Engineering Method

In this project for the integrative project 1 course, we deal with the case of how to generate reports from the database based on prices and types of phones. Among the client's needs are data table management, filtering information, statistical management through graphs and more.

Identification of the problem

According to the requirements presented by the company that hired us to do this work, it is identified that the main problem that this entity could have is **information management.** In fact, in addition to this problem there are small sub-issues, such as dealing with a database, which must be managed so that it can be better understood. Not treating this data in an application can generate a complete disorganization in the information, and if we organize it, we can help many people who want to buy a cell phone, and it would facilitate the work of the people who sell them because they would have a tool to support their work.

Information gathering

To give a solution to the problem we need to define the tools that will help us to solve it, for example, the Microsoft.ACE.OLEDB.12.0 tool, which helps us to facilitate the transfer of data between Microsoft Office System files and non-Microsoft Office applications, to treat the information that is in our database.

We also use the C# language which is a tool that helps us to shape this problem and give a possible solution to the company that hired us to solve this problem.

In addition to these tools, you need a database, to know how to model the information. For example, you can use the databases found in a page called Kaggle.

Search for creative solutions

To solve the problem of how to model information from a database, with graphs, maps, and so on, the following ideas were obtained:

use the tool and/or java programming language using scene builder, to build and model the information as needed, in addition to being able to have.

Use Kaggle, as a database in addition to taking the C# language to model the application and use Microsoft.ACE.OLEDB.12.0 to treat the information, and to be able to use the database in our application.

Transitioning from idea formulation to preliminary designs

For the preliminary designs we looked at which of the two ideas is better and we chose the second one which is to use C# as a tool to program this application, since it facilitates the creation of an application, besides it is not necessary to use an external agent such as scene builder as it would be necessary in java.

Bibliography

Mobile Price Classification. (2018, 28 February). Kaggle.
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Microsoft. (n. d.). *Microsoft Access 2010 database engine redistributable component*. Microsoft Downloads.

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