



# SYSTEM DESIGN

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BIONICS APPLICATION

GROUP 10.2

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## BIONICS APPLICATION

### Purpose

Our database specializes in the sale of prostheses along with their creation. In it we can highlight two types of users: The customer and the engineer.

- **CUSTOMER**

Has the ability to view the products offered by the company in addition to add them to a cart and place an order apart from being able to view previous orders.

Is conformed of the following attributes:

- Id
- Name
- Phone number
- Street
- City
- Postal Code
- Role id
- List of orders

- **ENGINEER**

Is charge of the creation of the products in addition to remove them. Will also be able to add materials in addition to other more complex functions.

Is conformed of the following attributes:

- Id
- Name
- Date of birth
- Contract starting date
- Contract ending date
- Salary
- Bonus
- Experience in years
- Role id
- List of products (The engineer has created them)

To be able to access, the users will have to register previously. In case they have forgotten the password, they will be able to create a new one. For this database, we have to have the following objects apart of the previous ones:

- **Product**

Will be the product of the company. They have the following attribute:

- Id
- Name
- Body part
- Price
- Date of creation
- Photo
- A list of materials that is made of.
- A characteristic

- **Material:**

What the product is made of. Attributes:

- Id
- Name
- Price
- Amount
- List of products that are made of them.

- **CHARACTERISTIC**

Every product has one characteristic. It is conformed of the following attributes:

- Id
- Dimensions
- Weight
- Number of joints
- Flexibility scale

- **ORDER**

The products that the customer has purchase or is going to purchase. They are conformed of:

- Id
- Date that the order was done.
- A list of products

There are many functions that will be able to do in the menu. We can classify them in two types: Customer function and Engineer function:

- **CUSTOMER MENU**

- View product: We will be able to view a product with its characteristics and materials from a determined type of body part and if the customer wants to, add it to the cart.
- Make purchase: Make the order of the product that are in the cart.
- Change product: If there is a product in the cart that we do not want to buy, we can remove it from it.
- See other purchases: See and view the products of order that have been previously done.

- **ENGINEER MENU**

- View product: We will be able to view a product with its characteristics and materials from a determined type of body part.
- Add new material.
- Add new product.
- Remove product.
- See existing projects: It will show the products that the engineer has created.
- View bonus: see the bonus of the engineer.
- Update a product's price.
- Update contract ending date: This function will allow to renew the contract with the company.
- Quit job: will allow the engineer to retire or to leave the company.
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Also, before the user have access to their determined menu there will be a previous menu that has the following options:

- Register: allows a new user to register
- Login: If the user has already an account, they will be able access to it.
- Forgotten password: It will allow the user to change the password in case the have forgotten.