Evaluate an Object Model  
CS 255  
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**Evaluate an Object Model**

Redding (2008) states that in object models, behavior is split across object types, whereas in process models, behavior is captured along chains of logically related tasks. Also, object models and process models lend themselves to different styles of implementation The provided UML class diagram outlines the structure and interactions within Hamp Crafts' online storefront. It delineates various functions, including managing the shopping cart, handling customer interactions, and administrative tasks. For instance, the "Shopping Cart" class manages cart functionalities like adding items, updating quantities, and checking out. The "Customer" class deals with customer-related functions such as registration, login, and profile updates. Additionally, the diagram encompasses classes for managing orders, shipping information, and the intricate details of each order item. These classes collectively constitute the backbone of the online store's functionalities.

In terms of user representation, the diagram showcases different classes of users: customers, users (those responsible for login verification), and administrators. The associations between these classes denote how they interact. For example, the "Customer" class is associated with "Order," "Shipping Info," and "Order Details," illustrating how customers interact with their orders and shipping information. Similarly, the "Shopping Cart" class is associated with the "Customer" class, indicating the relationship between a customer and their cart functionalities.

While the object model provides a detailed structural view of the system components and their interactions, it doesn't explicitly encompass every desired functionality of Hamp Crafts’ online store. For instance, the model doesn't overtly mention customer notifications based on order status or the administrative backend functionalities required for customer support and website updates. This might lead to a lack of clarity regarding these essential aspects in the model.

Comparing the process model and the object model, the process model primarily emphasizes the sequence and flow of activities within the system. It excels in illustrating how different processes unfold over time. Conversely, the object model delves into the system's structural aspects, offering a detailed view of the system's components and how they interact. While the process model might make the sequence of events clearer, the object model provides a more granular understanding of the system's structural and functional aspects, showcasing relationships and functionalities between different components.

A synergistic approach that combines elements from both models could enhance the understanding of Hamp Crafts’ system. Integrating the sequence of activities from the process model with the detailed structural and functional insights from the object model could create a more comprehensive representation of the online storefront, ensuring a more thorough and robust understanding of its functionalities and operations.

References

Redding, G., Dumas, M., Ter Hofstede, A. H. M., & Iordachescu, A. (2008). Transforming

Object-Oriented models to Process-Oriented models. In Springer eBooks (pp. 132–143). https://doi.org/10.1007/978-3-540-78238-4\_15