

UML : Unified Modeling Language

The diagram illustrates the relationship between three main classes in the system: User, Product, and Purchase.

The User class represents individuals using the system, with attributes including ID, name, email, and address.

The Product class represents the items available for purchase, such as electronics, with attributes like ID, name, description, and price.

The Purchase class captures the transactional data, including the purchase ID, user ID, product ID, quantity, and total price.

Additionally, the diagram demonstrates the association between these classes. Each user can make multiple purchases, indicated by the '1 to many' relationship between User and Purchase. Similarly, each product can be included in multiple purchases.

Moreover, the diagram introduces a Cart class, allowing users to store products before purchasing. A user can have multiple carts, and each cart can contain multiple products."

