



Daily Wage Worker management (Requirement document)

This document will provide a overview of the Daily Wage Worker Management System requirements, designed for developers and stakeholders. The system streamlines daily attendance, wage calculations, and report generation for daily wage workers, enhancing payroll processing and record accuracy.

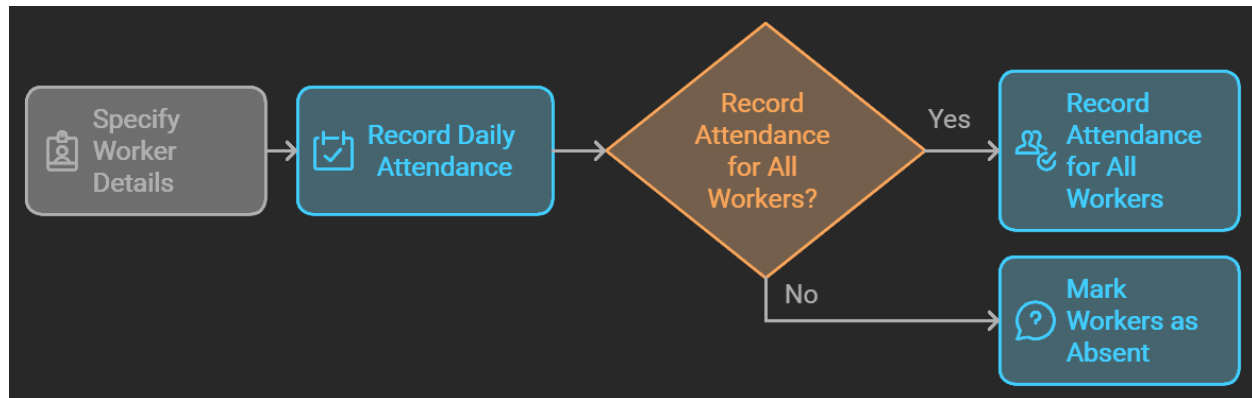
1. Project Overview

1.1 Purpose of the project

The Daily Wage Worker Management System is developed to efficiently manage and monitor attendance, work hours, wage calculations, and generate monthly reports for daily wage workers. This solution simplifies payroll management and ensures accurate record-keeping, benefitting HR personnel or managers.

1.2 Scope of the project

The system will facilitate functionalities such as recording attendance, calculating wages based on hours worked, generating monthly reports, and maintaining worker records. It is intended for HR staff or managers responsible for daily wage workers.

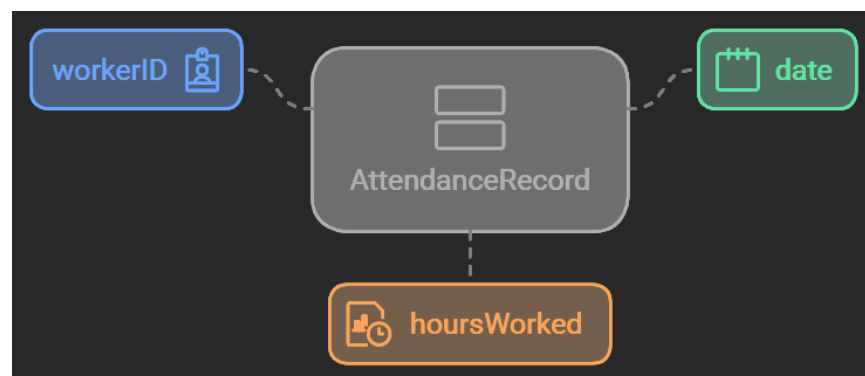


2. User Interface Requirements

2.1 Main Dashboard

- **Dashboard Overview:** The main screen provides an overview of the total number of workers, present and absent workers for the day, and the cumulative monthly wage payout.

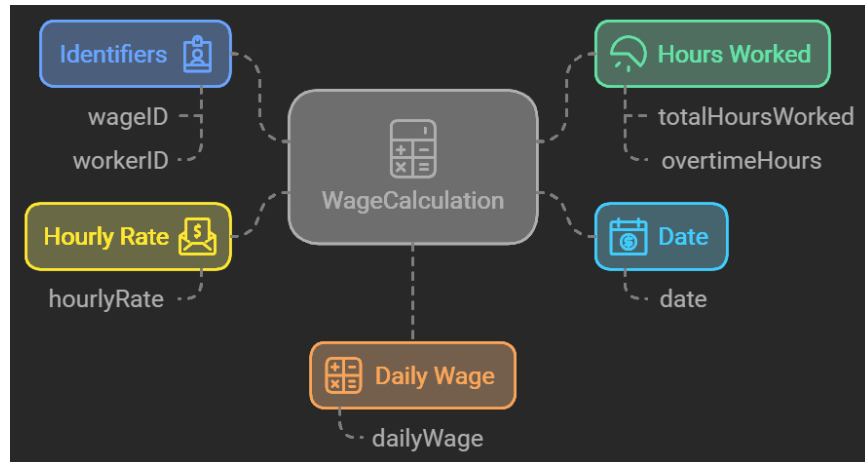
2.2 Attendance Management



- **Attendance Input:** Includes options to enter attendance for all workers on a selected date.

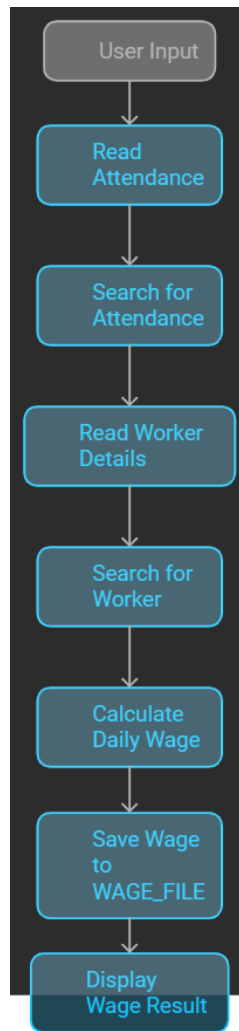
- **Fields:** Worker ID, start time, end time, and an absent marker if the worker is not present.

2.3 Wage Calculation

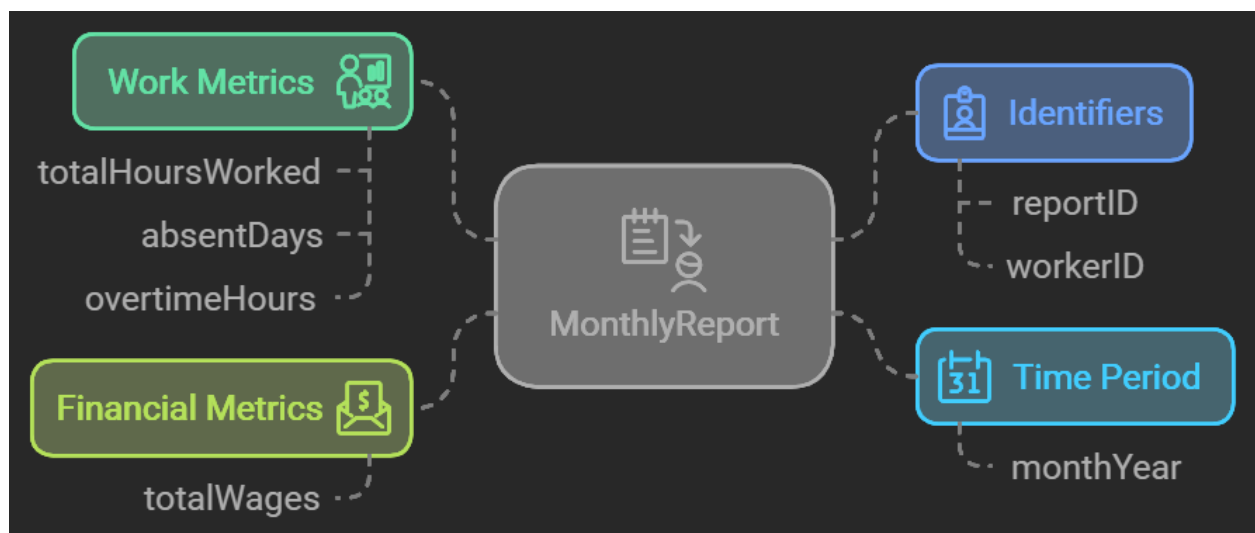


- **Summary Display:** Summarizes each worker's hours worked, calculated wages, and any applicable overtime for the day.

Data flow daigram

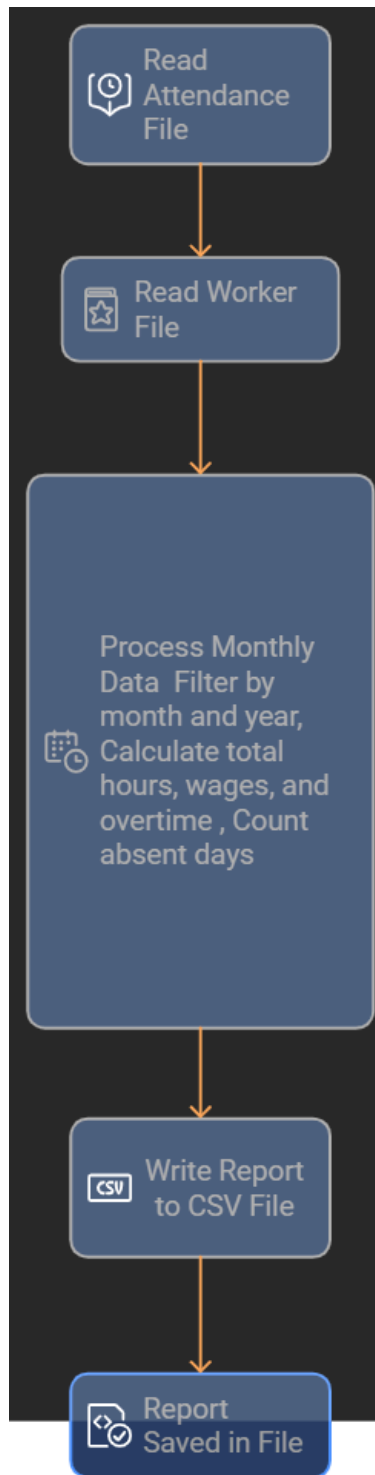


2.4 Report Generation

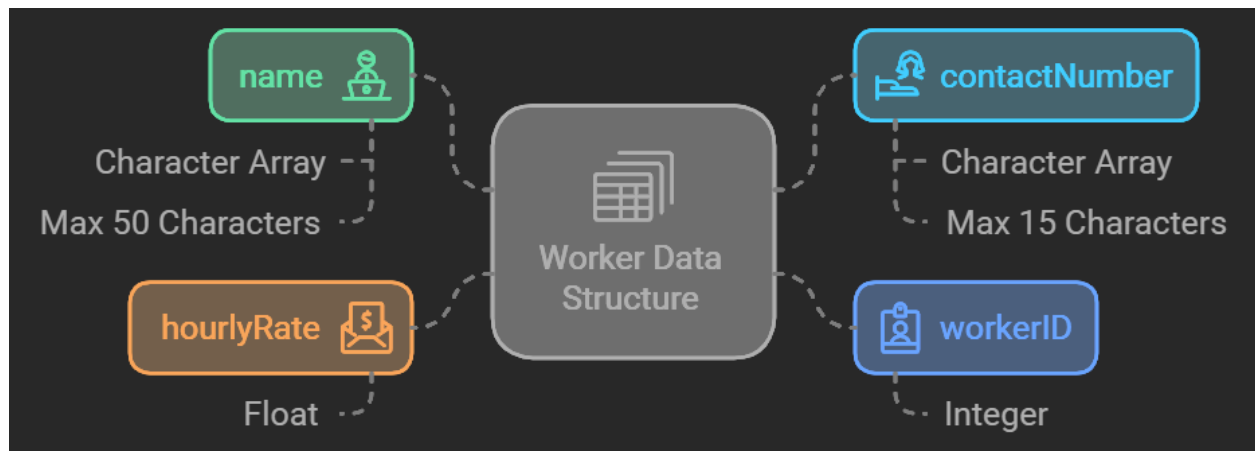


- **Monthly Report Options:** Allows users to generate and view a monthly wage report and provides an option to export it to CSV format for external use.

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2.5 Worker Management

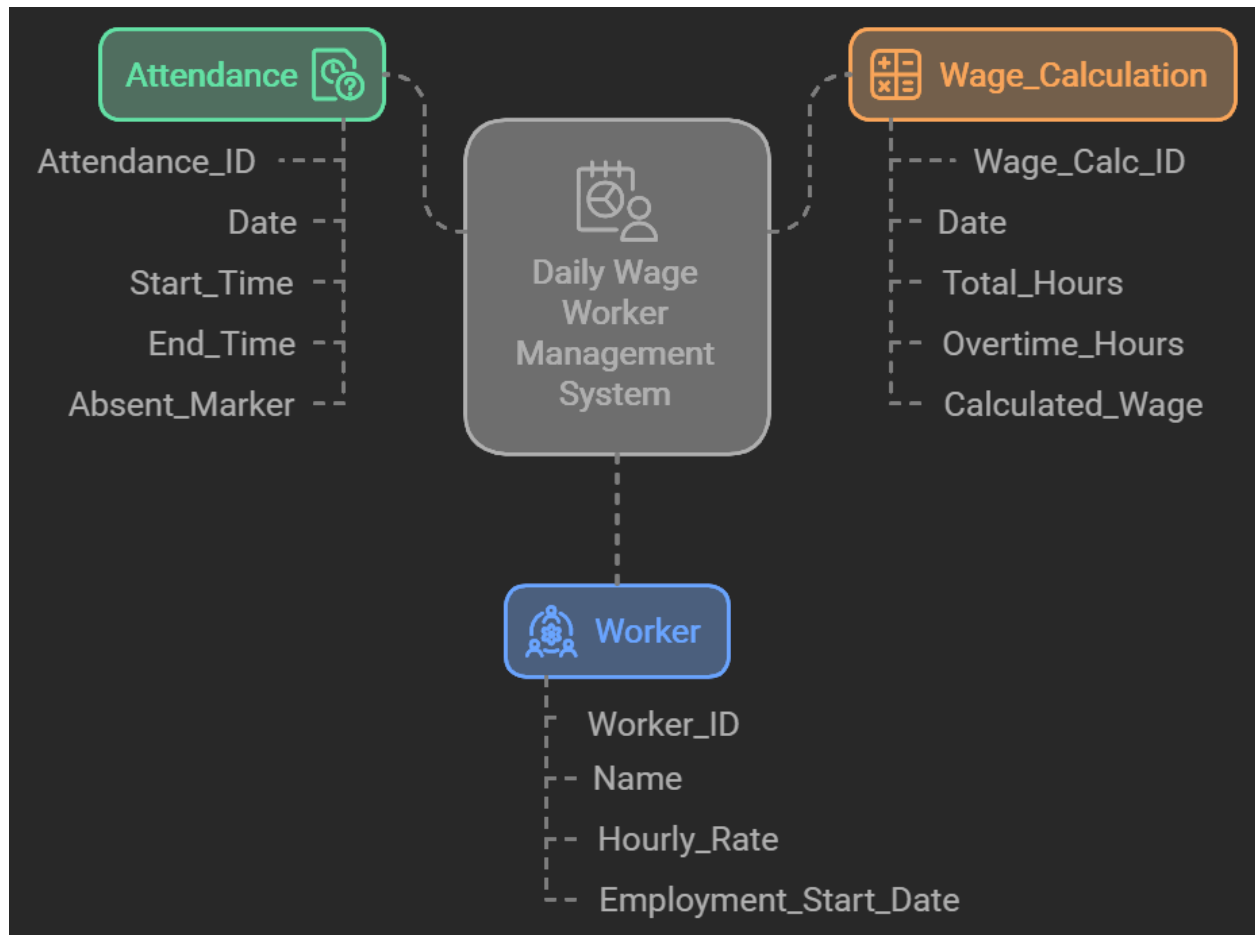


- **Worker Records:** Interface for adding, updating, or viewing worker details, such as worker ID, name, hourly rate, and employment start date.

3. Data Structures and Files

3.1 Data Structures

- **Worker Structure:** Stores worker ID, name, hourly rate, and other personal details.
- **Attendance Structure:** Contains worker ID, date, hours worked, and a marker for absenteeism.
- **Wage Calculation Structure:** Stores worker ID, total hours, overtime hours, hourly rate, and calculated daily wage.



3.2 Data Files

- **workers.dat:** Stores worker data.
- **attendance.dat:** Stores attendance records by date and worker ID.
- **wages.dat:** Stores wage calculations for each worker by date.

4. System Requirements

4.1 Attendance Management

- **Daily Attendance:** The system allows users to record daily attendance for each worker, specifying the worker's ID, date, start time, and end time.
- **Single Date Entry:** Users select a single date for entering attendance for all workers on that specific day, making the process streamlined.

- **Absentee Records:** Automatically marks workers as absent if no attendance record is found for the selected date.

4.2 Wage Calculation

- **Hourly Wage Rate:** Users can set a default hourly wage rate, with options to specify different rates for individual workers if required.
- **Daily Wage Calculation:** The system calculates daily wages based on hours worked and the worker's hourly rate, using the formula:
- **Overtime Calculation:** For hours worked beyond 8 hours, an overtime calculation applies, with overtime paid at 1.5x the hourly rate. Overtime wages are added to the daily wage:

4.3 Reporting

- **Monthly Wage Report:** Generates a report summarizing each worker's total hours worked, absences, and wages for a specified month. The report includes total hours, total wages, absent days, and overtime hours for each worker.
- **Export to CSV:** The monthly report and individual attendance records can be exported to CSV format for easy sharing and record-keeping in the user's Downloads folder.

4.1.4 Worker Management

- **Worker Data Storage:** The system maintains a record of workers, including details such as worker ID, name, employment start date, and hourly rate.
- **Add/Edit Worker Records:** Allows users to add new worker entries and update existing worker information.

5. Non-Functional Requirements

5.1 Usability

- **User-Friendly Interface:** The system provides a simple interface accessible to non-technical HR staff.

- **Error Handling:** Displays clear error messages for invalid inputs, such as incorrect dates or missing entries, ensuring data integrity and ease of use.

6. Technical Requirements

6.1 Platform

- This application will be a desktop app using the C programming language for functionality, with data storage in local files.

6.2 Data Storage

- **Storage Medium:** Data is stored in `.dat` files (`workers.dat` , `attendance.dat` , `wages.dat`), with options to export reports in CSV format.

6.3 Security

- **User Authentication :** user authentication feature may be implemented to limit access to sensitive worker data.
- username,password

