Software Requirements Specification

for

Takeout Ordering System

Version 1.0 Draft

Prepared by Alex van der Meulen for CEN 3073

Amimoto

04/24/22

Table of Contents

Revision History

Name	Date	Reason For Changes	Version
Alex van der Meulen	04/24/22	Initial Draft	Version 1.0 Draft

1. Introduction

1.1 Purpose

The system allows customers to place takeout orders without interacting with the front-of-house staff, who are often overwhelmed. In the takeout system, customers will be able to view allergy information for the different menu items. They will also be notified of the expected time at which they can pick up their order. The system will archive all customer orders. The proposed system will increase accessibility of ordering, customer satisfaction, business profits, and staff productivity.

1.2 Scope

Product Name

Takeout Ordering System

Overview

The system allows customers to place takeout orders without interacting with the front-of-house staff. In the takeout system, customers will be able to view allergy information for the different menu items. They will also be notified of the expected time at which they can pick up their order.

Goals

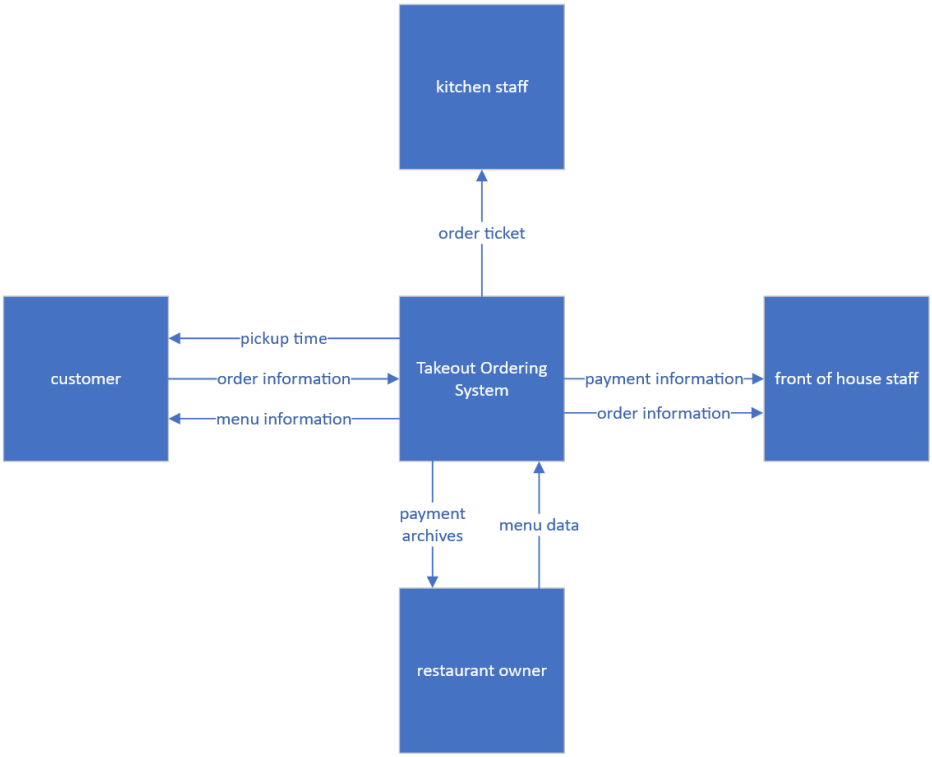
- Customer satisfaction for takeout orders will increase by at least 25% following one month after the implementation of the system. This will be verified through surveys before the new system and after it is implemented and used.
- Front of house staff productivity will be increased through the use of the system. Front of house staff will be able to take orders from dine in guests 30% faster on average, measured from the time the group sits down until the order is placed, after 3 months when the takeout ordering system is fully in use.
- Business profits from takeout orders will be increased by at least 15% following three months after the system is implemented. Current records of takeout orders will be compared to new records that are archived by the system to verify.

Out of Scope

- The system will not modify how front of house staff takes orders from guests who are dining in the restaurant.
- The system will not save user accounts or information.
- The system will not take reservations.

1.3 Product Overview

1.3.1 product perspective



Jira

Key	Summary
AJP-49	Only open source software available under the GNU General Public License may be used to implement the product
AJP-46	System design must follow responsive web design principles by Mozilla
AJP-45	System must run on Android and iOS browsers (safari, galaxy internet)
AJP-44	All textual data used by the application shall be stored in the form of XML files
AJP-36	A user clicks at the top of the menu view to search for items
AJP-35	The system must display all allergy and foodborne illness information associated with menu items
AJP-34	The system must be able to run on desktop web applications (Google Chrome, Mozilla Firefox)
AJP-33	Takeout orders must have a name given by the customer for identification
AJP-32	Takeout orders through the system shall only accept Visa, Discover, and Mastercard as payment options

1.3.2 Product functions

- Receive takeout order from customer
- Notify kitchen of takeout order
- Accept payment information
- Bill customer
- Display menu
- Display answer to frequently asked questions

1.3.3 User Characteristics

- Customers: use system to place take-out orders.
- Front of house staff: use system to identify orders and deliver to the appropriate customers.
- Kitchen staff: Use system to receive orders.

1.3.4 Limitations

Jira

Key	Summary	Description	Labels
AJP-20	The system must be able to run on web applications (Google Chrome, Mozilla Firefox), Android, and iOS.	must be able to run on web applications for desktop or mobile devices	Limitation
AJP-19	The system cannot save credit card information for later use.	payment information will not be saved for later use.	Limitation
AJP-18	The system cannot go down for maintenance between 4:00 P.M. and 8:30 P.M.	Maintenance must be completed before the system is needed for service.	Limitation
AJP-17	Orders can only be accepted between 4:00 P.M. and 8:30 P.M.	Amimoto is open from 5 to 8:30 and orders can only be placed one hour before opening until close.	Limitation

1.4 Definitions

Drop - start preparing a dish
Comp - give something away for free

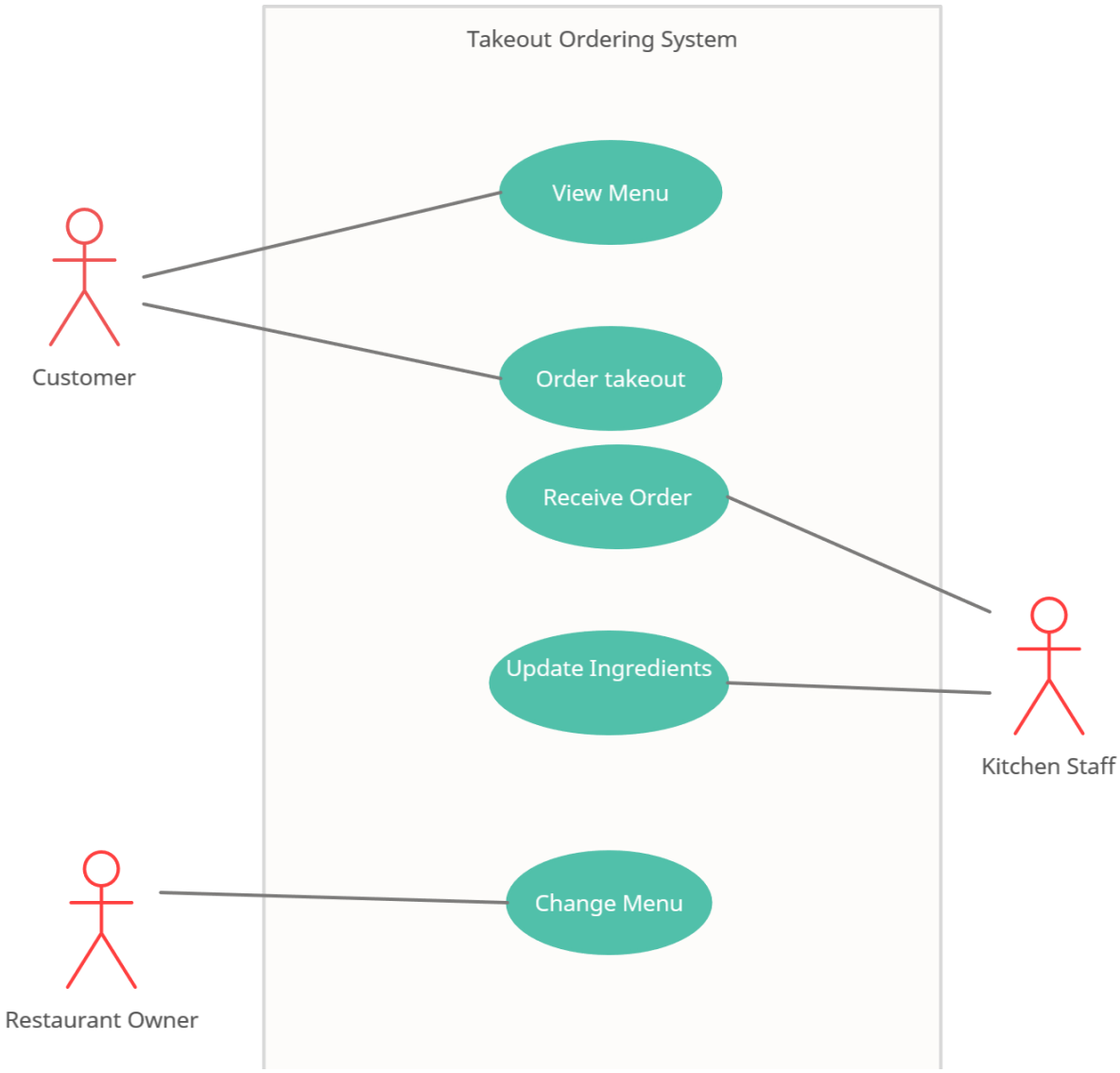
Fire - Order that is given to start prepping food
In the weeds - busy or overwhelmed

2. References

Tony Manabe, restaurant owner
Andy Vullo, front of house staff
http://ibisworld.com
Amimoto Facebook Page

3. Specific Requirements

Key	Summary	Description	T	Linked Issues	P	Labels
AJP-50	The system shall grey out any items that are not available when viewed on the menu			AJP-14	=	Functional, Nonfunctional
AJP-48	The system shall display at the top of the page if Amimoto is currently taking takeout orders or not			AJP-13	˅	Nonfunctional
AJP-47	If an order is placed before 4:00pm or after 8:00pm, the system shall display a message stating takeout orders are only available between 4:00pm and 8:00pm			AJP-13 , AJP-17	^	Functional
AJP-43	If an item is unavailable, the system will display a similar item that is available			AJP-14	=	Functional
AJP-42	The system shall store records of ordered items as XML			AJP-4	=	Functional
AJP-41	When an order is completed, the customer shall be notified within 1 minute			AJP-16	˅	Nonfunctional
AJP-40	When an order is completed, the system shall notify the customer through email			AJP-16	˅	Functional
AJP-39	When an order is placed, the kitchen staff shall receive the order within 15 seconds of it being placed			AJP-51	=	Nonfunctional
AJP-38	When a user requests after placing their order, the system shall send a copy of the receipt by email.			AJP-31	=	Functional
AJP-37	The time estimate of when the order will be ready shall be within 10 minutes of the actual time			AJP-16	=	Nonfunctional
AJP-30	If a takeout order is placed, the system shall provide the customer with a receipt of purchase.			AJP-12	˅	Functional
AJP-29	if an item is out of stock, the system shall display a disclaimer to the customer that the item is not available.			AJP-14	=	Functional
AJP-28	A customer shall order takeout orders through the system.			AJP-12	^^	Functional
AJP-27	The system shall display the current time estimate for a takeout order to be ready.			AJP-16 , AJP-13	^	Functional
AJP-26	If the payment for an order is accepted, the system shall display a confirmation message dialog window to the user indicating that the order placement has been successful.			AJP-31	=	Functional
AJP-25	If a takeout order is placed, the system shall display a list of ordered items to the customer to confirm before the order is placed.			AJP-9 , AJP-12	˅	Functional
AJP-24	The system shall display a list of menu items			AJP-15	^	Functional
AJP-23	If a takeout order is made, the system shall notify the customer when the takeout order will be ready for pickup.			AJP-16	^	Functional
AJP-22	If a takeout order is made, the system shall update the amount of available ingredients.			AJP-14	=	Functional
AJP-21	If a takeout order is placed, the system shall display a confirmation message dialog window to the user indicating that the order placement has been successful.			AJP-31 , AJP-15 , AJP-16	=	Functional



Primary Actor	Use Cases
Customer	1. View menu 2. Order takeout
Kitchen staff	3. Receive order 4. Update ingredients
Restaurant Owner	5. Change menu

UC ID and Name:	**UC-1. View menu**		
Created By:	Alex van der Meulen	Date Created:	3/15/22
Primary Actor:	Customer	Secondary Actors:	
Trigger:			
Description:	A customer views a menu displayed by the ordering system		
Preconditions:	PRE-1. A customer has accessed hte onlin eordering system		
Postconditions:	POST-1. Menu is displayed to the customer		
Normal Flow:	1. A user accesses the system 2. System displays the menu of available items		
Alternative Flows:	1. A user searches for menu items 1.1 Only desired items are displayed by the system		
Exceptions:			
Priority:	Very High		
Frequency of Use:	100+ times daily		
Business Rules:			
Other information:			
Assumptions:			

UC ID and Name:	**UC-2. Order takeout**		
Created By:	Alex van der Meulen	Date Created:	3/15/22
Primary Actor:	Customer	Secondary Actors:	Kitchen Staff
Trigger:			
Description:	A customer places a takeout order that will be received by the kitchen staff		
Preconditions:	PRE-1. Items are available PRE-1. Amimoto is currently taking orders		
Postconditions:	POST-1. Kitchen staff receives order POST-2. Item quantity in system adjusted		

Normal Flow:	1. A customer accesses the system 2. Customer views the menu (UC-1) 3. Customer selects item to order 4. inputs payment method 5. places order
Alternative Flows:	1. customer does not input payment method 1.1. customer pays in store
Exceptions:	
Priority:	Very high
Frequency of Use:	20+ times daily
Business Rules:	
Other information:	
Assumptions:	

UC ID and Name:	**UC-3. Receive order**		
Created By:	Alex van der Meulen	Date Created:	3/15/22
Primary Actor:	Kitchen staff	Secondary Actors:	Customer
Trigger:			
Description:	The ktichen staff receives a takeout order placed by a customer		
Preconditions:	PRE-1. Customer placed a takeout order		
Postconditions:	POST-1. Kitchen staff makes the order		
Normal Flow:	1. customer places order 2. kitchen staff receives the order		
Alternative Flows:	None.		
Exceptions:			
Priority:	High		
Frequency of Use:	20+ times daily		
Business Rules:			
Other information:			
Assumptions:			

UC ID and Name:	**UC-4. Update ingredients**		
Created By:	Alex van der Meulen	Date Created:	3/15/22
Primary Actor:	Kitchen staff	Secondary Actors:	
Trigger:			
Description:	The kitchen staff manually updates the ingredients available to the system		
Preconditions:	PRE-1. The amount of ingredients available changed		
Postconditions:	POST-1. Ingredient amounts are updated on the system		
Normal Flow:	1. kitchen staff is authorized by the system 2. kitchen staff updates the amount of ingredients available		
Alternative Flows:	1. kitchen staff is not authorized by the system 1.1. kitchen staff cannot make any changes		
Exceptions:			
Priority:	Medium		
Frequency of Use:	Once daily		
Business Rules:			
Other information:			
Assumptions:			

UC ID and Name:	**UC-5. Change menu**		
Created By:	Alex van der Meulen	Date Created:	3/15/22
Primary Actor:	Restaurant owner	Secondary Actors:	
Trigger:			
Description:	The restaurant owner changes the available menu items or prices in the system		
Preconditions:	PRE-1. Restaurant owner is authorized to change menu		
Postconditions:	POST-1. Menu is updated		
Normal Flow:	1. Restaurant owner logs into the system 2. Owner modifies available items/prices 3. restaurant owner saves the changes		

Alternative Flows:	1. Restaurant owner does not save changes 1.1. menu is reverted to previous state
Exceptions:	
Priority:	Medium
Frequency of Use:	Once monthly
Business Rules:	
Other information:	
Assumptions:	

4. Verification

Key	Summary	Verification Approach
AJP-50	The system shall grey out any items that are not available when viewed on the menu	Demonstration
AJP-48	The system shall display at the top of the page if Amimoto is currently taking takeout orders or not	Demonstration
AJP-47	If an order is placed before 4:00pm or after 8:00pm, the system shall display a message stating takeout orders are only available between 4:00pm and 8:00pm	Analysis
AJP-43	If an item is unavailable, the system will display a similar item that is available	Demonstration
AJP-42	The system shall store records of ordered items as XML	Test
AJP-41	When an order is completed, the customer shall be notified within 1 minute	Analysis
AJP-40	When an order is completed, the system shall notify the customer through email	Test
AJP-39	When an order is placed, the kitchen staff shall receive the order within 15 seconds of it being placed	Analysis
AJP-38	When a user requests after placing their order, the system shall send a copy of the receipt by email.	Test
AJP-37	The time estimate of when the order will be ready shall be within 10 minutes of the actual time	Analysis
AJP-30	If a takeout order is placed, the system shall provide the customer with a receipt of purchase.	Demonstration
AJP-29	if an item is out of stock, the system shall display a disclaimer to the customer that the item is not available.	Demonstration
AJP-28	A customer shall order takeout orders through the system.	Demonstration
AJP-27	The system shall display the current time estimate for a takeout order to be ready.	Inspection
AJP-26	If the payment for an order is accepted, the system shall display a confirmation message dialog window to the user indicating that the order placement has been successful.	Demonstration
AJP-25	If a takeout order is placed, the system shall display a list of ordered items to the customer to confirm before the order is placed.	Demonstration
AJP-24	The system shall display a list of menu items	Demonstration
AJP-23	If a takeout order is made, the system shall notify the customer when the takeout order will be ready for pickup.	Test
AJP-22	If a takeout order is made, the system shall update the amount of available ingredients.	Test
AJP-21	If a takeout order is placed, the system shall display a confirmation message dialog window to the user indicating that the order placement has been successful.	Test

5. Appendices

5.1 Assumptions and dependencies

Customers will want to make takeout orders and use the system as opposed to calling the restaurant as they did before.

Customers will be able to use the takeout ordering system without needing help from any staff.

5.2 Acronyms and abbreviations

COGS - The cost of goods sold
FOH - Front of house
FIFO - First in first out
POS - Point of sale
BOH – Back of House