Importance of Certification in Software Engineering

The growing reliance on computers for critical infrastructures indispensable for the running of the world and its economy provoke eloquent concern that has given rise to multitude of ethical, social, and legal issues. Consequently the capability to make comprehensive ethical judgments is therefore an imperative measure of Software engineer’s licensed expertise. There exist huge deficits of ethical, social and legal concerns in the field of software engineering currently due to the fact that it is merely been practiced as a profession and not as a controlled profession in the like manner in which both medicine and law are practiced respectively. Though it is acknowledged that certain ethics, guidelines and code of conducts are disposed to by members of professional societies which uphold and regulate the values of the professional practice. However, this does not assert that contravention of this code of conducts as obtain in the software engineering profession bars the concerned from further practice. (Sommerville, 2010). The foregoing therefore, elicits concern whether software engineers should be licensed or not?

(Laplante, 2005) premised the licensing of doctors, nurses, lawyers in addition to those in other professions alike and vocations as that of the interest to shield the public concern. And argues further that while the duties of doctors and nurses involve saving of lives and lawyers duties encompass the preservation of the sanctity of the constitution or better still law and order within a territorial confinement. Undoubtedly, it is high priority to preserve people’s lives to prevent untimely death as well as maintain law and order to put anarchy and lawlessness in check. These reasons sustained the arguments which subject both professions to the control of professional societies where membership confers the approval to practice only otherwise non membership means disapproval to practice consequently.

Comparing software engineering in the context of the foregoing, elicits fundamental issues
where critical infrastructures in today’s modern economies are dependent on computers which are powered by software designed and developed by software engineers. It’s sufficed to ask or reason whether it is worthwhile to anchor our conveniences and comforts in the hands of unlicensed or better still unskilled software engineers and their attendant flaws? In my opinion I beg to disagree vehemently.

Every pursuit of human proficiency ought to be commended. As there exist no coincidence in the appreciation or quest for competencies by any human effort. (Wilhelm, 1995) elicited argument based on the discretion that: “there is no demonstrated empirical relationship between certification and professional or business performance” which suggests that certifications are not true test of vetting direct linkage of competencies with actual performance or ability to perform above board as a professional; he opined further that “the format of most certification processes is that of an examination which samples the knowledge domain expected to be mastered. Rarely does a certification process include a test of practice and experience” which discloses that written test or examination cannot offer suitable replacement for practice and experience. Without any loss of accuracy he averred that “professionalism at its heart means personal responsibility” which clarifies that a professional is required to be admitted to ethics, social and legal conducts administered by professional societies which places certain responsibilities on the professional accordingly. He concluded by noting “that certification requires the codification of a body of knowledge” Codification makes modification and compliance additionally challenging as knowledge has been agreed and departmentalized.

Portraying the affirmed exposition of (Johnson, 2008) that, “considering the responsibilities of those who build systems fundamental to significant social functions, institutions, and values” and in that respect distinguishes between Guns-for-Hire or Professionals in the field of software engineering, where the former offer their service to the
highest bidder and can do anything as instructed by the bidder within the legal means, why the latter are guided by ethics and code of conducts of the professional bodies governing their conducts, they are not allowed by professional conduct to do anything except that which are approved or authorized in the conduct sanctioned by the professional bodies. He therefore advanced the curiosity whether software engineers are Guns-for-Hire or Professionals? However, given the importance and critical nature of the infrastructure the field supports in present times, it is advocated that professionals are most qualified to practice to prevent further ruin and unprecedented chaos.

In conclusion, though it might take certain length of time for the software engineering profession to grow to the level of been a controlled professional considering how important and essential it services provide for the running of our modern day economies, God forbid a situation where total ruin and disaster which are harbinger of unskilled, gun-for-hire, unlicensed person presents. I subscribe to the proposal that the field of software engineering be subjected to controlled professional code of conduct and code of practice respectively.

References:


Bibliographies:

