Sale Module

Most Jason’s customers are individuals in his community. However, local business have started to use his service for small gatherings, so for these business customers, Jason would like to record contact information.

Jason would like a system that helps his record sales for his catering customers. He is comfortable with recording his on demand food truck sales at the end of the day to one ‘customer’. Ideally, he would like to be able to retrieve sales for customers, so that he can see what happened in the past.

My recording the number of products purchased by recipe, Jason will have an idea of his inventory levels!

Your task is to create a class diagram and sequence diagrams to support the following user stories and systems use case specifications.

Use Case: Maintain Customer

User Story

As the owner of this business, I would like to record company and contact information for my customers. I would like to categorize companies by company type so that I can start to classify customers by their industry.

Acceptance Criteria:

1. Must be able to record multiple contacts for a customer
2. Must be able to flag contacts as no longer active.
3. Must be able to query companies by company type
4. Must be able to query sales by company.

Use Case Descriptions

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case Name | Create Company Information | | |
| Triggering Event | New company requests services. | | |
| Brief Description | Allows the Owner to record a new company’s information. | | |
| Actors | Owner | | |
| Related Use Cases |  | | |
| Preconditions | Owner has opened the Main Menu. | | |
| Post Conditions | Company is saved to the database. Sales can be created for the Company | | |
| Flow of activities | Actor | | System |
|  |  | Requests to add a new Customer | Prompts for Company name, address, telephone and email address |
|  |  | Enters company name, address, telephone number and email address | Verifies that name, address, telephone number and email address have been entered.  Creates a unique companies identifier  Displays the company’s identifier, name, address, telephone number and email address  Prompts to add contacts |
|  | loop | Chooses to add new contact | Prompts for contact name, telephone number and email address. |
|  |  | Enters contact name, telephone number and email address | contact name must be entered, telephone number and email address must be entered  Data is valid  Creates a unique contact identifier  Displays the contact’s information including name, email address and telephone number |
|  | End loop | Request to save | Saves the company and contacts |
| Exception Conditions | * Owner chooses to cancel adding the company | | |

User Story

As the owner of this business, I would like to record my sales so that I can quickly see how much money I’ve made.

Acceptance Criteria:

1. Must be able to record sales of selecting a recipe and entering the quantity sold. (a hamburger would be set up as a recipe, so would a poutine)

Use Case Descriptions

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case Name | Create Sales | | |
| Triggering Event | Customer has requested food and the food was prepared | | |
| Brief Description | Allows the Owner to record a new sales | | |
| Actors | Owner | | |
| Related Use Cases |  | | |
| Preconditions | Owner has opened the Main Menu. | | |
| Post Conditions | Sales is created and can now be queried | | |
| Flow of activities | Actor | | System |
|  | 1. | Requests to add a new sale | Displays a list of customers and prompts for selection. Prompts for sales date |
|  | 2. | Selects a customer  Enters sales date | Verifies that customer was selected.  Verifies that service date has been entered and generates a unique sale number.  Displays Sale identifier, date and customer. Display a list of recipes along with the ability to enter quantity sold. |
|  | 3. | Selects recipe and enters quantity sold | Verifies that quantity sold was entered  Adds recipe to sold list – calculates price \* quantity  Calculates HST  Updates totals.  Display a list of recipes along with the ability to enter quantity sold. |
|  | 4. | Until all recipes entered | Prompts to save sales |
|  | 5. | Chooses to save | Saves the sale.  Return to the main menu |
| Exception Conditions | * Owner chooses to cancel adding the sale | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case Name | Query Sales by Customer | | |
| Triggering Event | Owner requires a list of sale details by customer | | |
| Brief Description | Allows the Owner to retrieve sale details for a specific customer for a specified date range | | |
| petActors | Owner | | |
| Related Use Cases |  | | |
| Preconditions | Owner has opened the Main Menu. | | |
| Post Conditions | sales are retrieved, totaled and displayed | | |
| Flow of activities | Actor | | System |
|  |  | Requests to query sales (by customer, by date) transactions | Displays a calendar |
|  |  | Selects date range | Verifies that dates are selected. Displays a list of customers and prompts for selection |
|  |  | Selects a customer | Retrieves sale detail in the specified date range for the specified customer.  Calculate and displays totals  Prompts to exit |
|  |  | Request to exit | returns to the main menu |
| Exception Conditions | Owner requests to cancel query | | |

Your tasks:

1. Create a class diagram to support the above case study and Systems Use Case Specifications
2. Create an object level sequence diagram, detailing the Create Customer systems use case specification
3. Create an object level sequence diagram, detailing the Create Sales use case specification
4. Create an object level sequence diagram, detailing the Query Sales (by customers) system use case specification.