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| Time Management and Scheduling Application |
| Project Vision Document | |
| **Version 1.0** | |
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# Introduction

Welcome to Time Master which is a time management as well as a scheduling platform which will cater small business. Small business owners often struggle with the challenges of managing their time and resources effectively, which can lead to increased stress and reduced productivity. Our solution aims to address this problem by providing a comprehensive and user-friendly platform for creating and managing employee schedules, tracking time-off requests, and staying organized. Small business owners will be able to streamline these processes and better manage their time and resources using the features which we will have in the application. For example, they will be able to easily schedule shifts, track employee availability and skills, and generate reports to inform scheduling decisions.

## Purpose

The purpose of the project vision document is to provide a clear and concise overview of the goals, objectives, and intended outcomes of the project. It serves as a high-level roadmap that guides the direction of the project and helps ensure that all stakeholders are aligned on the project's vision and purpose. In the context of this project, the project vision document will outline the problem that the project aims to solve (i.e., the difficulties that small business owners face in managing their time and resources effectively) and the opportunity that the project presents (i.e., the creation of a platform that streamlines these processes and improves productivity). It will also describe the key deliverables and features of the platform, as well as the intended benefits for small business owners. By providing this overview, the project vision document will help all stakeholders understand the purpose and value of the project and ensure that everyone is working towards the same goals.

## Scope

### **In Scope**

* Development of a time management and employee scheduling platform for small businesses
* Managing employee schedule and tracking time off requests
* User-friendly and intuitive platform that is easy for small business owners to use

### **Out of Scope**

* Integration with existing HR systems or payroll software
* Customization of the platform for individual businesses beyond basic configuration options
* Training or support for small business owners in using the platform beyond basic documentation and tutorials.

## Definitions, Acronyms, and Abbreviations

|  |  |
| --- | --- |
| Term | Explanation |
| TM | Time Master |

## References

| Reference File Name | Version | Description |
| --- | --- | --- |
| *Flanagan, David. "JavaScript: The Definitive Guide: Activate Your Web Pages." 6th ed. O'Reilly, 2011.* | 6th Edition | "JavaScript: The Definitive Guide" is a comprehensive reference book on the JavaScript programming language, written by David Flanagan. The book covers all aspects of JavaScript, including the syntax, the built-in objects, and the browser-specific APIs. |
| *Duckett, Jon. "HTML and CSS: Design and Build Websites." John Wiley & Sons, 2011.* | 1st Edition | "HTML and CSS: Design and Build Websites" is a beginner's guide to web development, written by Jon Duckett. The book covers the basics of HTML and CSS, two fundamental technologies used for building websites. It provides a clear and easy-to-follow introduction to these technologies, including how to structure and style web pages and how to design for mobile devices. |
| *Bland, Alex. "Learning React: Functional Web Development with React and Redux." 1st ed. O'Reilly, 2017.* | 1st Edition | "Learning React: Functional Web Development with React and Redux" is a tutorial-style book on the React JavaScript library, written by Alex Bland. The book covers the concepts and techniques needed to build efficient and maintainable web applications with React and Redux, including how to use functional programming concepts and the Redux architecture. |

# Positioning

## Business Opportunity

***Time Master*** seeks to capitalize on the opportunity to improve time management and resource allocation for small businesses. Many small business owners struggle with the challenges of juggling with employee schedules, time management and tracking time-off requests, leading to decreased efficiency and potential negative impacts on the business. By providing a platform that offers advanced scheduling tools and real-time updates, the project aims to ease these burdens and help small businesses save time, reduce stress, and improve productivity. By addressing this business need, the project hopes to facilitate the success and growth of small businesses.

## Problem Statement

|  |  |
| --- | --- |
| The Problem of | Small businesses struggling with managing employee time sheets and scheduling |
| affects | Employees and business owners |
| the impact of which is | Decreased efficiency, increased stress, miscommunication, and potential business loss regarding time and resources. |
| a successful solution would be | 1. **Increased efficiency:** By streamlining the process of creating and managing employee schedules and tracking time-off requests, small business owners will be able to save time and focus on other aspects of their business. This can lead to increased efficiency and productivity, and ultimately, improved success and growth. 2. **Improved employee satisfaction:** A clear and organized system for tracking time-off requests and managing schedules can help reduce confusion and miscommunication among employees, leading to improved satisfaction and a more positive work environment. 3. **Potential for business growth**: By improving efficiency and employee satisfaction, a successful solution may lead to increased success and growth for small businesses. This can include increased profitability, expansion, and overall competitiveness in the market. 4. **Reduced stress**: Streamlining the process of managing employee schedules and tracking time-off requests can help reduce stress for small business owners, allowing them to focus on other aspects of their business with peace of mind. 5. **Improved communication**: A comprehensive and user-friendly platform for managing schedules and tracking time-off requests can facilitate clear communication among employees and small business owners, leading to improved collaboration and productivity. |

Table 1 Problem Statement

## Product Position Statement

|  |  |
| --- | --- |
| For | Small Businesses |
| Who | are faced with issues regarding employee time management and scheduling which grow harder as the business increases in scale. They might be using over manual processes or software that is difficult to use. |
| Time Master | is a time management and scheduling application. |
| That | Provides small businesses with the ability to process managing employee schedules and time off requests, saving small business owners time, and reducing stress while improving efficiency and employee satisfaction. This can help small business owners to focus on other aspects of their business with peace of mind, knowing that their employee scheduling and time-off tracking needs are being effectively managed. |
| Unlike | The primary disadvantage of using manual methods or other software solutions as a primary competitive alternative is that they may not be as efficient or effective as this project in terms of managing employee schedules and tracking time-off requests. Manual methods, such as spreadsheets or paper and pencil, can be time-consuming and prone to errors, and may not offer the same level of organization and clarity as a dedicated software solution. Other software solutions may not offer the same range of features and functionality or may not be as user-friendly or intuitive as this project. As a result, small businesses may struggle with the time and resources required to manage employee schedules and time-off requests using these alternatives, potentially impacting their efficiency and productivity. |
| Our product | The primary differentiation of this project is its comprehensive and user-friendly platform for managing employee schedules and tracking time-off requests. This project offers a range of features and functionality specifically designed to streamline these processes, including the ability to create and update schedules and tracking time-off requests. The user interface is intuitive and easy to use, making it accessible and convenient for small business owners to manage their employee schedules and time-off requests. In comparison to manual methods or other software solutions, this project offers a more efficient and effective solution that can save small business owners time and reduce stress while improving efficiency and employee satisfaction. |

Table 2 Product Position Statement

# Stakeholder and User Descriptions

## Stakeholder Summary

| Stakeholder Name | Represents | Role |
| --- | --- | --- |
| Developers | Stakeholder responsible for developing and designing the TM application. | Primary roles include implementing features, fixing bugs, and optimizing performance. |
| QA Testers | Stakeholder responsible for testing TM application. | The primary role would be to test the application and identify bugs which would be reported to the developers to be fixed. |
| Project Manager | The stakeholder is responsible for leading and assigning work for this project. | Project manager is responsible for overseeing the development of the project, including managing the project team, setting goals and deadlines, and ensuring that the project stays on track |
| UI/UX Developers | Stakeholder responsible for developing user interfaces and enhancing the user experience. | They will work closely with developers to create visual elements in the TM application. |

Table 3 Stakeholder Summary

## User Summary

| Username | Description | Responsibilities | Stakeholder |
| --- | --- | --- | --- |
| Employee | End user | Clocking in and out for shifts, viewing schedule, requesting time-off, viewing hours worked and pay breakdown | Self |
| Business Owner (Manager) | End user | Create and edit employee schedules, approve, or deny time-off requests, editing employee info (rate of pay, contact info etc.) and viewing previous employee schedules | Self |
| Admin | End user | Admin should be able to create, delete, edit manager profiles on the system. | Self |

Table 4 User Summary

# Stakeholder Requirements

| ID | Requirement | Stakeholder |
| --- | --- | --- |
| E01 | View my schedule at anytime | Employee |
| E02 | Submit Time-off requests | Employee |
| E03 | View total hours worked in a pay period | Employee |
| E04 | Ability to see a payment breakdown for the current pay period | Employee |
| E05 | Ability to punch in and out for shifts | Employee |
| M01 | Ability to create and edit schedules | Manager |
| M02 | Ability to approve or deny time off requests | Manager |
| M03 | Ability to update employee info such as availability, contact details, pay rate etc. | Manager |
| M04 | Ability to view previous employee schedules and pay | Manager |
| A01 | Admin should be able to create, edit, or delete manager(employee) profiles. | Admin |
| A02 | Admin should be able to edit the system as per its needs. | Admin |

Table 5 Stakeholder Requirements

# System Features

| ID | Feature | Stakeholder Requirement ID |
| --- | --- | --- |
| 01 | **Employee schedule view**: A feature that allows employees to view their schedules at any time. | E01 |
| 02 | **Time-off request submission**: A feature that allows employees to submit time-off requests. | E02 |
| 03 | **Pay breakdown view**: A feature that allows employees to view a breakdown of their pay for the current pay period, including overtime and other pay factors. | E04 |
| 04 | **Time worked tracking**: A feature that allows employees to view the total hours worked in a pay period. | E03 |
| 05 | **Shift punch-in/punch-out**: A feature that allows employees to punch in and out for shifts. | E05 |
| 06 | **Schedule creation and editing**: A feature that allows managers to create and edit employee schedules. | M01 |
| 07 | **Time-off request management**: A feature that allows managers to approve or deny incoming time-off requests. | M02 |
| 08 | **Employee information management:** A feature that allows managers to update employee information such as availability, contact details, and pay rate. | M03 |
| 09 | **Previous schedule and pay view:** A feature that allows managers to view previous employee schedules and pay. | M04 |
| 10 | **Manager profile management:** A feature that allows admins to create, edit, or delete manager profiles | A01 |
| 11 | **System management**: A feature that allows admins to edit the system and tend to its needs. | A02 |

Table 6 System Features

# Assumptions

* The target audience for this project is small business owners who are seeking a solution for managing employee schedules and tracking time-off requests.
* Small business owners have limited time and resources to devote to managing employee schedules and tracking time-off requests and are seeking a more efficient and effective solution.
* The target market for this project is small businesses with fewer than 50 employees.
* The user interface for this project will be intuitive and easy to use, making it accessible and convenient for small business owners to manage their employee schedules and time-off requests.
* The features and functionality offered by this project will be sufficient to meet the needs of small business owners in managing employee schedules and tracking time-off requests.
* The business processes and requirements for managing employee schedules and tracking time-off requests are similar across small businesses in the target market.
* Stakeholders including small business owners and employees will be willing to adopt and use this project in their business.
* The requirements and scope of this project are clearly defined and understood by all stakeholders.

# Constraints

* The TM application may need to be tested and optimized for different web browsers and devices to ensure a consistent user experience.
* The TM Application will require a stable internet connection so this may be a constraint for users with poor internet.
* Limited IT support available to development team.
* TM application may need to adhere to security standards to protect user information.
* The TM application may need to integrate with other systems or technologies, such as databases or APIs, which may require additional planning and resources to ensure compatibility and reliability.