Aplication Of Concepts in life cycles, software models and traditional methodologies

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TABLE CONTENT

1. SYNTHESIS

1.1. DESCRIPTION

There is a problem of a construction company, it wants to build a software system to carry out the respective monitoring of the works that it carries out. For the construction of this software, it asks that factors such as storage of works be considered where the state in which it is found is considered. For the realization of a work there are three types of plans, so each plan has a code that allows assigning its type, you must also have the plans of the land or plot, since this is where you intend to build together with your location. To carry out a work, you need the permission of the city council, and that the constructions can be carried out you need employees, these within their profile must count the works in which they have worked, and how many days they work in these, within the employees there will be two roles, the worker and the project manager, once the work is finished. They should be asked to pass it, the authorization processes together with the step, must notify if they were accepted or not, along with the date of such decision. To finance the works, there will be a private account assigned to each work, these accounts will have two statements, paid or payable, as the case may be. Because of the works are commissioned, the information on the work provided by a buyer must be counted, which within the information must include the amount of money to be paid, with this information the construction company can decide whether to accept it or not.

1.2. DESCRIPTION OF FLOWS AND MODELS

Taking into account the previous problem, an iterative process flow would be used, this selection in order to guarantee that each phase of the process is carried out correctly and completely. This guarantee is given thanks to the fact that through the iterative flow we can carry

out an activity over and over again and only until it is completed can we move on to the next activity. In this order of ideas, we decided to use an incremental model, because to solve the project we must have a progressive growth of functionality. This means that we want our product to evolve with each of the deliveries that are planned. The delivery schedule must be strictly followed because the project or delivery cannot be the same as the previous date, it should be noted that using this model we can guarantee that within each iteration it is easy to manage the tasks, as well as adapt the project to the needs that arise as they develop.

2. TRADITIONAL METHODOLOGY

2.1. GENERAL OBJECTIVES

As we know, we have a main objective with the RUP methodology, which is to ensure the production of high-quality software that meets the final needs, as we can see in this construction company, taking into account various aspects such as to become:

- cost
- Weather
- End customer satisfaction
- Quality
- Risks
- Scope

In other words, this methodology that we will use does not focus on the production of a large number of documents, but guarantees and emphasizes the maintenance of the models that we will use for development.

2.2. PRINCIPLES OF DEVELOPMENT

We want based the growth of the project with the construction company on 6 principles which will help us to develop it. Focusing on more specific aspects, allowing better management of information and requirements.

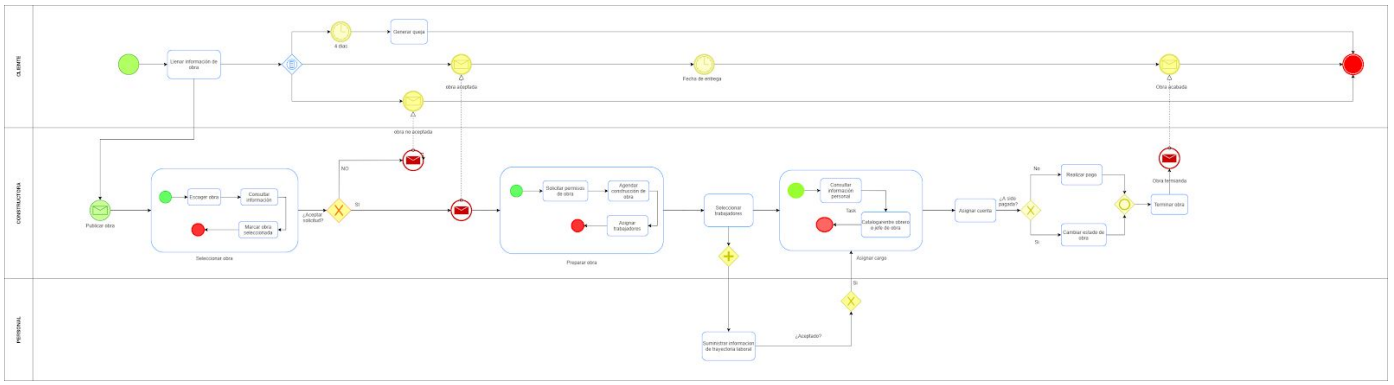
The most important ones we have highlighted below, and which we believe will help us with the aforementioned:

a. **Adapt the process:** We want to provide a solution that adapts to the needs of the end customer, thus giving exact data such as the size and scope of the project itself.

b. **Balancing priorities:** It will be necessary to put on the table the most important requirements that we can meet for the company to balance priorities.

c. **Focus on quality:** Provide a final product with quality control in each module or iteration, will allow us to have robust software in terms of quality and design

3. SOLUTION MODELING



4. CONCLUSION

We can conclude that the model to follow the RUP methodology. It is efficient when it comes to optimizing a set of methodologies, which can become adaptable to the context and needs of each organization. Thus facilitating the understanding of each of the explicit and implicit requirements that the client would like in the application, such as this example. All this is thanks to the fact that with this methodology we can understand each process, whether iterative or not.

We know that this methodology will always seek to ensure the production of software and this will only be a possible if aspects such as documentation and corresponding testing is taken into account at the time of its construction. That is why we implement this process, so there is a greater understanding of the general and additional problem which will help us in future evolution of it.

References

[1] Eng. Feijoo Professor of Software Engineering. (2020) Theorical Materials. Universidad El Bosque.