

In a previous version of a design for a personal financial management application, a single transaction consisted of a fixed number of properties: the date, the amount, the name/recipient, and the category. The new version of the application needs to support Venmo™. A Venmo™ transaction also includes a description, a “like” count, and other people’s comments (see below). We would like to expand the functionality of the transaction class so it can handle any type of property, even properties we have not thought of when the code is compiled. Each property needs to have a sort function, a name, and a value.



Assignment Definition

Create a class diagram representing the transaction. For most of the classes, just include the name (leaving the attributes and properties blank). For the Venmo™ class and for all the classes ancestor and child classes, list all the attributes and properties. Also, determine the quality level of the design according to the design metrics discussed *this semester*. Justify each quality level.

Grading

Your grade will be determined by the following scale:

- **Design Quality (60%):** Overall quality of the design. The best strategies were used when designing the class structure and individual class(es) of the design.
- **Design Visualization Tools (20%):** The class diagram(s) are used correctly, and it/they effectively communicate design ideas
- **Metrics (20%):** Appropriate metrics were identified and correctly utilized. The determination of each metric was fully explained and justified based on specific design decisions represented in the class diagram.