Contactless Restaurant Management Service

Project Vision Document

Version 1.3

10/3/2020

Revision History

Revision	Date	Author	Reviewed By	Summary of Changes
1.1	September 19, 2020	All Members	All Members	Introduction, Positioning, Constraints, Assumptions
1.2	September 26, 2020	All Members	All Members	Stakeholders, User Requirements and Descriptions
1.3	October 03, 2020	All Members	All Members	System Features and Finalize

Document Approval List

Version	Approved By	Signature	Date
1.1	Saif Bakhtaria	Saif Bakhtaria	September 19, 2020
1.2	Min Lin	Min Lin	September 26, 2020
1.3	Syed Jamal	Syed Jamal	October 03, 2020

Document Distribution List

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1   Introduction

This document outlines the vision for the Contactless Restaurant Management Service. The need for a service of this kind is more prevalent than ever due to the current on-going health crisis. CRMS provides a mechanism for customers and restaurant staff to take part in the dine-in experience will following social distancing mandates. This vision document aims to provide information that will ensure the project goals and requirement are well understood.

1.1   Purpose

The purpose of the Project Vision Document is to define the desired outcomes for our project when the business has implemented our product. This document highlights the business analysis conducted to conclude that the undertaken project is one that has good marketability and solves the business problem. The document establishes a business opportunity, purports a solution, analyzes stakeholders and establishes system requirements.

1.2   Scope

1.2.1   In Scope
This product vision document applies to the Contactless Restaurant Management Service (CRMS) which will be developed by the T14 development team. This service will be provided by two products; a customer-facing mobile application and web application for the restaurant staff/operators. The mobile application will coordinate reservations and contactless dine-in experience. The restaurant application will consist of a dashboard to manage operations and provide analytical insights. The mobile application will interface with the web application to deliver the overall management service.

1.2.2   Out of Scope
The Contactless Restaurant Management Service is primarily focused on the restaurant dine-in experience and will not provide functionality pertaining to takeout or delivery services. The restaurant management aspect of the service does provide many operational features to the operator but any functionality relating to payroll will not be included in this service.

1.3   Definitions, Acronyms, and Abbreviations

Term	Explanation
API	Application Programming Interface
CI/CD	Continuous Integration/Continuous Deployment
CRMS	Contactless Restaurant Management Service
UI	User Interface

1.4   References

Reference File Name	Version	Description

Name	Link
MenuSifu	https://www.menusifu.com/en/
Stripe	https://stripe.com/docs

2 Positioning

2.1 Business Opportunity

The business opportunity being met by this project is in reaction to the novel pandemic laws and by-laws passed to ensure the safety of the public. These safety measures have resulted in hefty monetary losses for businesses due to the nature of current restaurant logistics violating these safety measures. Businesses require methods to continue offering their services while abiding by the regulations laid out by the Ministry of Health.

2.2 Problem Statement

The Problem of	providing a safe and sustainable dining experience in the current health crisis environment
affects	restaurant staff/operators and customers
the impact of which is	trying to provide the same satisfactory service while trying to abide by the new food service mandates
a successful solution would be	a cost effective and easy to use application that restaurants can use to manage staff and services. The product will provide the customers a way to take part in dining service and comply to precautions set out by law makers. The solution will set out to provide to separate products; a mobile application for the customer and web application for the restaurant. The mobile application will provide the customers with the ability to make reservations and dine in at restaurants with minimal contact with staff. The web application will provide a dashboard to restaurants that will allow for efficient management of operations. The restaurant operator and others with elevated will be privy to insights on customer dining habits.

Table 1 Problem Statement

2.3 Product Position Statement

For	Restaurant customers and workers
Who	To serve customers while adhering to social distancing guidelines

The contactless restaurant management service	is a mobile and web application
That	will allow customers to dine while adhering to social distancing guidelines
Unlike	MenuSifu provides various services like POS system, customer ordering, online ordering, services in multiple languages, reporting, mobile ordering, reservations, staffing, inventory management and mobile payment.
Our product	Our application is designed specifically for in-house logistics. MenuSifu does not have any services that continue to serve the customer once they've arrived at the restaurant. Our product will continue to serve the customer until they've finished dining at the restaurant.

Table 2 Product Position Statement

2.4 SWOT Analysis

Strengths	Weaknesses
Easy to adapt to different restaurant models – modular	Requires high volume of data from many users to be profitable.
Reduce communication between staff and customer.	Fault tolerance – requires backup data and low-down times.
User Friendly.	
Opportunities	**Threats**
This app will help small business owners who are suffering in managing customer.	MenuSifu – earlier to market, mature company in the same industry, more resources
Unique and safe dining experience during the current situation which will help in running business as well as following all the guideline given by health sectors.	Market cycles – contraction and trough phases will see less people dining out at restaurants

3   Stakeholder and User Descriptions

3.1   Stakeholder Summary

Stakeholder Name	Represents	Role
Project Manager	This is a stakeholder that supervises the development of this project.	Responsible for managing project financials, project status report, change management, governance, role identification and business communication to the stakeholders.
Developer	This is a stakeholder that is primarily for developing web and mobile applications of this project.	Responsible for the design, implementation, test, and deployment and maintenance of this product.
Restaurant Owner	This is a stakeholder that uses this product.	Responsible for opening and running restaurants professionally with the help of this project.
Restaurant Customer	This is a stakeholder that is interested in this product. They are the end users of this product.	Responsible for providing feedback on the product and sharing the product with others.
Restaurant Staff	This is a stakeholder that uses this product and take benefit from its features.	Responsible for maintaining daily restaurant business, response to customers' request and following managers' leadership.
Quality Assurance Team	This is a stakeholder help meet clients' demands and expectations most fully.	Responsible for planning, observation and inspection, establishing policies and procedures, defining job descriptions and recruiting talented team members to perform tasks.
Market Research Analyst	This is a stakeholder that focuses on reducing the risks related to this project.	Responsible for gathering and analyzing data on consumers and competitors. They study market conditions to examine potential sales of a product or service. They help companies understand what products people want, who will buy them, and at what price.
Software Architect	This is a stakeholder that communicates with businesses and clients to	Responsible for making high-level design choices and trying to enforce technical

	design and execute solutions with a team of software engineers	standards, including software coding standards, tools, and platforms.

Table 3 Stakeholder Summary

3.2 User Summary

User Name	Description	Responsibilities	Stakeholder
Restaurant Customer	End user of the system	Sign in to the system, order through app, carry your own device, check if order is placed properly	self
Restaurant Staff	End user of the system	Confirm reservation, check day to day system communication, receive orders.	self
Restaurant Owner	End user of the system	Sign in to the system, check all terminal, check if system is working properly, make sure all the menu items are on the app.	self

Table 4 User Summary

4   Stakeholder Requirements

ID	Requirement	Stakeholder
4.1	Able to update menu, view customer data and visualizations, view / generate monthly reports, make / view seating plan and view/ manage shifts	Restaurant Owner
4.2	Able to create user profile, sign in, customize user profile, view restaurant and location, make restaurant review, make Reservation, view or update reservation, make payments, view receipts, sign into/ out restaurant and make table request	Restaurant Customer
4.3	Able to sign in, view / manage payments, view / manage table requests, view / manage reservation requests, send reservation verification E-mail, and confirm item requests	Restaurant Staff

Table 5 Stakeholder Requirements

5   System Features

Customer Mobile Application

ID	Feature	Stakeholder Requirement ID
5.1	**Create user profile** User should be able to create a new profile	4.2
5.2	**Sign in** User should be able to sign into application	4.2
5.3	**Customize user profile** Customer should be able to customize their profile if needed	4.2
5.4	**View restaurant and location** User should be able to view restaurants and their location	4.2

ID	Feature	Stakeholder Requirement ID
5.5	**Make restaurant review** User should be able to make a review on a restaurant if they wish to	4.2
5.6	**Make Reservation** User should be able to make reservations if available	4.2
5.7	**View or update reservation** User should be able to view or update reservation whenever required.	4.2
5.8	**Make payments** User should be able to make payments through the application	4.2
5.9	**View receipts** User should be able to view their receipts	4.2
5.10	**Sign into restaurant** User should be able to sign into the restaurant when they arrive.	4.2
5.11	**Sign out of restaurant** User should be able to sign out of restaurant when leaving	4.2
5.12	**Make table request** User should be able to make a table request	4.2
5.13	**Make an item request** User should be able to make an item request	4.2
5.14	**Alter item request** User should be able to alter their item requests if any changes need to be made	4.2
5.15	**Sign out** User should be able to sign out of application	4.2

Table 6 System Features

Restaurant Web Application – All Users

ID	Feature	Stakeholder Requirement ID
5.16	**Different privileges** Web application should provide two privileges – owner and restaurant staff	4.2, 4.3

ID	Feature	Stakeholder Requirement ID
5.17	**Sign in** User should be able to sign into application	4.2, 4.3
5.18	**View / Manage payments** Users should be able to view and manage payments made to restaurant	4.2, 4.3
5.19	**View / Manage table requests** Users should be able to view and manage customer table requests	4.2, 4.3
5.20	**View / Manage reservation requests** Users should be able to view and manage reservation requests from customers	4.2, 4.3
5.21	**Send reservation verification E-mail** Users should be able to send reservation verification E-mail to customers	4.2, 4.3
5.22	**Confirm item requests** Users should be able to confirm item requests from customers	4.2, 4.3

Restaurant web application – owner only

ID	Feature	Stakeholder Requirement ID
5.23	**Update menu** User should be able to make changes to the restaurant menu such as adding new dishes, removing dishes etc. whenever required	4.3
5.24	**View customer data and visualizations** User should be able to view customer data such as Time spent, location, food ordered etc.	4.3
5.25	**View / Generate monthly reports** User should be able to view and generate monthly reports	4.3
5.26	**Make / View seating plan** User should be able to view seating plan or make a new seating plan for the restaurant	4.3
5.27	**View/ Manage shifts** User should be able to view and manage the shifts of their employees	4.3

Table 7 System Features

6 Assumptions

- All resources required will be available.
- Team members possess all the required skills.
- The project scope will not change once finalized.
- Workstations are available
- System pre-configured with software and programs
- CI/CD technology available
- All equipment is in good condition
- Communication is concrete and clear between all stakeholders

7 Constraints

7.1 Security

Payments are done securely through Stripe API

Authentication of the user is by username and password.

7.2 Usability

Easy to use application with simple UI.

7.3 Responsiveness

System responds quickly to user commands and changes in the system.

On average, system should respond to user requests and changes in the system in 0.7 seconds.

7.4 Money

Features added to application will be limited to monetary compensations.

7.5 Time

Features added to applications will be limited to delivery date required by client.

7.6 Scope

Features are relative to the scope expected by client.