

Product Functions

The product in general will have the following major functions:

1. Record all essentials details of each individual employee.
2. using the attendance system it will calculate their payment.
3. draw graph of their records (Analyze productivity).
4. The attendance management system is flexible and easy to use.
5. use facial recognition for security purpose.

Our system has two types of accessing models:

1. **Administrator**
2. **User (employee)**
 - a. Employees on leave
 - b. Working employees

1. Administrator:

The system is managed by the administrator. Administrator has to update and monitor the registered employee details, add a new employee, remove employee, provide id to new employees, post news etc.... Administrator can update his profile.

2. User(employee):

- a. **Employees on leave:** They can only see their profile and see news that is posted by the administrator.
- b. **Working Employees:** User can update his profile, can ask for leave (how many days he want and the reason), can see the news that is posted by the Administrator etc....

The functions of the software can be neatly categorized into two sections:

- Privileged user (Employers)
- Ordinary users (Employees)

Functionality Reserved for Privileged users

- **Leave Management**
 - ✓ This includes the functionality of monitoring of employees on leave, granting leave to employees as well as denying leave to employees. The privileged users may also request for a report generation of employee leave graphs in any number of formats (pie, line, bar).
- **Attendance Management**
 - ✓ This includes the functionality of monitoring attendance of employees, querying for performance graphs on employees (relating to attendance), this is with the aim of providing organizations with data as it relates to tardiness, monitoring of recorded attendance data on specific employees.

- **Public outreach**

- ✓ Our system has the functionality of an interactive notice board where employers can post news and notices to engage with the employees in a more indirect but effective manner while avoiding unnecessary physical notice boards and such traditional means.

Functionality available to Ordinary users

- **Check-in Check-out**

- ✓ The user (employee) has the ability to check in as well as check out in that order. When an employee begins working, he is obliged to check in else wise he will not be able to check in after a certain cut off period. Employees are also obliged to check out, otherwise the system will default to recording the employee as absent on that particular day. Therefore, the coupled action of checking in and checking out at the necessary periods are vital to ensure an employee's attendance is recorded.

- **Requesting Leave**

- ✓ The employee may also request for leave. That request will be sent to the administrators (employers) and will be pending a reply. They cannot demand a leave, i.e. even if the employee had ample leave days on his/her roster, they may not demand.

Specific Requirements

NAME	Log In
INTRODUCTION	The system allows and authenticates the User to Sign In.
INPUT	Login information: Username and Password.
DESCRIPTION	Used to permit the user to enter the system and use the functionalities after being authenticated.
OUTPUT	After logging in successfully the System differentiates between an Employee and System Administrator and takes them to their respective pages and services.
ERROR HANDLING	Displays causes of the errors in a specified format in order to make corrections.

NAME **Register User (Employee)**

INTRODUCTION	The System admin can add new Employee users to the system.
INPUT	Employee Information: Full Name, Member ID, Mobile Number, Email, Picture of employee, Sex.
DESCRIPTION	Used in order to register new Employees introduced to the company and/or organization for them to make use of the services and functionalities provided by the system.
OUTPUT	Registration is properly made, and the registered user can access the uses provided by the attendance management system.
ERROR HANDLING	Displays cause of errors and specifies corrections.

NAME **View Employees**

INTRODUCTION	Lets the System Administrator to view previously registered Employees.
INPUT	None Required.
DESCRIPTION	The System permits the user to view the names, IDs, phone numbers and email of previously registered users for any purposes when required.
OUTPUT	The Name, ID, Phone Number and Email of Registered Employee users.
ERROR HANDLING	Displays Errors in familiar terms, no errors are prevalent.

NAME **View Employee Attendance**

INTRODUCTION	System Administrators can view the Attendance of registered employees.
INPUT	None Required. User ID and/or Date/Month can be specified.
DESCRIPTION	The System can display the data of the current users(Employees), as in the days attended, absent or late in the form of a list by month and date classification and also as a graphical representation through the use of a bar chart.
OUTPUT	Attendance data (days late, absent and present) by numerical and graphical representations.

ERROR HANDLING	Displays Error in familiar terms, no errors prevalent.
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NAME **Manage Employee Attendance**

INTRODUCTION	System Administrators and Company Managers can view and manage the Employees depending on the Attendance Data
INPUT	None Required. User ID and/or Date/Month can be specified.
DESCRIPTION	The System displays the Attendance Data of the User(Employee) and that data can be used to make changes to and manage the work hours, Employee timetables and work load.
OUTPUT	Attendance data (days late, absent and present) by numerical and graphical representations.
ERROR HANDLING	Displays Error in familiar terms, no errors prevalent.

NAME **Register Attendance**

INTRODUCTION	The System registers the Attendance of Employees with a time stamp.
INPUT	Employee Physical Input, it being a click or a touch gesture.
DESCRIPTION	The System permits the User to Check in and Check out in the morning and evening respectively in time frames set by the Admin and registers the time of check in/out using time stamps.
OUTPUT	Registers the entry and leave times of Employee on System Database.
ERROR HANDLING	Displays Errors through Alerts in the event of deadline passing.

NAME **Request Leave**

INTRODUCTION	The System allows the User(Employees) to send Leave Request to the System Administrator.
INPUT	User Input: Reason for Leave, Days Requested.
DESCRIPTION	The System is used to send leave requests to the Administrator, after specifying the reason and amount of days requested, for approval and validation of leave.

OUTPUT	Registers the Leave Request on the database as pending for approval or rejection by the System Administrator.
ERROR HANDLING	Displays Errors in Familiar Terms.

NAME Grant Leave

INTRODUCTION	Receives Leave Requests pending from Employees.
INPUT	User Input: ID
DESCRIPTION	The System permits the System Administrator to receive Leave Request from the Employees and to either approve or reject the leave request.
OUTPUT	Approve: The Employee is notified and granted leave for requested days. Reject: The Employee is notified he has not been approved for a leave.
ERROR HANDLING	Displays Error in Clear Ways, no errors prevalent.

NAME Manage Profile

INTRODUCTION	The User can View and Edit their Profile.
INPUT	None Required, Password for modification.
DESCRIPTION	The System can be used by the Employee to view their profile and Monthly and Daily attendance through numerical and graphical means. Also can be used to change current Account Password.
OUTPUT	Attendance data (days late, absent and present) by numerical and graphical representations.
ERROR HANDLING	Displays Error in familiar and clear manner.

NAME Send and Receive Messages

INTRODUCTION	System allows the Employee and System Administrator to interact through messages.
INPUT	User Input: Messages to be sent to the Employee and Administrator.

DESCRIPTION	The System can be used for the Administrator of the System and Employees to have a certain level of interaction. Messages can be sent and Received to Users that are Currently using the System.
OUTPUT	Message sent or received is displayed on the GUI.
ERROR HANDLING	Displays Error in familiar and handled accordingly.

NAME **Post News and Notifications**

INTRODUCTION	System allows the System Administrator to post News and Notifications to the System users.
INPUT	User Input: Title, Description, Video (Optional).
DESCRIPTION	The System permits the System Administrator to post News, Notifications and Videos of certain details they want the Users of the System to be Notified About and take note of.
OUTPUT	Details that the News has been published.
ERROR HANDLING	Displays Error in familiar and clear manner.