**WORKSHOP: FINDING OBJECTS, THEN CLASSES, THEN MODEL**

**PROBLEM**

We need a system to help us find information about electrical and electronic materials.

To understand what the program needs to do, first we need to know the basics about the material, as its characteristics, specifications, costs and operation that will serve us for different occasions, trying to make the information we provide easy to understand for the user, because our interface will be simple and attractive.

**OVERVIEW**

In the field of electronics, people should have an idea of what an electrical material can do on a manufactured circuit, for the benefit of the owner or other person who wishes to acquire this product, therefore our database is going to be in charge of providing the most basic and necessary information of the component.

**BACKGROUND**

The database will be in charge of showing basic aspects and prices of electrical and electronic materials, managing a simple and attractive database for the user who wishes to use it in order to learn more about the required material.

The buyer is responsible for obtaining wholesale electrical materials in large factories in order to redistribute them in their own business generating minimal percentage profits, for the development and constant updating of the interface, thus avoiding logic failures and material updating.

Thanks to the database that we will create, it will be easier for the user to search for the materials that they need to obtain, thus reducing the time and fatigue for the user when purchasing their materials.

The database will give us information regarding electrical and electronic materials which are: specifications, data sheets and costs.

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| --- | --- | --- | --- |
| **Material** | **Quantity** | **Purchase price** | **Unit selling cost** |
| 9V battery | 10 | $ 15,00 | $ 2,00 |
| Led diodes | 20 | $ 3,00 | $ 0,25 |
| Resistors | 500 | $ 50,00 | $ 0,20 |
| UTP cable (1 m) | 1000 | $ 350,00 | $ 0,40 |
| Integrated circuits | 100 | $ 75,00 | $ 0,80 |
| Dipswitch | 50 | $ 50,00 | $ 1,20 |
| Lizard wire | 50 | $ 10,00 | $ 0,35 |
| Capacitors | 100 | $ 50,00 | $ 0,60 |
| Potentiometer | 50 | $ 18,00 | $ 0,50 |
| Transistors | 200 | $ 70,00 | $ 0,70 |
| Arduinos | 200 | $ 1 600,00 | $ 10,00 |
| Protoboard | 500 | $ 7 500,00 | $ 18,00 |
| Multimeters | 100 | $ 2 000,00 | $ 22,00 |

**Project control**

The program that we are going to carry out, unlike other interfaces that likewise provide us with information on electrical and electronic materials, will be easy to use for beginner users because our data of the material will be concrete and for easy understanding.

The advantages of our database will offer will be clear: its appearance will be attractive and with a few hours of practice we will be able to acquire a lot of skill in its use, before launching our project we will have a test phase in which different types of users will participate with a lot of and little knowledge that will help us to know the most demanded materials in the field so, we will make the program adjust to the needs of each user.