

Form Meets Function: A Software Development Experience

Edwin Bachetti

Department of Computer Science
Virginia Tech
Blacksburg, VA 24061-0106
ebachett@vt.edu

D. Scott McCrickard

Department of Computer Science
Virginia Tech
Blacksburg, VA 24061-0106
mccricks@cs.vt.edu

Abstract

This work examines the divide between software engineering and usability engineering. We take a brief look at the two separate but similar lifecycles and, integrating previous works, we identify the differences between them along with obstacles that sometimes prevent the smooth coordination of related efforts. Our work provides a case study, looking back at a year of work in a Human Computer Interaction lab tasked with developing a Knowledge Management System for real-world use with a junior-level undergraduate computer science class. This system was home-grown and built completely from scratch, requiring us to not only determine the best way for the user to interact with the system, but also to design and build the system structure that would accomplish our goals. It is our claim that this project required the best of both worlds; forcing us to make real-world decisions on how to meet the needs of usability and functionality. We describe successes and failures with our implementation, and conclude with future directions for integrating the fields of software engineering and usability engineering.