

Video Prototype - DOM

Amy Brumet, Meleigha Holt - Design and Test

Matthew Bryan, Kyle Hipke - Writing, Team Management

We made our video prototype for DOM, the domestic robot system, using several digital cameras and combining the results together in software. This worked very well since some on our team had experience with video editing. They spliced the videos together, speeding some of them up to give a hectic effect. Since our project inherently involves a robot, we had to piece together a robot costume, which for efficiency sake, we made of only cardboard and tin foil. Our robot is to be used in a domestic setting, so one of our teammates offered to let us use her house for the setting. We made a quick iPad-sized paper prototype from our conceptual drawings, which luckily had scenes similar to a room in our target house. Those editing the video added some highlights on top of this video, which we felt would be the easiest way of doing it.

We made this video interesting by using a first-person narrative. We tried to capture what it would be like to actually own one of these systems and to make use of them. We also integrated an “olde-timey” aesthetic into the video. This decision came from wanting to depict what the person was thinking without having cheesy narration. We also wanted to show the robot performing an action, but wanted to speed it up so we would not bore the users. Putting these two things together, we decided to pursue a look similar to an old “talkie” where text is placed on the screen and is interleaved with seemingly sped-up video. In addition to being comical, this became a great contrast to the technology involved.

We found story-boarding the entire video in detail on a white board was extremely useful (see Fig.1). This process played a similar role as the cognitive walk-through described in Lewis and Rieman. By simulating specific interactions in detail in our heads and on paper, we were forced to consider aspects of our design which we had previously left relatively open. It was also helpful that we worked so well together. Since we all bring a general level of respect to our meetings, they go very smoothly and we accomplish a lot in a short period of time.

The thing we found most useful was also the most difficult. Since we had not considered certain details of the flow of the interface, we were forced to make decisions about it. This meant making certain trade-offs such as the trade-off between simplicity and functionality. We also found it difficult to fill in the context and back-story of our tasks. Since we have spent so much time on the design of the interface, the earlier drafts of our video prototype excluded important contextual details in favor of just showing off the interface itself. Overall, however, these problems were quite minor and we overcame them.

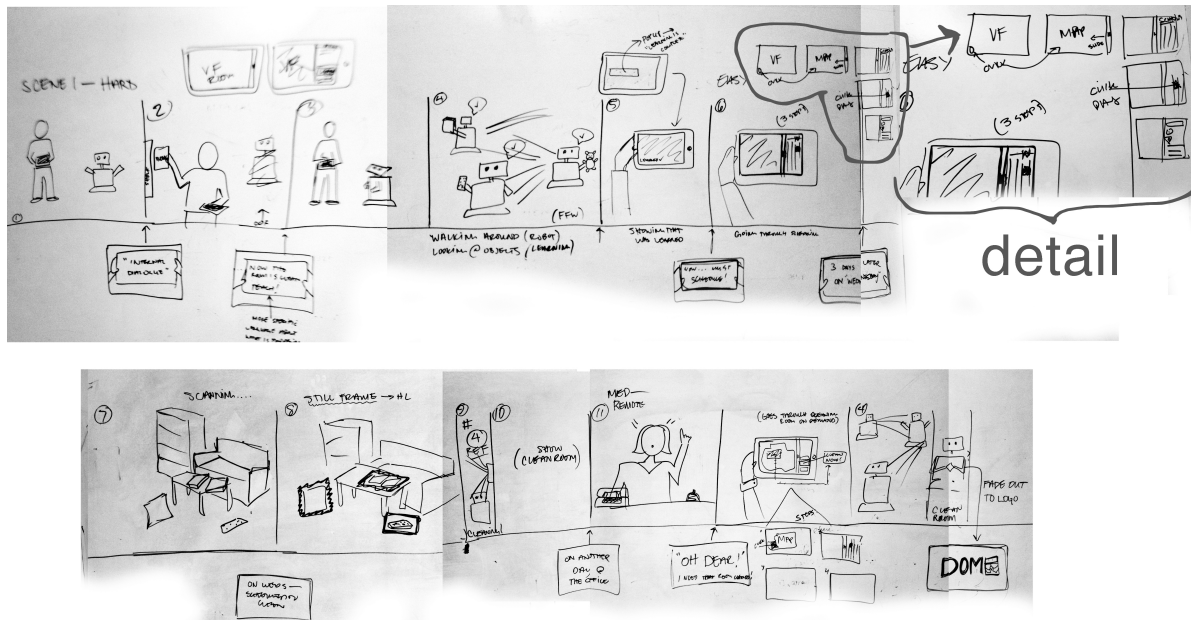


Figure 1: First storyboard of our video prototype (zoom in for detail, it is very high resolution)