Company: Charlene’s Cakes

Owner: Charlene Gzowski

Employees: Charlene plus 5 workers.

Charlene’s Cakes sells all kinds of baked goods—the goods are categorized as cakes, cookies, pies, pastries, muffins, donuts, and so on. The business operates out of a small factory on Dundas St. in Toronto. Its customers are hotels, businesses, wedding planners (Charlene’s cakes are very much in-demand at weddings and parties), and so on.

Business has been so good that Charlene can no longer keep track of orders and invoicing by hand. She needs a computer system that will allow her to manage customer information, create and track orders from customers, and create and manage invoices for customers.

In summary, Charlene needs the following:

* A function to create and edit customer accounts, and to mark them active and inactive
* A function to create orders, edit orders, add/remove items from orders, and to mark orders complete or cancelled.
* A function to create invoices for orders—Charlene needs to be able to create one invoice for one or more orders (in other words, several orders might be billed by one invoice). She needs to be able to adjust an invoice (if there is an error), and to mark it as paid or “in default” (not paid and never will be paid).
* Functions should check ensure data consistency (ie check incoming data)

**Working in groups of 2 to 3:**

* Fill in the “data used” columns in the given scenarios for each of the given use cases.
* Fill in the table of potential classes and attributes
* Record any questions that you feel you need to ask the business in order to clarify your design.

Use Case: Add Customer(s)

Precondition: Logged in and at Customer page is displayed

| Actor (Charlene) | System | Data Used |
| --- | --- | --- |
| Requests to add a customer.  Actor initiates action | Displays customer entry form for name, address and phone. | Customer  Customer Name  Customer Address  Customer Phone |
| Enters name, address, phone number. | Validates the entered information to make sure the customer is not a duplicate customer  State what needs to be done in abstract terms…no need to worry about how steps are implemented  If validation and duplicate checks are successful then  Save customer info to data store | By convention, indent conditional “if” statements |
| Repeats the above row until actors has no more customers to enter |  | Approach to repetition constructs “looping” |

Scenario: Correct Address

Precondition: Main Customer page is displayed

| Actor (Charlene) | System | Data Used |
| --- | --- | --- |
| Requests to see customer “Ed Brown” | Retrieves and displays name, address, phone and for customer “Ed Brown”. | Data here was found earlier scenario, so repeating here is optional |
| Changes “355B Dundas E.” to “355C Dundas E.”  Requests to save the information | Validates the entered address (for illegal characters) and saves the new address to the database. | Address |

Use information from use case scenarios and case study information to build classes

**Potential Classes Table for Manage Customers**

| Potential Classes | Attributes of Class |
| --- | --- |
| Customer | Name, Active, Address, Phone |
|  |  |
|  |  |

**Sample Questions an analyst may ask:**

|  |  |
| --- | --- |
|  | Can a customer have multiple addresses |
|  | How many phone numbers does a customer have |
|  | How many email addresses does a contact have? |
|  | How many phone number does a contact have? |
|  | How are customer numbers assigned? |
|  | Shipping internationally? |

Scenario: View Product

Precondition: Main inventory page is displayed.

|  |  |  |
| --- | --- | --- |
| Actor (Charlene) | System | Data Used |
| Requests to see a list of Charlene’s Cakes product categories. | Displays a list of product categories showing the name of each. | Product Categories  Product Category Name |
| Selects the category cookie and requests to see a list of all cookies that Charlene’s Cakes makes and sells. | Retrieves and displays a list of cookies—for each cookie the name is displayed. | Product  Product Name |
| Selects the “Champion Chocolate Chip” cookie. | Displays the cookie description and a list of ingredients. | Product Description  Product Ingredients |

**Potential Classes Table for Manage Inventory**

|  |  |
| --- | --- |
| Potential Classes | Attributes of Class |
| Product Categories | Name |
| Product | Name, Description |
| Ingredients | Name |
|  |  |
|  |  |
|  |  |
|  |  |

**Questions from Manage Inventory:**

|  |  |
| --- | --- |
|  |  |
|  |  |