## A4: Conceptual Data Model

Our simplified Conceptual Domain Model, which includes the relevant entities and the relationships between them are shown in Figure 1. It follows the UML class diagram notation conventions. The constraints and business rules are shown using notes.

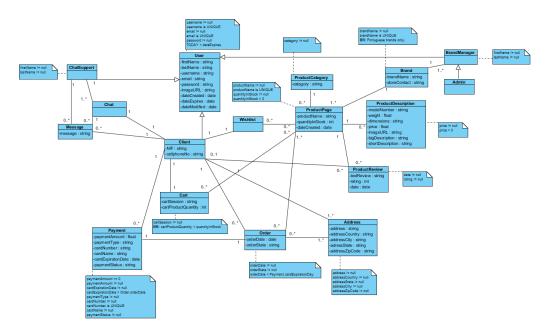


Figure 1: Simplified Class Diagram in UML

The relevant relationships (inheritance and association) are represented. Abstract classes or interfaces were not deemed necessary. All the associations between the entities are binary and bidirectional and the entities play a single, well-defined role in them.

The attributes' type is shown in a generic way and although they are all marked as private, there will be methods to access them. Attributes that can be derived from others (such as the the cart's total payment value) or that aren't going to be implemented (such as users' birthday, for discounts) are not shown.

## GROUP1736, 5/03/2018

- Group member 1 Beatriz de Henriques Martins, up201502858@fe.up.pt
- Group member 2 Francisco Tuna Andrade, up201503481@fe.up.pt
- Group member 3 Luís Miguel Santos Monteiro Saraiva, up201404302@fe.up.pt
- Group member 4 Ricardo Filipe Amaro Saleiro Abreu, up201304450@fe.up.pt