

Paper Prototyping: Inviting the user into the design process

From the design ideas the team prepares a paper prototype of the design. Paper prototyping is a quick way to envision the entire application and get significant user feedback very quickly (See Figure 3). The design team then tests the paper prototype with three of their original interviewees. Here users are asked to perform tasks from scenarios while one design team member “plays” computer by changing the screens. Others design team members take notes about when the user has difficulty accomplishing the task. This provides members of the design team with both a way to refine their design and to validate their ideas. In presenting a final design at the end of the course team members regularly explain features they have added or changed based on input from their users during the paper prototyping sessions.

Paper prototyping involves the use of a paper simulation of an interface or system. A paper prototype contains interface elements such as menus, windows, dialogue boxes, and icons which have been sketched on paper or created in advance with materials such as post-it notes, index cards, and acetate sheets (Snyder & Lahti; 1996). One member of the design team presents a user with an initial interface design and tasks to perform using the interface. The user is instructed to use their finger as a mouse to make selections and activate interface elements, and to verbally describe thoughts and impressions while working with the prototype. Another member of the design team plays the role of the computer and manipulates interface elements in response to the user’s actions.

Paper prototyping provides many advantages (Rettig, 1994). These include: increased willingness of design team to make changes because they haven’t invested extensive time into design and coding of a prototype, early detection of problems before extensive coding has taken place, increased likelihood of user suggesting changes or challenging the design, and increased focus on overall organization and feel of application rather than on details such as font size. Paper prototyping is an integral part of the design process used by students in completing the class design project.

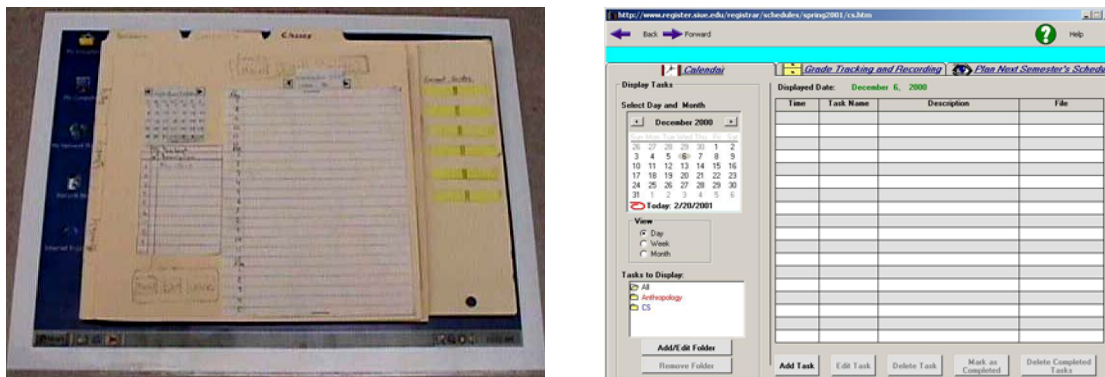


Figure 3: Paper prototype and final high fidelity prototype

Rettig, M. (1994). Prototyping for tiny fingers. *Communications of the ACM*, 37(4), 21-26.

Snyder, C. & Lahti, E. (1996). Paper prototyping tricks. *User Interface Engineering*. [video]. Available: www.uie.com.