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SNHU CS255 module 4

* + What are the different functions of the online storefront? How are they represented in this type of model?

The online storefront functions include managing shopping carts, customer account management, order processing, shipping management, and administrative control, represented as methods within their respective classes in the UML diagram.

* + What are the different classes of “users” represented by this object model? What are the associations between these classes?

The object model represents different user classes such as Customer, Administrator, and User, with associations like Customers linked to Shopping Carts and Orders, and Administrators managing the store's backend.

* + How would the objects “use” their respective variables and functions?

Objects in the model use their variables to store data (like customer details or order information) and functions to perform specific actions (like registering a user or placing an order).

* + Does this object model capture all of Hamp Crafts’ desired functionality? Why or why not?

This object model captures key functionalities like account management and order processing, but it may lack direct representation of product browsing and selection, crucial for an online store.

* + The above diagram uses a solid diamond shape to represent a form of aggregation. What type of aggregation does this represent? What does it imply about the relationship between the classes? Why is a solid diamond the appropriate choice here?

The solid diamond shape represents a "composition" type of aggregation, implying a strong ownership and life-cycle dependency between classes, such as between 'Customer' and 'Order', indicating that an 'Order' cannot exist without a 'Customer'. This is appropriate for representing relationships where the existence of one class is critically dependent on another.

Finally, think through the two different models you’ve explored for Hamp Crafts’ systems: a process model and an object model. Then **compare these models** by responding to the following prompts:

* + How well do you think a process model describes the system? What information does it make easier to understand? What aspects of the system are more difficult to understand or are not represented?

A process model effectively describes the flow and sequence of activities in the system, making it easier to understand the operational steps and interactions. However, it may not clearly represent the underlying data structure or the detailed object interactions within the system.

* + How well do you think an object model describes the system? What information does it make easier to understand? What aspects of the system are more difficult to understand or are not represented?

An object model excellently depicts the system's structure and relationships between different entities, clarifying roles and data encapsulation. However, it might not adequately convey the dynamic processes or the sequential flow of operations within the system.