

Restaurant Inventory System System/Software Requirements Specification (SRS)

Date of Release: 04/20/2021

Version Number: 1

1. Introduction

1.1 Purpose

Citrola's On College currently doesn't have any system to record current items in inventory or an easy way to order items. To order items, the staff members in charge of ordering write products down on a piece of paper and then take a picture on their phone to send to the supplier. This can lead to errors in ordering and can cause a lot of time to be wasted doing this. The proposed inventory system will be able to keep track of items and order them with ease in order to save the business time wasted on ordering how they currently do. It will also save them money by tracking items to prevent overordering items by accident or not using items before they are wasted.

1.2 Scope

Product Name

Inventory Management System

Overview

The Inventory Management System will allow staff to login with their employee ID and passcode, and view their respective inventories. Those who have the proper authorization will be able to order items using the system. The system will send the list of items to be ordered to the supplier as well as a copy to the owner.

Goals

The goals for the Citrola's On College were to reduce labor costs by reducing time spent by employees ordering these items by hand. The business also wanted to keep customer's happy by making sure that their items are always full so that customers can be assured they can order what they want without being rejected. They also wanted to reduce food costs on food lost due to them going bad due to expiration or human error (overordering). The system will help achieve the goals by doing the following:

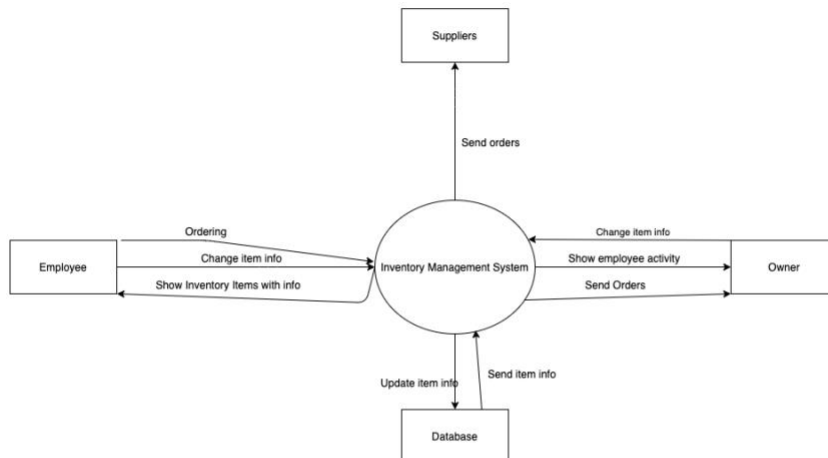
- Keep track of all inventory items in a database for easier organization.
- Alert users when an item is running low on stock.
- Alert users when an item is reaching its expiration date.
- Set a limit to items in inventory to prevent overordering.

Out of Scope

- Won't be able to update the inventory without user input.

1.3 Product overview

1.3.1 Product perspective



Constraints:

Key	Summary
SS-51	When sending orders to the supplier, it will be sent through email using Outlook.
SS-50	Only the owner can view employee actions.
SS-49	The software needs to run on at least iOS 14.0 for the owner's iPhone.
SS-48	The software needs to run on at least iPadOS 14.0 for the iPads at the business.
SS-47	The user clicks a column heading at the top of the inventory list to change the view from ascending order to descending.
SS-34	The system needs to be available at all times during business hours.
SS-33	The new system must run on the iPads currently at the business and the owner's iPhone.
SS-32	All orders sent to suppliers must be in .pdf or .txt files.
SS-31	The system must be written in either Java or Swift.
SS-30	The system must use a relational database with SQL to store data.

1.3.2 Product functions

- Have logins for employees for their own sessions.
- List item inventories with data for each item.
- Allow a search bar to look up items.
- Have a page to add items to order.
- Allow employees to be added or their passcode to be changed.

1.3.3 User characteristics

All staff members have at least a high school diploma for their education. Servers and cashiers already use a system for daily use. Their technical experience might be greater than the chefs. The chefs all have smartphones but haven't used a computer. Their technical experience might not be so great.

1.3.4 Limitations

Key	Summary
SS-19	The system can't be accessible by anyone other than the owner out of store operation hours.
SS-18	Security for employees must be 5 digit passcodes.
SS-17	Software must export ordering lists as pdf or txt files.
SS-16	The system cannot undergo maintenance during dinner service (4-9pm everyday).
SS-15	The system must run on iPad and iPhone devices.






1.4 Definitions









- 86 – out of an item (e.g. We are 86 on spaghetti)
- All day – items that need to be sent out completely (e.g. 3 pizzas all day)








2. References

Robin Gorry (Citrola's On College Owner)

3. Specific requirements

Key	Summary	Description	T	Linked Issues	Priority	Labels
SS-46	The system shall let the owner add new employees to the system.		Requirement			functional
SS-45	The system shall allow the owner to view and download old orders in the form of pdfs.		Requirement			functional
SS-44	When ordering items, the order list shall display a total price at the bottom, estimated delivery date, and supplier name.		Requirement			functional
SS-43	The system shall display an order list in order of items chosen along with item ID, item name, quantity being ordered, and price.		Requirement			functional
SS-42	The system shall let users choose from the inventory list by clicking on an item to add it to an order list to order items.		Requirement			functional

SS-41	The system shall allow the user to select items from the inventory to send to the printer to print.		Requirement			functional
SS-40	When a user wants to update an item's quantity, the system shall update the item's quantity within 1 second.		Requirement	SS-13		nonfunctional
SS-39	The inventory system shall allow the owner to update an employee's authentication/position.		Requirement			functional
SS-37	When a user tries to login after inputting his user ID and passcode, the system shall take less than 5 seconds to verify the passcode is correct.		Requirement			nonfunctional
SS-36	After a user logs in successfully, the system shall display a menu of options.		Requirement			functional
SS-29	The inventory system shall allow the owner to delete employees from the system.		Requirement			functional
SS-28	The inventory system shall allow users to change their 5 digit passcode.		Requirement			functional
SS-27	The inventory system shall allow users to search up items from the inventory based on item ID, keywords, or by expiration date.		Requirement	SS-10		functional

<u>SS-26</u>	<u>The inventory system shall allow the owner to view actions from their employees in a list categorized by action, date, and time in a list.</u>		Requirement	<u>SS-7</u>		functional
<u>SS-25</u>	<u>The inventory system shall let users with proper authentication delete items entirely from the inventory.</u>		Requirement			functional
<u>SS-24</u>	<u>The inventory system shall let users update item quantities when new items are delivered.</u>		Requirement			functional
<u>SS-23</u>	<u>The system shall allow users with proper authentication to edit item information.</u>		Requirement			functional
<u>SS-22</u>	<u>The inventory system shall alert the user when an item is running low on stock or nearing its expiration date.</u>		Requirement			functional
<u>SS-21</u>	<u>The inventory system shall allow users to view the inventory by displaying the list of items in ascending order of item ID along with it's price, quantity, and name.</u>		Requirement	<u>SS-11</u>		functional
<u>SS-20</u>	<u>After a user logs in with their employee ID and passcode, the system shall see if their passcode is correct based on their user ID.</u>		Requirement			functional

4. Verification

Key	Summary	verification approach
SS-46	The system shall let the owner add new employees to the system.	Demonstration
SS-45	The system shall allow the owner to view and download old orders in the form of pdfs.	Demonstration
SS-44	When ordering items, the order list shall display a total price at the bottom, estimated delivery date, and supplier name.	Inspection
SS-43	The system shall display an order list in order of items chosen along with item ID, item name, quantity being ordered, and price.	Inspection
SS-42	The system shall let users choose from the inventory list by clicking on an item to add it to an order list to order items.	Inspection
SS-41	The system shall allow the user to select items from the inventory to send to the printer to print.	Inspection
SS-40	When a user wants to update an item's quantity, the system shall update the item's quantity within 1 second.	Test
SS-39	The inventory system shall allow the owner to update an employee's authentication/position.	Demonstration
SS-37	When a user tries to login after inputting his user ID and passcode, the system shall take less than 5 seconds to verify the passcode is correct.	Test
SS-36	After a user logs in successfully, the system shall display a menu of options.	Inspection
SS-29	The inventory system shall allow the owner to delete employees from the system.	Demonstration
SS-28	The inventory system shall allow users to change their 5 digit passcode.	Test
SS-27	The inventory system shall allow users to search up items from the inventory based on item ID, keywords, or by expiration date.	Inspection
SS-26	The inventory system shall allow the owner to view actions from their employees in a list categorized by action, date, and time in a list.	Demonstration
SS-25	The inventory system shall let users with proper authentication delete items entirely from the inventory.	Test

<u>SS-24</u>	<u>The inventory system shall let users update item quantities when new items are delivered.</u>	Test
<u>SS-23</u>	<u>The system shall allow users with proper authentication to edit item information.</u>	Test
<u>SS-22</u>	<u>The inventory system shall alert the user when an item is running low on stock or nearing its expiration date.</u>	Demonstration
<u>SS-21</u>	<u>The inventory system shall allow users to view the inventory by displaying the list of items in ascending order of item ID along with it's price, quantity, and name.</u>	Demonstration
<u>SS-20</u>	<u>After a user logs in with their employee ID and passcode, the system shall see if their passcode is correct based on their user ID.</u>	Test

5. Appendices

5.1 Assumptions and dependencies - content from Activity 6.3.3.4: the Assumptions section of your Solution Statement page

- The system will improve organization throughout the restaurant.
- Employees will need to manually update the inventory.
- Time to order items will be reduced substantially.
- Employees will benefit from this new system.
- New items will be able to be logged.
- Will automatically delete items with expiration dates that have passed.

5.2 Acronyms and abbreviations

- BOH – back of house
- FOH – front of house