

Abstract:

Mashups, Web applications integrating data and functionality from other Web sources to provide a new service, have quickly become ubiquitous. Because of their role as a focal point in three important trends (Web 2.0, situational software applications, and end user development), mashups are a crucial emerging technology for information systems education. This paper describes the result of a pilot experiment of an open-ended mashup assignment using an end user Web-based visual development environment: Yahoo's Pipes. Surveys, qualitative analysis, peer evaluations, and comparative analysis were used to assess the assignment. Initial results indicated that the assignment was effective, well received, and cost efficient. Students found it to be useful, interesting, appropriate, and of the right level of difficulty. They gained the needed expertise in mashups and Yahoo's Pipes within a short period of time. They developed mashup applications with the expected degree of complexity, maturity, and innovativeness. There were no logistical bottlenecks and grading the open-ended assignment appeared to be consistent among the instructor and peers. The peer evaluations were perceived by students as very useful, even more so than the actual mashup development. Although Yahoo's Pipes were in general well received, its limitations, such as the lack of programming capability, created some minor issues and changed the designs of some mashups slightly. IS educators interesting in integrating open-ended mashup assignments into their courses may consider including a robust peer evaluation component and selecting a mashup development environment that matches the assignment goals. (Contains 8 tables and 2 figures.).

Citation:

Yue, K., Experience on Mashup Development with End User Programming Environment, Journal of Information Systems Education (JISE), Volume 21, Number 1, Spring 2010, pp111-119.