ReserveWell: Restaurant Reservation Platform Vision

Version History Table

Version	Date	Description
v1.0	4.11.2023	-
v1.1	8.11.2023	• Problem Statements are revised. • Product Overview is revised. • Other Product Requirements are revised.

1. Introduction

1.1 Purpose

The purpose of this document is to collect, analyze, and define high-level needs and features of the ReserveWell Application. It mainly focuses on the needs of the stakeholders and customers, why these needs exist, and main benefits of the applications.

1.2 Scope

The RW Application will work on WEB and mobile. It makes it possible for restaurant managers to save time and cost, to add new ones to the restaurants' fixed customer base, to prepare future reservation plans based on statistics prepared specifically for the restaurant, and to tolerate over/under booking cases. Those are detailed further sections in this document.

1.3 Definitions, Acronyms, and Abbreviations

- RW: ReserveWell
- Restaurant Managers: A person who manages the store
- Customers: People who eats food at the reserved restaurant

  Consult the glossary for further terms.

1.4 References

1. Vision Document Template
2. "IBM Engineering Lifecycle Management/Vision Document" https://www.ibm.com/docs/en/engineering-lifecycle-management-suite/lifecycle-management/7.0.3?topic=SSYMRC_7.0.3/com.ibm.rational.rrm.help.doc/topics/r_vision_doc.htm
3. Applying UML and Patterns: An Introduction to Object-Oriented Analysis and Design and Iterative Development (3rd Ed.), Craig Larman, Prentice Hall PTR, 2004.

● 2. Positioning

Project Context:
Our effort to create a restaurant reservation system was started in response to the increasing demand from customers for a simple and effective method of making restaurant reservations. We understand that the need for eating experiences—both in-house and takeout—is growing, and that's why we need to offer a user-friendly platform that addresses the difficulties both customers and restaurant owners encounter when trying to manage reservations.

Business Goals:
There are several different business objectives for our project:
Maximize table reservation revenue by ensuring effective seating, cutting down on no-shows, and optimizing reservations.
Reduce wait times and provide convenient table reservations to improve the entire eating experience for customers.

Gain market dominance by dominating the restaurant reservation industry and serving a wide variety of restaurants.
Encourage expansion in the restaurant business by offering data and analytics to restaurateurs so they may enhance their operations and make data-driven decisions.

Strategic Alignment:
Our restaurant reservation system works in perfect balance with the larger business objectives of our company. By offering a technical solution that improves the dining experience and helps restaurants optimize their operations, it balances our commitment to innovation, customer happiness, and digital transformation. It's an essential part of our strategic plan, not just an independent project.

Market Analysis:
Our project intends to establish itself as a leader in the highly competitive restaurant business by providing a complete solution. We've discovered an increasing demand for a single reservation system that serves both casual and fine-dining restaurants through comprehensive market research. Our goal is to close this gap and take the lead in the industry.

Target Audience:
Our primary customers are diners who want to easily reserve a table and restaurant managers or owners who want to effectively handle their reservations. Staff members in restaurants who handle seating arrangements and operational analytics are examples of secondary users.

Unique Selling Proposition (USP):
Our restaurant reservation system stands out from other systems because of its flexibility, waitlist functionality, and ease of use for a variety of restaurant sizes and types. It is a unique solution because of its smooth integration with current restaurant systems and real-time analytics for decision-making.

Value Proposition:
All parties involved in our project stand to benefit many advantages from it. It promises a simpler reservation process and a more pleasant eating experience for customers. It optimizes revenue, streamlines processes, and gives restaurant owners useful insights to grow their company. In the end, our method provides a solution that benefits both parties involved in the dining experience.

Scope and Boundaries:
A user-friendly reservation program, connection with restaurant operations, and comprehensive analytics for performance assessment are all part of our project. It does not, however, include developing

customized mobile applications or websites for particular restaurants.

Risks and Challenges:

Risks and problems that could occur include the restaurant industry's dynamic nature, user adoption, data security, and competition from current reservation systems. To ensure project success, we are dedicated to taking proactive measures to solve these difficulties.

Dependencies:

A variety of technologies are used in our project, such as real-time communication protocols, database management systems, and secure payment gateways. Furthermore, our success also depends on our restaurant partners' willingness to integrate our technology into their daily operations. The success of the project depends on how well these dependencies are understood and managed.

The effectiveness of our restaurant reservation system depends heavily on how it is positioned in the organization and market. This document offers an understanding of the goals, background, and significance of the project in relation to the industry in general. It provides a strong basis for making well-informed decisions, establishing priorities, and carrying the project towards completion.

○ **2.1 Problem Statements**

○ **2.1.1 Problem Statement for <u>Customers</u>**

The problem of	*difficulty in finding available tables, making table selections, and engaging in phone conversations instead of utilizing a user-friendly interface*
affects	*customers, who endure communication intricacies, forgettable reservations*
the impact of which is	*reduced customer satisfaction, leading to a potential decline in commitment and loyalty.* *a need for a more efficient reservation experience that benefits customers.*
a successful solution would be	*a comprehensive, user-friendly application that simplifies the dining reservation process.* *a system that facilitates efficient communication between diners and restaurants.* *an intuitive platform that enhances commitment, loyalty while reducing the manual effort required for reservation management.*

2.1.2 Problem Statement for <u>Restaurants</u>

The problem of	*challenges in handling restaurant reservations, fully utilizing restaurant capacities and engaging in phone conversations instead of utilizing a user-friendly interface*
affects	*restaurant owners and managers (off and on-site), who struggle to efficiently manage reservations and optimize table turnover.* *restaurant employees, including waitstaff and hosts/hostesses, who face difficulties in coordinating table assignments.*
the impact of which is	*reduced customer and business satisfaction, leading to a potential decline in restaurant profitability*

	inefficient workforce allocation and challenges in reservation management.
	a need for a more efficient reservation experience that benefits restaurants
a successful solution would be	*a comprehensive, user-friendly application that simplifies the reservation management process.*
	a system that minimizes overbooking, optimizes table turnover, and facilitates efficient communication between diners and restaurants.
	an intuitive platform that enhances commitment, loyalty, and restaurant profitability while reducing the manual effort required for reservation management.

○

○ **2.2 Product Position Statements**

2.2.1 Product Position Statement for <u>Customers</u>

For	*restaurant enthusiasts*
Who	*are seeking a convenient dining experience*
The ReserveWell	*is a revolutionary application.*
That	*is a state-of-the-art restaurant reservation platform that offers a seamless and efficient way to book tables.*
Unlike	*traditional competitors like OpenTable, Quandoo and websites of the restaurants, our product sets itself apart by providing real-time reservation management, personalized dining experiences, and dynamic pricing, creating a unique and all-encompassing solution for diners.*
Our product	*'s primary differentiation lies in its commitment to enhancing the dining experience, waitlists, from ease of booking to tailored customer service.*

2.2.2 Product Position Statement for <u>Restaurants</u>

For	*restaurant owners*
Who	*are striving to maximize their reservations respectively.*
The ReserveWell	*is a revolutionary application*
That	*is a state-of-the-art restaurant reservation platform that offers a seamless and efficient way to manage reservations, and optimize seating turnover.*
Unlike	*traditional competitors like OpenTable, Quandoo and websites of the restaurants, our product sets itself apart*

	by providing real-time reservation management, and dynamic pricing, creating a unique and all-encompassing solution for restaurant owners.
Our product	*'s primary differentiation lies in its ultimately boosting restaurant profitability.*

3. Stakeholder Descriptions

○ **Stakeholder Summary**

Name	Description	Responsibilities
Restaurant Management (External)	Restaurants' Owners	approves funding
		checks if the service provided by the software
		project (system) aligns with the restaurant's requirements and business goals.
		makes the implementation decision
		authorizes project's initiation
		has interest on profit
Restaurant Management (End Users)	Store Manager	monitors the project's progress and budget
		works with IT team to ensure smooth operations
		oversees user training on how to use the system
		participate in quality assurance
		keeps an eye on the system's performance
		manages capacity and workforce allocation
Employees (End Users)	Waiters	uses system to meet and assist customers
		track reservation realizations
		promotes customers the use of loyalty program
Customers (End Users)	Diners	uses system to make and track reservations
		makes payments
		creates and joins waitlists
		communicates with Customer Support Team

Name	Description	Responsibilities
Partners	Marketing Firm	promotes the project on different platforms to boost user acquisition and retention
Partners	App Store	provides a marketplace for distribution of the project app
Payment Platforms (External)	Online banking applications	identifies verification provides secure payment handles refunds
Customer Support Team	Customer Support Representatives	answers inquiries provides information communicates with customers receive feedbacks from customers
Project Management	Product Owner, Project Managers, Technical Leads	defines project goals, scope, objectives and deliverables develops a project plan, including schedules, allocation, milestones controls project scope facilitates stakeholder communication oversees quality, budget, schedule compliance
Development Team	Developers	collaborates with stakeholders to understand and document project requirements, user stories and use cases creates software architecture and documentation writes, tests, debugs code to create software solutions ensures quality, security, scalability and performance optimization provides implementation support and maintenance
Quality Team	Product Owner, Project Manager, Classmates	reviews code and documents provides feedback helps for continuous improvement carries functional/performance testing
Data Protection Regulatory Bodies	Product Owner, Project Manager, Developers	monitor and enforce compliance with data protection laws and regulations

○ **User Environment**

The system cannot be used offline.

Number of people involved in completing the task is one and it is not changing, regardless of the customers(diners) or restaurant staff (store manager, waiters)

Completing tasks for customers takes between 1 and 5 minutes, depending on the saved information.

Completing tasks for waiters takes between 1 and 2 minutes.

For the diners, reservation is possible with or without membership.

The waitlist feature and loyalty program is special to customers with membership.

Waiters should login and have membership to use the system.

System is available in web platforms and will be available in mobile platforms in future releases (v2.0).

Our system needs to integrate with Google Maps, so that for the restaurants which are available on Google Maps, customers can make reservations seamlessly, while checking the location.

The language is English and it is planned to make it accessible in different languages to accommodate multilingual users.

Users need to accept some agreements about the data protection and privacy policies.

Notification preferences can be customized.

4. Product Overview

○ **Needs and Features**

Need	Priority	Features	Planned Release
To offer customers the opportunity to make reservations through a platform by offering multiple restaurant options.	High	Shows available capacity and offers table selection for variety of restaurants	v1.1
To minimize the errors due to the human factors in reservations with traditional ways	High	A user-friendly interface without the need to interact with the restaurant staff	v1.1
To offer customers web access	High	A web-based application	v1.1
To show real-time availability of the tables in a restaurant	High	An easy-to-interact user interface that is being updated continuously	v1.2
For a wishlist for customers who cannot find available spaces at a specific time	Medium	Waitlists for both the customers and restaurants, which will be updated real-time according to realized and canceled reservations.	v1.2
To answer customers' questions about their reservations and takes feedback from them to make product better	Medium	Customer support system contact with customers at any time with its chat bot	v1.3

For customers to choose a specific table	Medium	Layout support to represent sitting plans for each restaurants	v2.0

To integrate with individual restaurant websites and payment services	Medium	Reservations, payments and capacity information is updated accordingly	v2.0
For customizable reservation preferences	Medium	A user interface for the customers to arrange their preferences such as preferred dining times, seating options or dietary restrictions	v2.0
To offer customers mobile access	High	A user friendly, mobile-responsive design of the web application	v2.0

5. Other Product Requirements

Requirement	Priority	Planned Release
Change Management: It is essential that the unified process is followed effectively in order to adapt to the changes. Many change and update requests can come from the stakeholders, and the updates to the system should be handled in an elegant manner in order not to get complex in the future. For this purpose, dividing the work into smaller pieces is of high importance for the developer team to react to changes. These divided pieces of work (the tasks) should be handled in at most 7 days in the UP approach for maximizing the adaptability to the changes.	**High**	v1.0
Security and Privacy: Similar to the security requirement, the system should adhere to the privacy of their users. Private user data should be encrypted with industry-standard protocols. Other than securing the data of the customers, the users should have the control of their data such as creating, updating or deleting under the proper authorization conditions.	**High**	v1.2
Reliability & Availability:	**High**	v1.2

The system should provide a real-time view of the reservations in the restaurant. Therefore, high reliability of the data that the system provides is necessary. The necessary maintenance and updates should be done in the non-operating times of the restaurant in order to obtain minimal downtime during working hours, and it should provide at least 99.9% availability during the operating hours of the restaurant. In addition to that, the maintenance operations should be done in a regular and scheduled manner.		
Scalability and Performance: The system should be capable of withstanding and performing in its optimal standards of providing a maximum response time of 3 seconds (under standard internet connection) under the condition of growing users. This includes scaling the resources dynamically under the peak conditions. Performance monitoring for memory consumption and response time should be done in regular intervals in order to achieve this goal.	**High**	v1.3
Feedback and Analytics: In order the system to evolve, user feedback is essential. The system should collect user inputs for their suggestions, and follow the data-driven approach. After making a reservation or a transaction, the customers should give feedback to the system (a point out of 5, and a note if they will) in under 10 seconds seamlessly.	**Medium**	v1.3
Testing and Quality Assurance: The system should be tested in a comprehensive manner. The necessary unit and end-to-end tests should be handled in an automated way with the tester team. This is essential in order to capture any system related issues before reaching the users.	**High**	v1.3
Integration:	**Medium**	v2.0

It should be noted that many restaurants have websites, and the reservation system should integrate with the websites seamlessly in order to get the most benefit. In addition to that, the system has to integrate with payment services and some external services such as Google Maps.		
User Support and Training: For the best user experience, the system should provide a simple-to-use environment for the communication with the customers such as chat support and email. The customers should reach any service assistant and get a response in under 5 minutes using the system interface. Additionally, necessary training materials should be provided to both the customers and the restaurant staff for high adaptability. The customers should make a reservation of their choice in under 5 minutes, and the restaurant staff should become familiar with the system so that they can use it on a daily basis in under 4 hours with the training materials.	**Low**	v2.0
Localization: Depending on the location of the user, the system should support a diverse user segment. In its early stages, it should focus on English and the localization may not be of high concern, however, for the scalability purposes as well, the language that the system supports should expand with different languages such as French, German and Turkish.	**Low**	v2.0