

“But Where’s the Spec?” – Learning Through Collaborative Development and Discovery

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Throughout the world of academia, there has always been a divide between what is taught and what is done in industry. Often, the skills a student leaves college with falls short of the needs of industry in entry-level positions. With the market becoming increasingly global, many high-tech jobs are moving off shore, forcing individuals to be more competitive in the job market. The question that must be asked, is how can the higher learning institutes rise to meet this challenge and better prepare its students for the demands that lie ahead.

In an attempt to probe this question, we organized a development project that would involve three distinct groups of students and observed some of the tensions encountered, the techniques to overcome them, and the effectiveness of the supporting tools and technologies used. This research development project’s goals were not only to improve the design process in Human Computer Interaction [1], but also to expose students to factors they will encounter in the “real-world.” The high level vision of this project was to develop a system by which distributed designers could contribute to and reuse design knowledge in design/development activities for interactive software systems. This system was web-based, requiring an assortment of tools to achieve a wide variety of functions, ranging from storyboarding, collaborative work, testing, and version-tracking.

The majority of our paper describes the three main issues mentioned above: hurdles to collaboration, techniques for overcoming team obstacles, and tools for supporting collaborative development of web-based software systems in a learning environment. This work should be of interest to anyone teaching students in a field that would benefit from the development of internet content – as groups of students are challenged to develop tools that would access this content, they will encounter many of the issues we discuss.

Based on our analysis of the hurdles, practices, and tools that were evaluated during our development efforts, we make recommendations that will allow others to anticipate and prepare for the challenges they may face in their own endeavors. Our complete short paper will elaborate on the key guidelines on each of the three areas. With our recommended guidelines for tool development, we feel this paper will help inform the E-Learn community about emerging opportunities for high impact research. Our own future work will continue to probe these issues and help improve the process through evaluating new possible solutions to lead to a fuller, more robust, collaborative development experience for students and professionals alike. Developing this discourse with other E-Learn researchers will help us stay focused on our primary objective, providing a quality learning environment.

References

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