

In this diagram, we have classes which represent the different types of articles we want to define, along with their unique parameters.

The first class we have created would be the article class, which defines all the basic parameters which every other object of type "Article" will inherit by default. Moreover, we have created it as an abstract class in order to not have to repeat the same parameters in the other classes. Article defines the id, description and unitPrice that an article has to have.

Then, we would have the other three classes, which inherit the parameters and functions previously defined in Article, and also define the objects Food, Book and Tobacco. In the case of Food, we are adding a parameter which is the special promotion that is only applied for food, in this case. Then we have the Book class with an added category which represents the category it belongs and finally there would be the Tobacco class.