Abstract:

Open Source Software (OSS) has provided a successful model for community-based collaborative development of software. The success of OSS has triggered interests in applying similar approaches to other areas besides software development, such as open courseware development and open content projects. However, there are nearly no projects on building highly collaborative Open Content Community (OCC) for developing high quality, comprehensive, rich and freely distributable educational materials on specific subjects. Learners can directly use these educational materials to effectively learn the respective subjects, and instructors can use them to construct courses. This paper presents an OSSbased model for building an OCC that supports volunteers to effectively develop, evaluate and use open content educational materials. The model is composed of fine-grained knowledge units to encourage high degree of collaboration. It also has a hierarchical module-based framework for structuring projects. The community Website provides tools and services for content development, project management and project navigation. It is designed to provide high flexibility to cater to varying requirements of different projects, which may evolve in a way similar to OSS projects. An initial prototype has been developed and the authors are in the process of fine-tuning the prototype for experimentation with sample projects.