# Editorial

Just a little bit more than three decades has passed since IBM introduced the personal computer (PC), and this technology started to be introduced easier into the daily life of different kind of companies. With the subsequent reduction of the computer costs during the nineties and the first decade of the current century, more and more people were able to afford a PC, and computers became one of our most important belongings. Parallel to this growth of the computer industry, the field of knowledge concerning the development of computer programs, which are actually the part that let us interact with, and extract the potential of the computers, has had perhaps, one of the fastest growing in history. Computing addresses the design of hardware and software systems for many different purposes including processing, structuring, and managing various types of information, and encompasses several subareas such as computer engineering, computer science, information systems, information technology and software engineering, each of which has its own interests and challenges.

Accordingly, during the same period, the development of information systems has gone from being the work of a reduced group of technical professionals able to interact with the hardware at a low level, to become in an structured field with well-grounded theories, not only for the construction of algorithms, but also for the design of proper physical and logical software architectures. Moreover, the size and scale of the software projects prompted the emergence of methodologies that promote organized and agile software development, since the interaction of large groups of people working on components of the same project, became imperative. Nevertheless, with a continuously growing industry, new challenges emerge every day and the academic community as well as the software companies, must keep an ongoing discussion and providing new strategies and alternative methodologies, which can respond to the new challenges.

In consequence, the present issue of the journal, includes extended versions of the some of the best papers presented at the 3rd International Conference on Software Process Improvement (CIMPS'14), which was held in Zacatecas, Zacatecas, México, during October 1-3, of 2014. The editorial board of the journal, aware of the importance of software development as a field of knowledge, of the continued growth of its industry, and of the interests of our readers, has decided to accept the invitation of the CIMPS's organizing committee, and after the peer review process, publishes five papers which address problems that arise at different stages of the software development process, and provide strategies for the improvement of such processes.

Concerning the huge development of the technologies of information and the massive way they are currently used, it is worth reviewing the issue of so-called electronic documents or digital files, terms widely used, making them generic and ambiguous. The term electronic document refers to information generated, sent, received or stored by electronic, optical or similar means [1]. An electronic record file must be understood as the record of generated, received information, stored and communicated by electronic means remaining in the media during its life cycle; It is produced by a person or entity by reason of their activities and must guarantee its authenticity and proper preservation in order to ensure its informative, legal and cultural values [2, 3]

According to the Standard NTC / ISO 15489-1, electronic documents must possess certain characteristics [4]:

*Authenticity:* It can be shown that the document is what it claims to be, that has been created or sent by the person who claims to have created or sent, and which has been created or sent at the time stated. The electronic record contains the same features as the rest of the records: originality, uniqueness, and probative value. The differences with the rest derive from the fact that its creation, manipulation, transmission, retrieval and reading is performed using appropriate tools either from hardware (computers, peripherals and networks) or software (operating systems, applications and communications protocols ).

*Integrity:* It refers to the complete and unaltered electronic document character. It is necessary that a document is protected against unauthorized modification. Preventive conservation of the media to ensure the permanence of the information and the legal value of the document is one of the principles governing the management of files and therefore, the electronic record file [2, 5]

*Reliability:* Its content is exactly what is meant. It is a complete and accurate representation of what it witnesses and can be used to prove it. The records should be created at the time or shortly thereafter in the operation or activity which reflect, by individuals who have a direct knowledge of the facts or, automatically, by the instruments commonly used to perform the operations.

*Availability:* It is possible to locate, retrieve, present, interpret and read. Its presentation should show the activity that produced it. The context of the documents must be sufficiently clear and contain the information necessary for understanding the operations that created and used them. The ease of electronic record files is the main contribution of digital technology in this area of management. This feature has two dimensions. On the one hand, the speed and accuracy of search and recovery through automation instruments of description, along with the required standards. On the other hand, increasing the degree of dissemination and use of the file that provides the ability to access documents electronically within the producing institution through intranets (also providing during the production of documents the capacity to exchange, share and participate in their creation by different participants) - and from the outside by users outside the organization through Internet.

*Organization:* As the digital world poses new challenges to the authenticity and preservation, its emergence does not suppose a rupture with the ways of organization and access that are carried out in the current documents. Rather, information technologies while offering new possibilities and greater effectiveness and efficiency, raise the need to remain faithful to the techniques of organization. It is commonplace in both texts by high-profile researchers as well as in the recommendations of major archival organizations [6].

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