Use Case # 1 Hiring an employee

GENERAL CHARACTERISTICS

Author	Abdulaziz Alayadi
Last Update:	3/22/2017
Scope	Restaurant Automation System
Level	User Level
Status	Finalized Conceptualization
Primary Actor	Restaurant Manager, A person who has the authority to hire and fire employees.
Secondary Actors	New employee, Database.
Stakeholders and Interests	- Restaurant Owner, wants to keep track of the employees and payroll cost. - Restaurant Manager, wants to hire an employee to do certain job. - The employee, wants to be hired to do certain job for a pay.
Preconditions	Manager is identified and authenticated.
Success Post Condition	A new employee record is created and saved, the payroll sheets are updated accordingly.
Failed Post Condition	No new employee records are created nor deleted. The payroll sheets are not changed.

MAIN SUCCESS SCENARIO (or basic flow)

Step	**Action -** description in words of each step in success scenario
1	Manager decides to hire a new employee.
2	Manager starts a new employee application.
3	Manager enters the new employee information; name, date of birth , address, phone number, position, salary, work times, start and end date.
4 5 6 7	Manager submit the application. System creates a new employee record with a unique id. System updates payroll sheet with the new employee salary. System prints an id card with the name, id, and barcode identifier of the employee.

EXTENSIONS or Alternate Flows

Step	Branching Action
a. *1-4*	At anytime, System fails: To support recovery, ensure all information can be recovered from any steps of the scenario. 1. Manager restarts the system, logs in and requests a recovery to prior state. 2. System reconstructs previous state. 2.a System detects anomalies preventing recovery: 1.System signals error to Manager, records the error and enter clean state. 2. Manager starts a new employee application. Manager cancels the application. 1. The application information is destroyed. 2. No new employee record is created nor the payroll sheets are changed.

SPECIAL REQUIREMENTS

Req Num	Requirement
	N/A

TECHNOLOGY AND DATA VARIATIONS LIST

Var Num	Variation
1	System must support card printing.
2	System must support reading cards.
3	Reliable database.

FREQUENCY OF OCCURRENCE: Sometimes.

OTHER ISSUES

Issue Num	Issue
	N/A

Use Case # 2 Firing Employee

GENERAL CHARACTERISTICS

Author	Abdulaziz Alayadi
Last Update:	3/22/17
Scope	Restaurant Automation System
Level	User Level
Status	Finalized Conceptualization
Primary Actor	Restaurant Manager, A person who has the authority to fire employees.
Secondary Actors	New employee.
Stakeholders and Interests	- Restaurant Owner, wants to keep track of the employees and payroll cost. - Restaurant Manager, wants to end an employee's contract. - The employee being fired, wants to get last benefits.
Preconditions	Manager is identified and authenticated.
Success Post Condition	The selected employee record is destroyed and deleted, the payroll sheets are updated accordingly.
Failed Post Condition	The record of the employee who has been fired is not deleted and remains unchanged.

MAIN SUCCESS SCENARIO (or basic flow)

Step	**Action -** description in words of each step in success scenario
1	Manager decides to fire an employee.

2	Manager views the employee's record.
3 4	Manager chooses “fire employee” option. Manager confirms that this is intentional and not accidental.
5 6 7	Manager enters credentials to verify identity. The record of the employee is marked as past employee. The payroll is updated and calculates last benefits if there is.

EXTENSIONS or Alternate Flows

Step	Branching Action
a *4*	At anytime, System fails: 1. Manager log in and re-do the process. Manager cancel the action: 1. Nothing has changed in the system.
5	Manager fails to verify identity: 1. Manager asked to re-verify identity. 2. Repeat step 1 for maximum of 3 times. 3. The system logs out automatically after the third failed attempt.

SPECIAL REQUIREMENTS

Req Num	Requirement
n	N/A

TECHNOLOGY AND DATA VARIATIONS LIST

Var Num	Variation

1	System could have a card reader to verify Manager identity.

FREQUENCY OF OCCURRENCE: Rare.

OTHER ISSUES

Issue Num	**Issue**
1	Should the system keep the information of ex-employees, if yes for how long?

Use Case # 3 Adding Menu Item(for manager)

GENERAL CHARACTERISTICS

Author	Ziyou Shang
Last Update:	3/20/2017
Scope	Restaurant Automation System
Level	User Level
Status	Finalized Conceptualization
Primary Actor	Manager
Secondary Actors	Database
Stakeholders and Interests	-Manager, to add items to the menu for the customers
Preconditions	Manager is identified and authenticated.
Success Post Condition	The items that the manager decides to add in the menu are uploaded to the electrical menu successfully
Failed Post Condition	Different items, which the manager do not want to add to the menu, are uploaded to the menu, or items fail to be added.

MAIN SUCCESS SCENARIO (or basic flow)

Step	**Action -** description in words of each step in success scenario
1	Manager logs in the system.
2	Manager decides what to add to the menu
3	Manager uploads items to the menu

4	System adds items to the menu
5	Manager logs out the system

EXTENSIONS or Alternate Flows

Step	Branching Action
a. 1-5	If anything goes wrong with the system, restart the system and report the error or use ordinary ways to make the menu for the customers (probably by handwriting).
	If manager wants to check the menu, click the “Sample Menu” button on the touch screen.

SPECIAL REQUIREMENTS

Req Num	Requirement
1	Database of all the items(dishes, dessert, appetizer, drinks) that manager may select for the menu.
2	Language internationalization on the text.

TECHNOLOGY AND DATA VARIATIONS LIST

Var Num	Variation
1	Touchscreen for the manager to choose items for the menu.

FREQUENCY OF OCCURRENCE:Once or twice a month (or any time the manager would like)

OTHER ISSUES

Issue Num	Issue
1	It probably takes time if the manager can only upload the items to the menu one by one.

Use Case # 4 Editing Menu Item(for manager)

GENERAL CHARACTERISTICS

Author	Ziyou Shang
Last Update:	3/20/2017
Scope	Restaurant Automation System
Level	User Level
Status	Finalized Conceptualization
Primary Actor	Manager
Secondary Actors	Database
Stakeholders and Interests	- Manager, to edit items in the menu for the customers.
Preconditions	Manager is identified and authenticated.
Success Post Condition	The items that the manager decides to change in the menu are changed successfully
Failed Post Condition	Different items, which the manager do not want to change in the menu, are changed in the menu, or the items in the menu remain unchanged.

MAIN SUCCESS SCENARIO (or basic flow)

Step	**Action -** description in words of each step in success scenario
1	Manager logs in the system
2	Manager decides what to change in the menu

3	Manager changes items or price of the items in the menu
4	System updates the menu
5	Manager logs out the system

EXTENSIONS or Alternate Flows

Step	Branching Action
a. 1-5	If anything goes wrong with the system, restart the system and report the error or use ordinary ways to make the menu for the customers (probably by handwriting).
	If manager wants to check the menu, click the “Sample Menu” button on the touch screen.

SPECIAL REQUIREMENTS

Req Num	Requirement
1	Database of all the items(dishes, dessert, appetizer, drinks) that manager may select to edit the menu.
2	Language internationalization on the text.

TECHNOLOGY AND DATA VARIATIONS LIST

Var Num	Variation
1	Touchscreen for the manager to choose items for the menu.

FREQUENCY OF OCCURRENCE: Once or twice a month (or any time the manager would like)

OTHER ISSUES

Issue Num	Issue
1	It probably takes time if the manager can only change the items in the menu one by one.

Use Case # 5 Deleting Menu Item(for manager)

GENERAL CHARACTERISTICS

Author	Ziyou Shang
Last Update:	3/20/2017
Scope	Restaurant Automation System
Level	User Level
Status	Finalized Conceptualization
Primary Actor	Manager
Secondary Actors	Database
Stakeholders and Interests	Manager, to delete items in the menu for the customers.
Preconditions	Manager is identified and authenticated.
Success Post Condition	The items that the manager decides to delete in the menu are deleted successfully
Failed Post Condition	Different items, which the manager do not want to delete in the menu, are deleted in the menu or the items fail to be deleted.

MAIN SUCCESS SCENARIO (or basic flow)

Step	**Action -** description in words of each step in success scenario
1	Manager logs in the system
2	Manager decides what to delete in the menu
3	Manager chooses items in the menu to be deleted

4	System sends a confirmation request of deleting items
5	System deletes the items
6	Manager logs out the system

EXTENSIONS or Alternate Flows

Step	Branching Action
a. *1-5*	If anything goes wrong with the system, restart the system and report the error or use ordinary ways to make the menu for the customers (probably by handwriting).
	If manager wants to check the menu, click the “Sample Menu” button on the touch screen.

SPECIAL REQUIREMENTS

Req Num	Requirement
1	Database of all the items(dishes, dessert, appetizer, drinks) that manager may select to edit the menu.
2	Language internationalization on the text.

TECHNOLOGY AND DATA VARIATIONS LIST

Var Num	Variation
1	Touchscreen for the manager to choose items for the menu.

FREQUENCY OF OCCURRENCE: Once or twice a month (or any time the manager would like)

OTHER ISSUES

Issue Num	Issue
1	It probably takes time if the manager can only delete the items in the menu one by one.

Use Case # 6 Customer Recording

GENERAL CHARACTERISTICS

Author	Ziyou Shang
Last Update:	3/20/2017
Scope	Restaurant Automation System
Level	User Level
Status	Finalized Conceptualization
Primary Actor	System(database)
Secondary Actors	Manager
Stakeholders and Interests	- Waiter, to record the customer flow of the restaurant for a day or a month - Manager, to check the customer flow rate in order to make any change to manage the restaurant.
Preconditions	Manager and waiters are identified and authenticated and system works well.
Success Post Condition	Number of customers is saved. number of customers at different time of the day is saved
Failed Post Condition	The recording of customers is incorrect. The number of customer is not recorded at all.

MAIN SUCCESS SCENARIO (or basic flow)

Step	**Action -** description in words of each step in success scenario
1	Customers enter the restaurant.

2	Customers are led to their table and the number of customers are recorded.
3	The system save the record of the number of customers when shift ends.
4	Record and calculate the number of customers during the whole day and separately in different shifts.
5	The manager checks out the records and decide to make further changes for the restaurant.

EXTENSIONS or Alternate Flows

Step	Branching Action
a. *2*	If the customers do not make any orders, they should not be recorded
b. *3*	Customers during the time between breakfast shift and lunch shift or afternoon should not be counted as number of customers in any shift, but they should still be counted as customers in the whole day.
c.	If anything wrong that may affect the basic function of the restaurant, reset the system and delete the records for the day.

SPECIAL REQUIREMENTS

Req Num	Requirement
	N/A

TECHNOLOGY AND DATA VARIATIONS LIST

Var Num	Variation
1	machine to record, save and calculate the number of customers.

FREQUENCY OF OCCURRENCE: Whenever the restaurant is open or on business

OTHER ISSUES

Issue Num	Issue
1	Should the consumption of the customers be recorded as well?

Use Case # 7 Dish Promotion (for customers)

GENERAL CHARACTERISTICS

Author	Ziyou Shang
Last Update:	3/20/2017
Scope	Restaurant Automation System
Level	User Level
Status	Finalized Conceptualization
Primary Actor	Customers
Secondary Actors	Manager, chef
Stakeholders and Interests	- Waiter, to recommend the special dishes today or any chef special to customers. - Chef and manager, to offer and decide the special dishes for the customers. - Customers, to get known about and choose the special or recommended dishes they would like to order.
Preconditions	Waiters are identified and authenticated. dishes can be uploaded successfully to the menu touchpad which restaurant staff are able to use.
Success Post Condition	The special dishes are uploaded to the menu touchpad and can be easily seen by the customers.
Failed Post Condition	The special dishes are not uploaded nor obvious on the menu.

MAIN SUCCESS SCENARIO (or basic flow)

Step	**Action -** description in words of each step in success scenario
1	Chef and manager decide the special dishes for today or this week
2	The special dishes are uploaded to the system and can be easily seen on the menu touchpad for customers
3	Waiter gives the electrical menu with the touchpad to the customers
4	Customers choose the dishes they would like to order
5	The number of special dishes ordered will be recorded for chef or manager to make further changes

EXTENSIONS or Alternate Flows

Step	Branching Action
a.1	The chef will make the suggestions and manager will make the decisions
b.2	If the customers are not interested in the special dishes, other dishes can be shown on the touchpad by clicking a link or a side-bar.
c.5	The number of special dishes ordered may be recorded separately by time (breakfast, lunch and dinner) or maybe different categories

SPECIAL REQUIREMENTS

Req Num	Requirement
1	Design of the electric menu

TECHNOLOGY AND DATA VARIATIONS LIST

Var Num	Variation
1	touchpad for the customers to make orders

FREQUENCY OF OCCURRENCE: Once a week or every day (depends on manager)

OTHER ISSUES

Issue Num	Issue
1	The chef and manager may have a disagreement on the special dishes.

Use Case # 8: Placing a new order

GENERAL CHARACTERISTICS

Author	Sayan Ekambarapu
Last Update:	3/22/17 / Fixed formatting
Scope	Restaurant Automation System
Level	user-level
Status	Finalized conceptualization
Primary Actor	Waiter
Secondary Actors	Customer placing the order
Stakeholders and Interests	Customer: Wants their order to be correctly entered so they can get their food Manager: Wants correct order information so that customer is pleased with the service
Preconditions	Order has items that are on the menu
Success Post Condition	Order is successfully placed and in the system <All items in order are on the men]>
Failed Post Condition	Order has an error <Not all items are on the menu>

MAIN SUCCESS SCENARIO (or basic flow)

Step	**Action -** description in words of each step in success scenario
1	Waiter logs into system
2	Waiter picks the item number and the quantity for an item in the order

3 4	Repeat step 2 until all items are in the order Waiter is asked to confirm the placement of the order
5	Order is set to in progress and an order number is generated

EXTENSIONS or Alternate Flows

Step	Branching Action
1.1	System fail Waiter restarts system and places order again
2.1	Waiter cancels during confirmation phase Order is not placed

SPECIAL REQUIREMENTS

Req Num	Requirement
1	Screen would have to be touch screen for faster creating of an order

TECHNOLOGY AND DATA VARIATIONS LIST

Var Num	Variation
n	N/A

FREQUENCY OF OCCURRENCE: Frequently

OTHER ISSUES

Issue Num	Issue
n	Should the customer be able to place an order from their table without the waiter? Touchscreen pad at table?

Use Case # 9: Add items to order

GENERAL CHARACTERISTICS

Author	Sayan Ekambarapu
Last Update:	3/22/17 / Fixed formatting
Scope	Restaurant Automation System
Level	User level
Status	in progress conceptualization
Primary Actor	Waiter
Secondary Actors	Customer
Stakeholders and Interests	Waiter wants to be able to do it quickly for a higher tip Customer wants to add an item from their order because they changed their mind Manager wants the customer to be happy so they return to the restaurant
Preconditions	The item being added is on the menu
Success Post Condition	The order is updated so that the item is added or the quantity is increased <The item is on the menu>
Failed Post Condition	An error occurs because the item that is trying to be added isn't on the menu

MAIN SUCCESS SCENARIO (or basic flow)

Step	**Action -** description in words of each step in success scenario

1	Customer tells waiter what item he/she wants added to the order
2	Waiter logs into system
3 4	Waiter adds the item from the order using the order ID Waiter is asked to confirm the changes
5	The updated order is printed out so that the customer knows the item has been add

EXTENSIONS or Alternate Flows

Step	Branching Action
1.1	System fail Waiter restarts system and places order again
2.1	Waiter cancels during confirmation phase Order is not changed

SPECIAL REQUIREMENTS

Req Num	Requirement
1	Touchscreen system so that waiter can easily update order

TECHNOLOGY AND DATA VARIATIONS LIST

Var Num	Variation

n	[N/A]

FREQUENCY OF OCCURRENCE: Frequently

OTHER ISSUES

Issue Num	Issue
1	Should the customer be able to do it without contacting the waiter?

Use Case # 10: Delete items from order

GENERAL CHARACTERISTICS

Author	Sayan Ekambarapu
Last Update:	3/22/17 / Fixed formatting
Scope	Restaurant Automation System
Level	User level
Status	in progress conceptualization
Primary Actor	Waiter
Secondary Actors	Customer
Stakeholders and Interests	Waiter wants to be able to do it quickly for a higher tip Customer wants to remove an item from their order because they changed their mind Manager wants the customer to be happy so they return to the restaurant
Preconditions	The item being removed is currently in the order
Success Post Condition	The order is updated so that the item is no longer part of it <The item was already in the order>
Failed Post Condition	An error occurs because the item that is trying to be deleted isn't in the order right now

MAIN SUCCESS SCENARIO (or basic flow)

Step	**Action -** description in words of each step in success scenario

1	Customer tells waiter what item he/she wants off the order
2	Waiter logs into system
3 4	Waiter deletes the item from the order Waiter is asked to confirm change
5	The updated order is printed out so that the customer knows the item has been deleted

EXTENSIONS or Alternate Flows

Step	Branching Action
1.1	System fail Waiter restarts system and places order again
2.1	Waiter cancels during confirmation phase Order is not changed

SPECIAL REQUIREMENTS

Req Num	Requirement
1	Touchscreen system so that waiter can easily update order

TECHNOLOGY AND DATA VARIATIONS LIST

Var Num	Variation

n	[N/A]

FREQUENCY OF OCCURRENCE: Frequently

OTHER ISSUES

Issue Num	Issue
1	Should the customer be able to do it without contacting the waiter?

Use Case # 11: Process the sale of an order

GENERAL CHARACTERISTICS

Author	Sayan Ekambarapu
Last Update:	3/22/17 / Fixed formatting
Scope	Restaurant Automation System
Level	User level
Status	in progress conceptualization
Primary Actor	Waiter
Secondary Actors	Customer
Stakeholders and Interests	Waiter wants to get paid so he processes the order Customer wants proof of transaction for their payment Manager wants the customer to pay because the restaurant needs revenue
Preconditions	The order id is a valid number and exists in the system
Success Post Condition	The order is successfully processed and the receipt is printed the order id entered was valid>
Failed Post Condition	The order is not successfully processed and an error occurs <the order id might have been an invalid order id>

MAIN SUCCESS SCENARIO (or basic flow)

Step	**Action -** description in words of each step in success scenario
1	Customer tells waiter they are ready for the bill

2	Waiter logs into system
3	Waiter enters in order id
4 5	The order is then paid via cash/check/credit card etc The receipt is given to the customer showing proof of transaction

EXTENSIONS or Alternate Flows

Step	Branching Action
1.1	System fail Waiter restarts system and places order again

SPECIAL REQUIREMENTS

Req Num	Requirement
1	Touchscreen system so that waiter can easily process order

TECHNOLOGY AND DATA VARIATIONS LIST

Var Num	Variation
1	Payment must be able to process via cash/check/credit card/debit card

FREQUENCY OF OCCURRENCE: Frequently

OTHER ISSUES

Issue Num	Issue
1	Should the customer be able to do it without contacting the waiter?

Use Case # 12 Inventory Item Update

GENERAL CHARACTERISTICS

Author	Abdulaziz Alayadi
Last Update:	3/22/17
Scope	Virtual Inventory
Level	User Level
Status	Finalized Conceptualization
Primary Actor	Chef.
Secondary Actors	Supplier.
Stakeholders and Interests	Chef, wants to update the inventory. Manager, wants to view the inventory and inventory costs. Suppliers, want to know when an item is low in the inventory.
Preconditions	Chef is logged in and authenticated.
Success Post Condition	The virtual inventory items are updated to match current real life situation.
Failed Post Condition	The inventory's state does not change.

MAIN SUCCESS SCENARIO (or basic flow)

Step	**Action -** description in words of each step in success scenario
1	Chef views items in inventory.
2	Chef selects to change count of an item (delete/add).

3	Chef chooses how many units of this item shall be deleted or added.
4 5	Chef confirms the update. Items are updated in the virtual inventory.

EXTENSIONS or Alternate Flows

Step	Branching Action
a.	At anytime, System fails: 1. Manager log in and re-do the process.
2-4	Chef selects the option of cancelling. 1. The system goes back to step one with no change to state of the inventory.
5.a	If item counts are deducted: 1. System checks if items count is low 2. If item count is low, notify suppliers.

SPECIAL REQUIREMENTS

Req Num	Requirement
n	N/A

TECHNOLOGY AND DATA VARIATIONS LIST

Var Num	Variation
1	System should have access to a notification method (e.g. e-mail).

FREQUENCY OF OCCURRENCE: Very Often

OTHER ISSUES

Issue Num	Issue
n	N/A

Use Case # 13 Inventory Item Adding

GENERAL CHARACTERISTICS

Author	Abdulaziz Alayadi
Last Update:	2/21/17
Scope	Restaurant Automation
Level	User Level
Status	Finalized Conceptualization
Primary Actor	Restaurant Manager, a person who has the authority to add new items to the inventory.
Secondary Actors	Chef.
Stakeholders and Interests	Manager, wants to add a new item to the inventory. Chef, wants the Manager to add a new item to the inventory. Suppliers, want to know when items are low to supply more. Restaurant Owner, wants to know the cost of items in the inventory.
Preconditions	Manager logged in and authenticated.
Success Post Condition	The virtual inventory has the new item, how many of it and suppliers information.
Failed Post Condition	The inventory state does not change.

MAIN SUCCESS SCENARIO (or basic flow)

Step	**Action -** description in words of each step in success scenario

1	Manager chooses to add a new item.
2	Manager adds new item's; name, description, suppliers name and contact information, current counts of the item in the inventory.
3 4	Manager submits the new item's form. Virtual Inventory shows the new item in the list of items.

EXTENSIONS or Alternate Flows

Step	Branching Action
a.	At anytime, System fails: 2. Manager log in and re-do the process.
2	The Manager chooses the cancel option: 1. The state of the virtual inventory is not affected.

SPECIAL REQUIREMENTS

Req Num	Requirement
	N/A

TECHNOLOGY AND DATA VARIATIONS LIST

Var Num	Variation
	N/A

FREQUENCY OF OCCURRENCE: Sometimes

OTHER ISSUES

Issue Num	Issue
	How the chef will communicate the need for a new item to the manager?

Use Case # 14 New Dish Suggestion

GENERAL CHARACTERISTICS

Author	Abdulaziz Alayadi
Last Update:	3/22/17
Scope	Restaurant Automation
Level	User Level
Status	Finalized Conceptualization
Primary Actor	Chef
Secondary Actors	Manager
Stakeholders and Interests	Chef, wants to add a new dish to the menu. Manager, wants to review the suggested dish before it is added to the menu.
Preconditions	Chef is logged in and authenticated.
Success Post Condition	A new suggested dish is created in the menu list for the Manager to review.
Failed Post Condition	No suggested dish is created.

MAIN SUCCESS SCENARIO (or basic flow)

Step	**Action -** description in words of each step in success scenario
1	Chef views the menu.
2	Chooses “add a dish”

3	Enters dish; category, name, description, and price.
4 5	Submits the form. The dish is added to the menu as a suggested dish waiting for action.

EXTENSIONS or Alternate Flows

Step	Branching Action
a	At anytime, System fails: Chef log in and re-do the process.
2-3 *4*	Chef chooses the cancel option. 1. The system state doesn't change. 2. System displays the menu list. 4.a The Manager chose to approves the dish. 1. The dish is added to the menu list in the correct category. 4.b The Manager choose to edit the price. 1. The price is changed. 2. Repeat number 4. 4.c The Manager chooses to disapprove the dish. 1. The dish is removed from the menu list.

SPECIAL REQUIREMENTS

Req Num	Requirement
	System should show the menu list differently depending on the user credentials.

TECHNOLOGY AND DATA VARIATIONS LIST

Var Num	Variation
	N/A

FREQUENCY OF OCCURRENCE: Rarely

OTHER ISSUES

Issue Num	Issue
	None

Use Case #15: Request more supplies

GENERAL CHARACTERISTICS

Author	Sayan Ekambarapu
Last Update:	3/22/17 / Fixed formatting and changed waiter to manager
Scope	Restaurant Automation System
Level	User level
Status	in progress conceptualization
Primary Actor	Manager
Secondary Actors	Supplier
Stakeholders and Interests	Manager wants more supplies to make more food Customer wants more supplies to get fresher food Supplier wants to sell supplies to make money
Preconditions	The supplier has the items requested in stock
Success Post Condition	A confirmation is sent saying the items were requested <The supplier has the items in stock>
Failed Post Condition	The item codes are entered wrong and an error occurs

MAIN SUCCESS SCENARIO (or basic flow)

Step	**Action -** description in words of each step in success scenario
1	Manager needs to order supplies
2	Manager enters in the item numbers and quantity of the items he/she needs to order

3	A confirmation pops up asking if those are the items they requested
4 5	Once confirmed the list is sent to the supplier to deliver The list is also sent to the manager as proof of purchase

EXTENSIONS or Alternate Flows

Step	Branching Action
1.1	System fail Manager restarts system and places order again
2.1	Manager cancels during confirmation phase Order of supplies is not sent to the supplier

SPECIAL REQUIREMENTS

Req Num	Requirement
1	[N/A]

TECHNOLOGY AND DATA VARIATIONS LIST

Var Num	Variation
1	System could have a list that the manager could click on instead of having to enter item ID’s

FREQUENCY OF OCCURRENCE: Once a week?

OTHER ISSUES

Issue Num	Issue
1	What if the supplier doesn’t have the required amount in stock?

Use Case # 16 Table Recording

GENERAL CHARACTERISTICS

Author	Ziyou Shang
Last Update:	3/20/2017
Scope	Restaurant Automation System
Level	User Level
Status	Finalized Conceptualization
Primary Actor	Waiter
Secondary Actors	Customer
Stakeholders and Interests	- Waiters, to check the remaining tables for customers and keep the reserved tables. - Customers, to check the number of people currently in the restaurant and estimate the time they might wait for the tables.
Preconditions	Waiters are identified and authenticated. System works well.
Success Post Condition	Customers will be easy to figure out how long they need to wait for the seats, and waiters can take customers to empty seats that are not reserved easily as well.
Failed Post Condition	Empty tables are not shown on the screen. Reserved tables are not shown on the screen.

MAIN SUCCESS SCENARIO (or basic flow)

Step	**Action -** description in words of each step in success scenario
1	Set the system: Before opening, set a map or graph of the restaurant

	and mark the reserved seats as yellow color with initial of the customer, the empty seats as green color.
2	When a new customer comes, manage the customer to one of the empty tables and mark it on the graph as red.
3	When a customer pays for the bill and is about to leave, mention the cleaner to clean the table and mark the table on the graph as green again.
4	When all the tables in the restaurant are full, start to distribute waiting numbers for new customers and show the earliest waiting number on the screen that can be seen by the customers.
5	Customers leave and the table changes back to green color on the screen.

EXTENSIONS or Alternate Flows

Step	Branching Action
a.1 *b.1*	If the reserved request is cancelled, mark the reserved table of the customer as green again. If there are new reserved table requests, select a empty (green) table for the customer and mark it on the graph as yellow and initial of the customer.
c.3	If the customer leaves without paying for the bill, mention the manager or security guard.
d.	If the system is broken, restart the system and report the error.

SPECIAL REQUIREMENTS

Req Num	Requirement

	N/A

TECHNOLOGY AND DATA VARIATIONS LIST

Var Num	Variation
1	Touchscreen for the map of the tables in the restaurant.
2	Big screen for the customer to see the earliest waiting number. (Elective)

FREQUENCY OF OCCURRENCE: Whenever the restaurant is open or on business

OTHER ISSUES

Issue Num	Issue
1	It might be difficult for restaurant staff like waiters and cleaners to figure out the empty seats whether the customers have left or they were just leaving for a while(and would probably come back), which cause difficulties to manage seats for customers