

## **Habilidades Técnicas para Gestión**

For a smooth software management process, it is necessary to have various technical skills, some of which I consider the most important are:

Technical experience – Estimation: “If you’ve worked with a piece of technology in the past, you are more likely to be aware of its intricacies and potential complications. This makes you better equipped to effectively estimate the time needed for development.” (Gera S, 2017). It is clear that although there are many variables that have an effect in the time and cost of a project to give an adequate estimate, past experiences in implementing software systems are a great starting point to base these estimates on, since the developer already knows the time and the cost of implementing a certain feature, his familiarity with the use of certain technology, the processes of certain methodology, etc.

Knowledge of software architecture design – Planning: having the ability to plan in advance the architecture of a system gives the developer the opportunity to build stable, flexible, and scalable software from the start, something that would be more difficult if attempted later without a good foundation.

Use of a version control system – Monitoring and control: The proper use of these gives the developers total control of the project status, in addition to monitoring the changes automatically, including who, when, why, and how each one of this was made.

### **References:**

Gera S. (2017, December 3rd). How to Get Better at Estimating Software Development Time. Medium. Retrieved from <https://medium.com/hackernoon/barriers-to-effective-software-effort-estimation-and-how-to-avoid-them-4abd39f09f26>

Krify. Importance of Architecture planning in any software application development! Retrieved from <https://krify.co/importance-of-architecture-planning-in-any-software-application-development/>

GeeksforGeeks. (2022, June 29th). Version Control Systems. Retrieved from <https://www.geeksforgeeks.org/version-control-systems/>

## **Habilidades Blandas para Gestión**

For a smooth software management process, it is important to have various soft skills, some of which I consider having the most relevance are:

Communication – Planning: most software projects are carried out by teams of varying sizes, therefore, in the planning phases, it is essential that individuals can clearly express their ideas and concerns, and finally come to an agreement. In addition, at the end of this phase, everyone must be clear about what they have to work on, when they must deliver it, how it will be done, etc.

Time management – Estimation: Good time management not only helps to make deliveries on time and appropriate manner, but also someone who generally keeps a record of the activities that they carry out, has the possibility of consulting how long a certain activity took and compare it with the new demands, and with this valuable information make a better estimate of time.

Analytical skills – Planning: being the “The traits and abilities that allow you to observe, research and interpret a subject in order to develop complex ideas and solutions” (Indeed, 2022) overall they are very useful to arrange, test and review a development plan.

### **References:**

Indeed. (2022, September 20). Analytical Skills for Your Job Search: Examples and Tips. Retrieved from <https://www.indeed.com/career-advice/resumes-cover-letters/analytical-skills>

Kachigan M. Why Time Management Is Considered a Soft Skill That Can Change Your Career Trajectory For The Better. Teamly. Retrieved from <https://www.teamly.com/blog/why-is-time-management-considered-a-soft-skill/>

Fruciano M. Why Effective Communication Is the Most Important Soft Skill. Effective Presentations. Retrieved from <https://www.effectivepresentations.com/blog/communication-is-the-most-important-soft-skill/>

## **Sprint**

Although we tried to try to follow an agile methodology, specifically Scrum, I noticed that when planning the project sprints, we only established what needs to be done and who is are the people in charge for each activity, but we didn't really follow a defined structure and even sometimes some things were left unresolved, and things like that caused delays in development. For future projects, to produce better results and contribute to an agile process, I will ensure that the team follows the sprint planning more strictly and in these establish more clearly the what, the who, the how, the inputs, and the expected outputs, which the scrum methodology recommends that they be established at this stage.

### **References:**

West D. Sprint planning. Atlassian. Retrieved from  
<https://www.atlassian.com/agile/scrum/sprint-planning>

## **Gestión de Procesos de IS**

In the academic training of a Software Engineer, the skills/knowledge/competences of process management must include at least: the structure and components of various management methodologies that allow the student to carry out efficiently the processes of planning, scheduling, execution, tracking, reviewing, and finally the delivery of software; both individually and as a team.

Also, as mentioned in “In a world of constant change and global competition, software development organizations are pressured to achieve greater efficiency with lower costs. In order to achieve this objective, it is necessary to adopt a way of working that makes it possible to understand, control, communicate, improve, predict and certify the work carried out” (Ruvalcaba M) software development is a very competitive market, which reinforces my belief that it would be preferable for this training to include agile management processes to be competitive in today's world of work.

### **References:**

Wrike. What Is Software Project Management? Retrieved from  
<https://www.wrike.com/project-management-guide/faq/what-is-software-project-management/>

Ruvalcaba M. SG. Procesos de Software. Retrieved from  
<https://sg.com.mx/revista/1/procesos-software>