
Walkthroughs: Evaluating a prototype

Participatory design has borrowed or developed a wide variety of methods for evaluating interactive systems. A key strategy is to involve users in the evaluation process. In addition to standard usability studies and data analysis techniques, video design walkthroughs provide an easily-accessible way for users to participate in evaluation and give feedback that is directly relevant to the design early in the process. The purpose of this session is to identify potential design problems and suggest concrete ways of improving them.

 **Video Walkthrough** A "walkthrough" is a peer group review of a product: people at roughly the same level in the organization meet to systematically review and discuss a segment of software. One can review code, architecture or any aspect of the software. Here, we are interested in the design of the software from the user's perspective. Structured Walkthroughs (Yourdon, 1979) and code inspections have been shown to one of the most efficient and effective methods of obtaining feedback and improving the quality of computer programs.

The rules are very simple, but very important: Groups should be small (3-7 people), members of the group should be at the same level, the presenter should prepare in advance, everyone must be on time and the review should be limited to at most one hour. The goal of the walkthrough is to identify as many problems as possible, not to discuss solutions. Criticisms should be as positive as possible and should be restricted to the design at hand.

 **Roles:** In the presentation group, one person should act as the presenter, who explains the basic idea of the scenario and presents the scenario step by step. In theory, you will use the video you shot from the last exercise. If you are not ready, let other members of the presentation group help manage the interaction by manipulating the paper prototype as the presenter goes through the storyboard. The camera person should come from the presentation group. The second group is responsible for evaluating the first group's design scenario. One member of that group should act as the scribe, noting the comments and ensuring that the discussion stays positive.

Exercise Conduct a video walkthrough to evaluate the video prototype. Find several people who have not participated in the design and invite them to help you evaluate the videoprototype. Handing out copies of the storyboard will help participants follow the storyboard and make comments. The presenter should begin by playing the video from beginning to end, then rewind and go through the video prototype, step by step. Participants should ask questions about the design and make constructive criticisms either about specific screens or general usability.

Decide in advance which perspectives members of the reviewing group will take. For example, the user's perspective, technical feasibility, interaction design, and marketability. Do not criticize the authors, concentrate on the software. The presenters should explain, but not defend, their design choices. The scribe should list all the design problems identified. At the end, the group should decide whether the software is acceptable, needs minor revision or needs major revision. Remember: the goal is to identify problems, not correct them. After the walkthrough, participants should hand their notes (on the storyboard) to the presenter, who can revise the design accordingly.

