How to teach technology: As study

Gautam Prasad
Acropolis Institute of Technology and Research, Indore, India.

Abstract

Open source is not just about making something freely available. It is an arrangement of qualities—a method for working that practices open coordinated effort between a group to fabricate or keep up something. On the premise of these qualities, today we can watch a dynamic and flourishing open source group in charge of a significant number of the considerable accomplishments in numerous commercial enterprises.

Keywords: Teaching, technology, technical education, teaching and training.

Introduction

Most folks need their youngsters to maintain great qualities through their adolescence into adulthood, and introduction to open source is only one of the methods for guaranteeing kids take in these great qualities. Esteeming open cooperation is not something restricted to the mechanical business; we can see it at work crosswise over different commercial enterprises and groups. By uncovering the present era of understudies to the open source way, we will undoubtedly see a positive effect later on, when these understudies go into the work environment with an open attitude.

This open mentality thus prompts quicker improvement as individuals add to open source ventures since they have a driving enthusiasm for whatever they're dealing with. This instructs youngsters to work with what they appreciate, not what gives the most cash. More organizations are presently searching for individuals who have taken a shot at open source extends, and demonstrating understudies what open source can do will urge them to add to extends (or even open source their own particular ventures), which will unquestionably pay profits later on.

In an open source environment, connections between volunteers are significant for guaranteeing the venture flourishes. Open source urges individuals to develop and keep up solid connections that would significantly advantage these understudies in open source groups as well as in different situations.

Presenting understudies to open source

Open source innovations are in charge of helping numerous understudies over the globe, whether it's giving them with a stage to experimentation (such as the Raspberry Pi) or giving less lucky kids in less monetarily created nations with tablets fueled by GNU/Linux. The minimal effort of the Raspberry Pi has made it a reasonable alternative for schools and understudies alike to use for upgrading learning. Raspbian, the suggested circulation for the Raspberry Pi, accompanies Python and Scratch preinstalled so understudies can figure out how to program utilizing the Raspberry Pi.

However, this is just the tip of the ice shelf. With the Raspberry Pi, understudies can work with sensors and other outside hardware so as to accomplish more imaginative things, for example, make a controllable robot. More aspiring understudies can make this one stride promote and buy their own Raspberry Pi PCs for use outside of the classroom, maybe as web servers for their improvement ventures (HTML, CSS, JS, PHP among numerous others), as media servers, or for different activities.

The Raspberry Pi's potential outcomes are genuinely unending. As of late the BBC dispatched a national venture to give each understudy in year seven (11-and 12-year-olds) with an individual coding gadget right now named venture Micro Bit, which uses open source equipment. These are just a couple of the cases in which open source advances are helping understudies.

Numerous understudies at present utilize (or will utilize) open source advances (or innovations that utilization open source segments) each day, yet a hefty portion of them don't understand this. That open source advances are offering understudies once a day, some assistance with enhancing their training, taking their educational module to places they've investigated, or furnishing them with assets that wouldn't generally have been available to them, is clear. Furthermore, got from open source methods of insight of open source is another type of training today: open instruction, where instructors over the globe meet up to share, deliver, and upgrade instructive assets for nothing.

Expanding mindfulness

One of the most effortless approaches to expand understudies' attention to open source is by presenting them to the way that huge numbers of the innovations they utilize each day are open source.

I for one got some answers researching so as to concern the open source development the roots of GNU/Linux, which controls my Raspberry Pi Model B. Until that day, I was totally uninformed about both the open source development and the way that I was utilizing an open source working framework.

Conclusion

One of the numerous different ways we can open understudies to open source is by showing them about open source values in their data innovation classes or software engineering classes. We frequently see understudies contemplating the foundations of numerous different subjects, and this unquestionably shouldn't be a special case. In the event that understudies are required to find out about specific laws and their precise dates of production, then is there any valid reason why they shouldn't need to find out about open source programming and its standards, which are in charge of controlling billions of gadgets, administrations, and base.

References

Bruns, A., & Humphreys, S. (2005, October). Wikis in teaching and assessment: The M/Cyclopedia project. In Proceedings of the 2005 international symposium on Wikis (pp. 25-32). ACM.

Cavus, N., Uzunboylu, H., & Ibrahim, D. (2007). Assessing the success rate of students using a learning management system together with a collaborative tool in web-based teaching of programming languages. Journal of educational computing research, 36(3), 301-321.

Coates, H., James, R., & Baldwin, G. (2005). A critical examination of the effects of learning management systems on university teaching and learning.Tertiary education and management, 11, 19-36.

Cole, J., & Foster, H. (2007). Using Moodle: Teaching with the popular open source course management system. " O'Reilly Media, Inc.".

Giannozzi, P., Baroni, S., Bonini, N., Calandra, M., Car, R., Cavazzoni, C., ... & Dal Corso, A. (2009). QUANTUM ESPRESSO: a modular and open-source software project for quantum simulations of materials. Journal of Physics: Condensed Matter, 21(39), 395502.

Kane, G. C., & Fichman, R. G. (2009). The shoemaker's children: using wikis for information systems teaching, research, and publication. MIS quarterly, 1-17.

Martín-Blas, T., & Serrano-Fernández, A. (2009). The role of new technologies in the learning process: Moodle as a teaching tool in Physics.Computers & Education, 52(1), 35-44.

Ravel, Á., & Newville, M. (2005). ATHENA, ARTEMIS, HEPHAESTUS: data analysis for X-ray absorption spectroscopy using IFEFFIT. Journal of synchrotron radiation, 12(4), 537-541.

Seluakumaran, K., Jusof, F. F., Ismail, R., & Husain, R. (2011). Integrating an open-source course management system (Moodle) into the teaching of a first-year medical physiology course: a case study. Advances in physiology education, 35(4), 369-377.

Stroulia, E., Bauer, K., Craig, M., Reid, K., & Wilson, G. (2011, May). Teaching distributed software engineering with UCOSP: the undergraduate capstone open-source project. In Proceedings of the 2011 community building workshop on Collaborative teaching of globally distributed software development (pp. 20-25). ACM.