

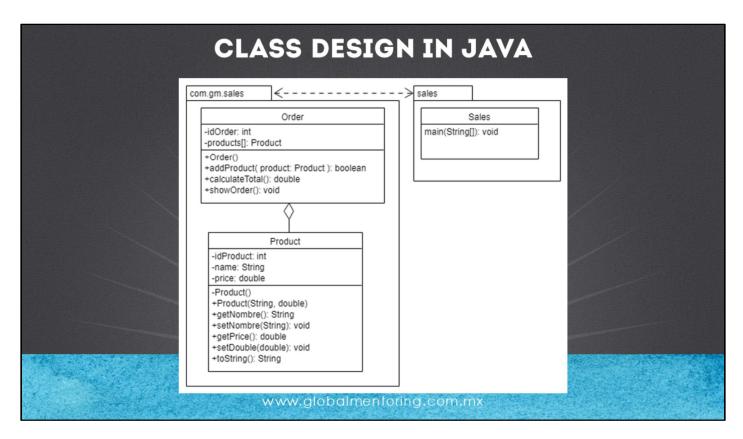


Hello, Ubaldo Acosta greets you again. I hope you're ready to start with this lesson.

We are going to study the design topic of Classes in Java.

Are you ready? Come on!





In Java, we will usually create more than one class with the objective of creating functional systems, for example, a system that processes sales in a store or online, or a billing system, accounting, or any general purpose system. When we create classes that interrelate, we will know it as class design.

With Java it is possible to create any of these systems, since it is a general purpose language. In this way cover the requirements requested by our users, which are the people or entities that will use and interact with our system. The idea of this course is to provide the bases of the most fundamental Java syntax and concepts that will allow us to create and understand this type of systems.

In the diagram we are showing the relationship between two classes, which are in a package called: com.gm.sales. Classes are related by a relation in UML (Unified Modeling Language) that is known as aggregation relation. This relationship indicates that an Order class contains Products. An order is a sales ticket, which has the summary of all the products that are going to be sold for a particular order.

For this reason, the Order class contains the methods of adding Product, calculating Total (of the order), and showing Order, the latter method whose objective is to show the order's Id, the total amount of the order, as well as each of the products added to the order. To store several products, the Order class has as an attribute an array of products, and in this way we can add several products to an order, using the addProduct method.

The Product class contains three attributes: Product id, name and price of the product, by means of these attributes we can easily identify a product.

Finally we have the class with which we will perform the tests that all function correctly. The Sales class within the sales package is where we will create the Order and Product objects and use the respective methods to prove that our code works correctly.



