

Faculdade de Engenharia da Universidade do Porto

Base de dados



Online Retail Database

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Description

The online retail market has a very relevant impact in the global economic structure. The aim of this project was to create a database for an online store. This database must store the different users. It stores if the user has high access privileges (administrators), their order history, their address, make sure the user is legally an adult (considering 18 years old has reference age), storing the buyers' opinions on products, checking if there is an sale in any of the products which are being bought amongst other information about the products and the manufacturers.

Project specification's

The costumers of this platform can wither be regular costumers or admins (admins can also be costumers). A regular costumer has to be over 18 years old, has a name, a unique id, an email and a social security number. Their location (postal code and country) is also stored has a foreign key. The admins also have stored their employee ID, what is their job title and in which sector of the company they work.

Every costumer has three options to login: using Facebook API, using google API or using their email and password (Normal login).

Every product in the store has a name, a unique id, the line of products to which belongs (dairy, tech, gardening...), its price and stock information (In stock or out of stock). The reviews of the products are left by the costumers and have a rating (1-5) and the date of review. A composite key with the product id and the costumer id can obtain the product review.

Products of online stores are often in discount. These offers have a start date and a finish date (always superior to the start date) and the percentage of discount as well.

The products are made by other companies so, information about this companies must also be stored such has its name, its city (since a company may have different branches on different cities of the same country, so the name is not enough for identification), and its revenue.

Costumers' orders have a unique Id, an order date, a delivery date (always superior to the order date) and the total price of the order (result of the sum of the value of each of the products multiplied by its quantity). The relation of the products with the order has to assure that the quantity of the product is superior to zero.

A costumer can have multiple orders at the same time in its cart. The cart stores the total price (sum of the prices of the orders). The payment of the cart is done using one of four different methods: PayPal, Visa, MasterCard, Shop Card but always requires a credit card number (for safety purposes and because the majority of the payment methods require it).

Conceptual Model

