Module Four Assignment

Evaluate an Object Model

CS-255

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What are the distinct functions of the online storefront? How are they represented in this type of model?

Hamp Crafts, a physical storefront, has commissioned Creative Web Developers, the company I work for, to enhance its revenue by designing a new website. As a part of the design process, I have delved into the intricacies of the UML class diagram that outlines the new online store system.

The object model, depicted through the UML diagram, provides a comprehensive representation of the different objects required for the functioning of Hamp Crafts' online store. The objects are presented in a format that conveys the name, attributes, and functions of each object. The "+" symbol, appearing in front of each function, indicates that it is public and can be accessed and acted upon by other objects in the system. For instance, the process of registering a new customer involves creating a Customer object and calling the register () function on it.

Moreover, the diagram sheds light on the relationships between objects in the system. The inheritance relationship, depicted through the superclass-subclass structure, showcases how the User class serves as the superclass for the Customer and Administrator classes. The composition relationship, represented through a solid diamond, demonstrates that the child object cannot exist independently of the parent object. The UML diagram highlights the composition relationship between the Customer and Shopping Cart and Order, and between Order and Shipping Info and Order Detail.

In addition, the UML class diagram for Hamp Crafts' online store system provides a comprehensive and visually appealing representation of the objects, their functions, and their relationships. It serves as an indispensable tool for our design team to understand the requirements and build the system efficiently.

I feel that most of Hamp Craft’s functionality is outlined by the UML design, although there are a few instances where more functionalities may be desired such as the ability for the customer to use an in-store credit or possibly for the return of merchandise.

When it comes to understanding the systems of Hamp Crafts, it is important to consider the two different models that have been explored: a process model and an object model. I will consider each of these models and compare their advantages and disadvantages in describing the system.

The process model provides a high-level overview of the steps involved in the system and can help understand the flow of the system. For instance, it makes it easy to understand the different stages in the process, such as registering a customer, adding items to a shopping cart, and placing an order. However, the process model does not give us a complete picture of the system as it does not show the relationships between the objects or the attributes that are associated with the objects.

On the other hand, the object model provides a much more in-depth understanding of the system. It represents Hamp Crafts as an online store system, showcasing the different classes or objects required for the system and their respective functions and attributes. The object model makes for a better understanding of the relationships between objects, such as the inheritance relationship between the User class and the Customer and Administrator classes. It also highlights the composition relationship between objects, such as the relationship between the Customer and Shopping Cart and Order. This allows us to gain a better understanding of how the objects interact with each other, making it easier to visualize the underlying workings of the system.

In conclusion, both the process model and the object model have their strengths and weaknesses when it comes to describing the systems of Hamp Crafts. While the process model provides a clear overview of the flow of the system, the object model offers a more in-depth understanding of the relationships between objects. The best approach would be to use a combination of these models to get a complete understanding of the system, as both models provide complementary information. The owners of Hamp Crafts understand the complexities of the design when it comes to an online presence. They have decided to go with Creative Web Developers plan of action and I have scheduled the first agile scrum meetings with the team.