Software Requirements

for

Omnizenon

~ a productivity solution

Version 1.0 approved.

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11-02-2023

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Revision History

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| **Name** | **Date** | **Reason For Changes** | **Version** |
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# Introduction

## Purpose

In this contemporary age, we often see organizations struggle to keep their workforce motivated and keen on working.

**OMNIZENON** is a productivity-boosting application to combat this issue

Productivity boost requires HAPPY employees. Employees need acknowledgment of their work, which can be done using incentives to make them happy and provide motivation for the future.

Our application helps to determine who deserves the most raises, promotions, and other benefits.

We achieve this through an algorithm that takes respective inputs and calculates their overall performance.

## Document Conventions

NA –Not Applicable

SRS –System Requirement Study

## Intended Audience and Reading Suggestions

Intended Audience: The Productivity and Employee Management App is designed for small to medium-sized businesses and organizations, including startups, non-profits, and government agencies. The app is intended for managers and supervisors who are responsible for managing employees and improving organizational productivity.

1. **Business Owners and Entrepreneurs**: This app is a useful tool for business owners and entrepreneurs who are looking for ways to improve productivity, reduce costs, and streamline employee management processes.
2. **Human Resource Managers**: Human Resource Managers can benefit from the app's centralized platform for managing employee information, as well as its time and attendance tracking, task management, and leave management features.
3. **Supervisors and Team Leads**: Supervisors and team leads can use the app's performance tracking features to monitor employee performance, identify areas for improvement, and make informed decisions about promotions and rewards

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1. **IT and Technical Professionals**: The app's integration with third-party tools and its use of cutting-edge technology, such as face recognition, make it a valuable resource for IT and technical professionals looking to improve productivity and efficiency.
2. **Employees**: Employees can use the app to clock in and out, view their schedules, request leave, and stay informed about their performance and progress.

Note: It is recommended that these audiences familiarize themselves with the concept of face recognition technology and its applications in employee management, as well as with the basic principles of productivity and time management

## Product Scope

The OmnizenonApp is a cutting-edge solution designed to streamline and optimize the day-to-day operations of businesses. The app uses face recognition technology to enhance the overall efficiency and accuracy of the employee management process.

1. Time and Attendance Tracking: The app allows employees to clock in and out using face recognition technology, ensuring that only authorized personnel can access the system and reducing the risk of time fraud.
2. Employee Management: The app provides a centralized platform for managing employee information, including personal details, work schedules, and performance metrics.
3. *Task Management: The app allows managers to assign tasks and track the progress of their employees, ensuring that deadlines are met and tasks are completed effectively.*
4. *Leave Management: The app provides an intuitive interface for employees to request leave, view their leave balances, and receive approval notifications.*
5. *Performance Tracking: The app provides real-time data and analytics to help managers evaluate the performance of their employees, identify areas for improvement, and make informed decisions about promotions, bonuses, and other rewards.*

# Overall Description

## Product Perspective

The Omnizenon App is an innovative solution that leverages the power of face recognition technology to streamline and optimize the employee management process. By providing a centralized platform for managing employee information, tasks, and performance, the app helps businesses to improve productivity, reduce costs, and enhance the employee experience.

## Product Functions

1. **Face Recognition Technology**: The app uses face recognition technology to allow employees to clock in and out and to secure access to the app's features and functions. This technology enhances the accuracy and security of the employee management process.
2. **Time and Attendance Tracking**: The app provides a platform for tracking employee attendance, including clocking in and out times, calculating total hours worked, and identifying any discrepancies or attendance violations.
3. **Employee Management**: The app provides a centralized platform for managing employee information, including personal details, work schedules, and performance metrics. The app also includes features for assigning tasks, tracking progress, and managing employee leave.
4. **Task Management**: The app allows managers to assign tasks to employees, monitor their progress, and track completion status. This helps to ensure that tasks are completed effectively and on time.
5. **Leave Management**: The app provides a user-friendly interface for employees to request leave, view their leave balances, and receive approval notifications. This helps to streamline the leave request and approval process, saving time for both employees and managers.
6. **Performance Tracking**: The app provides real-time data and analytics to help managers evaluate the performance of their employees, identify areas for improvement, and make informed decisions about promotions, bonuses, and other rewards.
7. **Integration with Third-Party Tools**: The app integrates with other tools, such as payroll systems and HR management platforms, to provide a comprehensive solution for managing employees and maximizing productivity.
8. **Secure Access**: The app uses advanced security measures, such as encryption and multi-factor authentication, to ensure that sensitive employee information is protected against unauthorized access and cyber threats.
9. **User-Friendly Interface**: The app has a user-friendly interface that is intuitive and easy to navigate, making it accessible to users of all technical abilities.

Overall, the Productivity and Employee Management App offers a suite of functions designed to streamline and optimize the employee management process, saving time and improving productivity for businesses and organizations of all sizes.

## User Characteristics

1. **Tech-Savvy**: Users of the app are likely to be tech-savvy and familiar with the use of technology in the workplace.
2. **Attention to Detail**: Users of the app must pay close attention to detail, as the app provides real-time data and analytics that must be accurate and up-to-date.
3. **Organized:** The app requires users to be organized and efficient, as it provides a centralized platform for managing employee information, tasks, and performance.
4. **Collaborative**: The app encourages collaboration between employees, supervisors, and managers, as it provides a platform for task assignment, progress tracking, and performance evaluation.
5. **Results-Oriented**: The app is designed to improve productivity and optimize employee management processes, so users are likely to be results-oriented and focused on achieving specific goals and objectives.

## Operating Environment

**Platforms**: The app is designed to work on a variety of platforms, including desktop computers, laptops, tablets, and smartphones. This allows users to access the app from any location and on any device, providing flexibility and convenience.

**Operating Systems**: The app is compatible with a range of operating systems, including Windows, MacOS, iOS, and Android. This ensures that the app can be used by a wide range of users, regardless of the device they use.

**Internet Connectivity**: The app requires an internet connection to function properly. This ensures that users have access to real-time data and analytics and can communicate with other users in real-time.

**Security**: The app uses advanced security measures, including encryption and multi-factor authentication, to protect sensitive employee information against unauthorized access and cyber threats.

**Data Storage**: The app uses secure cloud-based data storage to ensure that employee information is always available, even in the event of a disaster or technical failure.

Overall, the app is designed to function in a variety of operating environments and to provide users with the flexibility and security they need to manage employees and maximize productivity. The app is designed to be easy to use, efficient, and secure, ensuring that users can focus on achieving their goals and objectives, rather than struggling with technical issues or security concerns.

## Design Constraints

1. **User Experience**: The app must have a user-friendly interface that is easy to navigate and use, even for those who are less tech-savvy.
2. **Performance:** The app must have fast and reliable performance, even when dealing with large amounts of data and information.
3. **Scalability:** The app must be scalable and flexible, allowing businesses and organizations of all sizes to use it and customize it to meet their specific needs.
4. **Integration:** The app must integrate seamlessly with other tools and systems, such as payroll systems and HR management platforms, to provide a comprehensive solution for managing employees and maximizing productivity.

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1. **Security:** The app must use advanced security measures, such as encryption and multi-factor authentication, to protect sensitive employee information against unauthorized access and cyber threats.
2. **Timeframe:** The app must be developed and implemented within a specified timeframe to meet the needs and expectations of users.
3. **Budget**: The app must be developed within a specified budget, taking into account the costs of development, testing, and deployment.
4. **Resource Availability:** The app must be developed using available resources, such as developers, designers, and project managers, who have the necessary skills and experience to develop the app successfully.
5. **Technical Expertise:** The app must be developed using the latest technologies and tools, requiring a high level of technical expertise and experience.
6. **Testing and Deployment:** The app must be thoroughly tested and deployed in a timely and efficient manner, ensuring that it is reliable, efficient, and secure.

Overall, the design and implementation of the app must take into account a wide range of constraints, including user experience, performance, scalability, integration, security, timeframe, budget, resource availability, technical expertise, and testing and deployment. The app must be developed and implemented in a way that meets the needs and expectations of users, while also ensuring its reliability, efficiency, and security.

## Assumptions and Dependencies

1. **Face Recognition Technology**: The app assumes that face recognition technology will be available and functional for use in the employee management process

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1. **Internet Connectivity**: The app assumes that users will have access to reliable and stable internet connectivity, allowing them to access the app and its features at any time.
2. **User Adoption**: The app assumes that users will be willing and able to adopt the app and use it as part of their daily workflow.
3. **Legal Compliance**: The app assumes that its use will be in compliance with all relevant laws and regulations, such as data privacy and protection regulations.
4. **Hardware**: The app depends on the availability of devices and equipment that are compatible with the app, such as cameras and smartphones, to enable the use of face recognition technology

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1. **Software**: The app depends on the availability of other software and tools, such as payroll systems and HR management platforms, to provide a comprehensive solution for managing employees and maximizing productivity.
2. **Data Accuracy**: The app depends on the accuracy of data and information entered by users, such as employee information, time and attendance records, and payroll data.
3. **Technical Support**: The app depends on the availability of technical support, such as developers, designers, and project managers, to ensure that it is developed, deployed, and maintained successfully.
4. **User Training:** The app depends on the availability of user training, such as online tutorials and training sessions, to ensure that users are able to effectively use the app and its features.

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# External Interface Requirements

## User Interfaces

*The user interface of the productivity and employee management app with face recognition technology can be designed to include the following features and elements:*

*Dashboard: A visual dashboard that provides an overview of employee attendance, productivity, and other key metrics.*

*Attendance Tracking: A feature that allows employees to clock in and out using their faces, with the option to add notes or reasons for absence or late arrival.*

*Employee Information Management: A section where HR or managers can view, edit, and manage employee information, including personal details, job titles, departments, and more.*

*Time and Attendance Reports: A section that generates reports on employee attendance, including details on late arrivals, absences, and overtime.*

*Payroll Management: A feature that integrates with payroll systems to manage employee salaries, bonuses, and deductions.*

*Performance Management: A feature that allows managers to track and evaluate employee performance, including setting goals, tracking progress, and providing feedback.*

*Task Management: A feature that allows employees to manage their tasks and assignments, with the ability to track progress and deadlines.*

*Notifications and Alerts: A feature that sends notifications and alerts to managers and employees, such as reminders for clock-in and clock-out times and updates on performance and tasks.*

*Settings: A section where users can manage their preferences and settings, such as their personal profile information, language preference, and security settings.*

*Overall, the user interface of the app should be designed to be intuitive, easy to use, and visually appealing, providing users with a streamlined and efficient way to manage employee information, track attendance, and maximize productivity. The interface should also provide users with access to relevant information and data, enabling them to make informed decisions and take action when necessary.*

## Hardware Interfaces Requirements

The hardware interface requirements for the productivity and employee management app with face recognition technology include:

Cameras: The app requires cameras, such as smartphone cameras, webcams, or dedicated facial recognition cameras, to capture images for face recognition purposes.

Processing Power: The app requires processing power to run face recognition algorithms and to perform other tasks, such as generating reports and sending notifications.

Storage: The app requires storage for storing employee information, attendance records, and other data, as well as for storing images captured for face recognition.

Connectivity: The app requires connectivity to the internet to access cloud-based services and to transfer data between devices.

Display: The app requires a display, such as a smartphone screen, monitor, or tablet, to display the user interface and to allow users to interact with the app.

Operating System: The app requires an operating system, such as iOS, Android, or Windows, to run on and to provide an environment for the app to function in.

Overall, the hardware interface requirements for the app should ensure that it is able to run reliably and effectively, providing users with a seamless and efficient way to manage employee information, track attendance, and maximize productivity. The hardware requirements should also be scalable and flexible, allowing the app to be used on a variety of devices and to accommodate the needs of different users and organizations.

## Software Interfaces Requirements

*The software interface requirements for the productivity and employee management app with face recognition technology include:*

*Face Recognition Technology: The app requires face recognition technology to accurately identify employees and to track their attendance. The technology should be reliable, fast, and accurate, and should work in different lighting conditions and with different facial features.*

*Integration with Other Systems: The app requires the ability to integrate with other systems, such as payroll systems, to manage employee information and to transfer data between systems.*

*Reporting and Analytics: The app requires reporting and analytics capabilities to generate reports on employee attendance, productivity, and other key metrics. The reports should be customizable and should provide relevant data and insights to help managers make informed decisions.*

*Notifications and Alerts: The app requires notifications and alerts capabilities to send reminders and updates to employees and managers, such as reminders for clock-in and clock-out times and updates on performance and tasks.*

*Security and Access Control: The app requires security and access control features to protect sensitive employee information and to ensure that only authorized users have access to the app and its data.*

*User Management: The app requires user management features to manage and control user access, such as assigning roles and permissions and setting up multi-factor authentication.*

*Data Management: The app requires data management features to store, manage, and retrieve employee information, attendance records, and other data. The data should be organized, easy to access, and secure.*

*Overall, the software interface requirements for the app should ensure that it is easy to use, efficient, and reliable, providing users with a streamlined and effective way to manage employee information, track attendance, and maximize productivity. The software requirements should also be flexible and scalable, allowing the app to be customized and adapted to meet the needs of different users and organizations.*

## Communications Interfaces

API Integration: The app requires API integration capabilities to allow it to communicate and exchange data with other systems and applications, such as payroll systems and HR systems.

Cloud Services: The app requires integration with cloud services to store and manage data in the cloud, and to provide users with access to the app and its data from any location.

Email and SMS Integration: The app requires email and SMS integration capabilities to send notifications and alerts to employees and managers, such as reminders for clock-in and clock-out times and updates on performance and tasks.

Mobile App Integration: The app requires integration with a mobile app, allowing employees to clock in and out using their mobile devices, and providing managers with real-time access to attendance and productivity data.

Web-Based Interface: The app requires a web-based interface, allowing managers and employees to access the app and its data using a web browser from any device with internet access.

# System Features

Face Recognition Technology: The app uses advanced face recognition technology to accurately identify employees and to track their attendance. The technology should be reliable, fast, and accurate, and should work in different lighting conditions and with different facial features.

Employee Information Management: The app allows users to manage employee information, such as personal details, job titles, and schedules, in a centralized location, making it easy to access and update.

Attendance Tracking: The app uses face recognition technology to track employee attendance, providing accurate and up-to-date information on who is clocked in and out.

Reporting and Analytics: The app provides reporting and analytics capabilities to generate reports on employee attendance, productivity, and other key metrics. The reports should be customizable and should provide relevant data and insights to help managers make informed decisions.

Notifications and Alerts: The app sends notifications and alerts to employees and managers, such as reminders for clock-in and clock-out times and updates on performance and tasks.

Security and Access Control: The app provides security and access control features to protect sensitive employee information and to ensure that only authorized users have access to the app and its data.

User Management: The app provides user management features to manage and control user access, such as assigning roles and permissions and setting up multi-factor authentication.

Data Management: The app provides data management features to store, manage, and retrieve employee information, attendance records, and other data. The data should be organized, easy to access, and secure.

Appendix A: Glossary

<Define all the terms necessary to properly interpret the SRS, including acronyms and abbreviations. You may wish to build a separate glossary that spans multiple projects or the entire organization, and just include terms specific to a single project in each SRS.>

Appendix B: Analysis Models

<Optionally, include any pertinent analysis models, such as data flow diagrams, class diagrams, state-transition diagrams, or entity-relationship diagrams.>

Appendix C: To Be Determined List

<Collect a numbered list of the TBD (to be determined) references that remain in the SRS so they can be tracked to closure.>