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DATA MODELLING AND DATABASES

ASSESSMENT 3 REFLECTION

INTRODUCTION

Through this reflection, the intention is to communicate the experience of carrying out the Royal Rundle hospital work case, which covers all the topics discussed during this course.

I will try to break down the different learning obtained throughout the study and reading of the exercise as well as the difficulties that arose when developing the different ideas and topics that were included in Assessment 3. The main reason for this reflection is to show the learning that was reinforced by completing this work case.

***Case study Royal Rundle Hospital***

The Royal Rundle Hospital work case presented a series of challenges when executing what was requested during the exercise. The diversity of variables as well as the size of the hospital's organizational structure meant that identifying and designing operational flows with databases (entities, attributes, and relationships) resulted in an arduous task that made me change my mind repeatedly regarding to what I was doing. This assessment has allowed me to reflect on the importance of the proper handling of information as well as it has helped me to measure the number of challenges that can arise when developing a system that meets the client's needs.

***Presentation of the information***

During the completion of this assessment, I was able to realize how important it was going to be to present the information to the client in an orderly, attractive and easy to understand way, in order to increase the chances of being the winner. A clear obstacle was being able to include all the information as clearly as possible without omitting key points within the design of the database, something that in my opinion I believe I managed to transmit successfully although without being 100% satisfied.

The limit on the number of words was also a key point to consider when including the necessary information corresponding to each topic, since by the nature of the case, summarizing some subjects was extremely complicated by all the research that had to cover.

***Process identification***

The identification of the internal processes of the hospital in relation to the flow and handling of information was divided into several parts and there were different variables that made me read the case more than once. I realized that basically everything was connected, so I decided to make a diagram where I exemplified the trajectory of the patients from the time they entered the hospital to their departure. Through each process it can be identified that there are different stages in which the information is captured and updated , in this case with the patient's clinical information.

***Entities, attributes and relationships***

Although I consider that now I know much more about databases than when I started the course, I had some difficulties in being able to identify both the entities, attributes and relationships between them. Being an exercise that contained more information than normal compared to others seen, creating the ERD was a challenge that made me reflect too much about what I learned in class. I think that being able to identify these three points was one of the most important steps in putting together a presentation that had the necessary tools to meet the parameters of the hospital.

***Databases***

The hospital has large amounts of information that need to be processed in the best possible way, databases belonging to doctors, nurses, workers, patients and the use of some facilities such as rooms could be identified. All this information can be perfectly managed by a robust database that efficiently processes the hospital and produces reliable and updated information on the daily operations of the company.

***Visual aids***

By organizing the information concerning the assessment and by consulting different reports presented by renowned consultants (as suggested by the assessment brief) I was able to realize the use and importance of visual aids when presenting the information that was wanted to transmit, it definitely causes a greater impact having a diagram, table or graph that summarizes or complements the written information, for this reason, during my work, I tried to place visual information relevant to the topic covered on each sheet as well as a design that was friendly to the eye.

Being a topic related to numbers and schemes, it may be difficult to design a presentation that is visually attractive enough for end users, however, during my previous research I was able to attest that numerous large and important organizations handle their monthly reports. or annual (where there is a lot of numerical information) with a high degree of simplicity, each page represents a clear message with what you want to convey and most of the time it is not tiring in sight.

***Importance of data in organizations***

A few years ago I began to hear about relatively new terms such as data mining, machine learning, big data, among others, which aroused my curiosity on the subject. This led me to discover that practically any sector makes use of data in one way or another, some organizations taking more advantage of this than others due to the difference in access to information and human and monetary resources, but in general today any organization with A competent IT department can generate great value if it makes adequate use of all the information that is generated through the daily operation of a business, practically all of this there is only to find a reliable and economical way to subtract it and that is something that careers related to databases can provide.

CONCLUSION

This work has left me many important lessons in the beginning of my relationship with subjects such as databases. I have been able to understand the importance that it has always had in business and that until a few years ago it began to grow exponentially due to, among other things, the rise of information technologies in part thanks to the decrease in prices and growth in popularity of various personal electronic devices such as cell phones and laptops.