worked on throughout the week. Users have the flexibility to save entries for later and can view their timesheet entries on a weekly or monthly basis. Once submitted, entries become immutable to ensure data integrity. The portal provides a user-friendly interface, integrates with a database for secure data storage, and allows users to log off after completing their timesheet activities. Additionally, distinct user roles may be implemented, such as administrators with additional privileges. The system aims to streamline time tracking, enhance user experience, and maintain transparency through an audit trail for accountability.

1.4 Product Perspective

This web-based application is used to perform the operation like creation of project and the user can able to preset the number of hours needed to complete the project. And then the user can able to update the work done status of the project. Weekly and monthly the use should submit the status of their work done and once the status submitted then the user can’t able to edit.

2. Specification Requirements

This section contains all of the functional and quality of this application. It gives a detailed description of the application and all its features. This section provides a detailed description of all inputs into and output from the application.

2.1 User Interfaces

This application contains 3 pages:

1.Home page
- Login page
- Sign up page

2.Time tracker portal
3.User activity report

2.2 Home page

The Login Page of the Time Tracker Portal serves as the initial entry point for users and is designed to collect essential authentication information. Users are required to input their email ID and password to gain access to the application. The email ID serves as the unique identifier for each user, ensuring a secure and personalized login process. The password, implemented with robust encryption measures, adds an additional layer of security. This authentication mechanism guarantees that only pre-registered users with valid credentials can access the portal, thereby safeguarding sensitive timesheet data. If the user is a first-time user, then he/she has supposed to register their username, email ID and password.

The signup page for first-time users will feature three essential fields: username, email address, and password. To create an account, users will be required to input a unique username, a valid email address, and a secure password. The username serves as their identification within the system, while the email address ensures communication and account recovery options. The password, chosen by the user, adds a layer of security to their account. The signup process aims to be straightforward, allowing new users to easily create their accounts by providing these three pieces of information.

2.3 Time Tracker Portal

Time tracker portal has detail view of the project description and the total amount of hour to be needed to complete the project. Then the user can able to manage the time consumption to complete the project within the given time. If there is any lack of user's performance in the project completion then the user has to manage the project completion by working extra hours and that extra hour work is also to be added in this portal.

There is a feature called "Add Project" that allows users to include details about a new project. When utilizing this option, users can input a project description and specify the maximum hours expected to complete the project. This functionality provides a structured way for users to outline and set expectations for their projects.

Additionally, there is a separate option labeled "Add Your Work," where users can input information about the tasks they've worked on. Within this feature, users can specify the name of the project they contributed to, the date of their work, and the number of hours dedicated to the project on that particular day. This allows for a granular and detailed tracking of the time spent on individual projects.

Upon completion of their daily work, users have the option to submit the work done. This submission action formalizes the recorded hours and updates the system with the latest work information. This workflow ensures that users can comprehensively track their project progress, maintain accurate records of time spent, and contribute to effective project management through the platform

2.4 User Activity Report

On the "User Activity Report" page, users can access a comprehensive summary of their work done, detailing the information added in the previous "View work " page. This report is structured to provide insights into the user's activities on both a weekly and monthly basis.

In the weekly view, users can observe a breakdown of their work contributions throughout the week. This includes details such as the projects worked on, the respective dates, and the number of hours dedicated to each project on a day-to-day basis. This view allows users to analyze their productivity and time allocation over the course of a week.

Similarly, in the monthly view, users can explore a broader perspective of their work done over an entire month. The report displays a summary of their contributions across different projects, dates, and total hours worked during the month. This monthly overview aids users in tracking their long-term progress and identifying patterns or trends in their work habits.

3.Functionality Requirements

The login page of the application is designed to validate the identity of users who have previously registered. Upon entering their credentials, registered members can proceed to authorize the application. This authorization ensures that only authenticated and pre-registered users gain access to the system. In the case of a successful login, the user is granted permission to navigate within the application.

However, for individuals attempting to log in without prior registration or for new users, the application will not authorize access. In such instances, an error message will be prominently displayed on the login page, notifying the user that their login attempt was unsuccessful. This error message serves as a clear indication that access is restricted to registered members only. The implementation of this login verification process enhances the security of the application, ensuring that only authorized users can utilize its features and functionalities.

After a successful login, the application will display the username prominently on the screen, providing a personalized and user-friendly interface. This feature ensures that users are immediately aware of the account they are logged into.

The "Time Tracker Portal" encompasses a detailed project management functionality that enables users to efficiently manage and monitor their project timelines. Users can access a comprehensive project detail view that includes a project description and the total hours required to complete the project.

The functionality of the "Add Your Work" option, which facilitates granular tracking of the time spent on individual tasks within a project. Users can input specific details such as the project name, date of work, and the corresponding number of hours dedicated to each task on a particular day. This level of detail ensures a nuanced understanding of time allocation and project progress, enabling users to make informed decisions about resource allocation and task prioritization.

The functionality of “View work” option is to display the work done by the user which was added in the time tracker portal and the report of the work done can able to visible in two different aspects. Dropdown menu should be provided in the user activity report to the user can view his/her report in weekly aspects or monthly aspects. In the report the user can able to modify the work done and can submit the changes and saved in the report. Once the datum in the report has been modified and submitted then the user cannot able to modify or delete the datum in the report.

After the work done by the user then a "Log Out" button will be available to users, serving as a mechanism to log out of the application. Clicking on the "Log Out" button initiates a session timeout, ensuring that the user is securely logged out after a period of inactivity.

This session timeout functionality adds an extra layer of security, preventing unauthorized access to the user's account if they leave their session. Overall, the combination of displaying the username and incorporating a log-out button with session timeout contributes to a secure and user-centric login experience within the application.