AGILE DESIGN AND ARCHITECTURES

Ernest Edmonds
IOCT, De Montfort University, Leicester
ernest@ernestedmonds.com

In this note I very briefly review my early work on what we now know as "agile software development" and on the development of software architectures in support of human-computer interaction (HCI). I will not review other related work in this short contribution.

In 1970, having set on the path of researching the use of computers for creative tasks, I was supervising a final year computer science degree project in which plotter software was being developed for artists and designers. My students, who had been taught a waterfall approach, found it more or less impossible to elicit the requirements from potential users. I realized that a different design and development method was needed and I devised one that I then called "adaptive". Today we would call it "iterative" or "agile".

I presented these ideas to a Computer Arts Society (SIG of the BCS) meeting in London and the wrote it up. Submitting my paper to *Computer Aided Design* was not successful as a review thought that "If you don't know what you are going to do before you start you should not start." Eventually, I published it in *General Systems* (Edmonds 1974b), having by then developed a strong interest in HCI design methods for non-technical users (Edmonds 1974b).

The software issues around using adaptive (agile) design became important to me in the early 1970s when of course the hardware context was primarily the mainframe. I discussed these in a variety of papers (Edmonds 1978a; 1978b) and finally summed my position up in a 1982 paper (Edmonds 1982) where, in particular, I proposed that we should use a partitioned software architecture so as to enable a targeted adaptive design approach to the HCI features of a system. I took this proposal, and my diagram, to a workshop and we used it to propose what became known as the "Seeheim Model" (Green 1985).

Much debate has followed this work and the subsequent development of the WWW has in any case made many of these ideas a normal part of HCI that hardly requires a mention.

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