Human-Computer Interaction

Week 3 Lecture 3B Scenarios

COMP 3900 & COMP 6390

Semester 2, 2016

Duncan Stevenson

Australian National University

Scenarios as an HCI design tool

A scenario is:

- An informal storytelling description of activities or tasks
- It uses vocabulary and ways of writing that are familiar to the users
- It can be understood by the stakeholders
- It is often the first step in establishing requirements Paraphrased from "Interaction Design, 4th Edition", page 371

Scenarios as an HCI design tool

For our purposes, a scenario has:

- An introduction that describes the context and the intended system
- A set of personas, which are abstract descriptions of typical participants in the activities
- A set of "use-cases". Each use-case lists the sequence of actions that the persona or personas take (and the corresponding actions from the system) in order to achieve a task.

Scenarios as an HCI design tool

Also, for our purposes, each use-case is written in a descriptive, story-telling style, so that the person reading the use-case can more easily envisage what is happening (in contrast to numbered lists of actions in tight, formal prose)

Jodie Moule, author of "Killer UX Design", talked at OZCHI2012 about how her design company uses scenarios. She includes cartoon sketches to give her personas character. She lists four types of scenario that her company uses when it is exploring a product design.

She would call our scenarios "key pathway scenarios" which "discuss the user's interactions with the product, focusing on how the user engages with it to achieve goals" (p125-126)

An applied research example

Designing a tele-health system for paediatric surgeons to do post-operative outpatient consultations.

[After the operation the children come back to the hospital for 3-monthly, 6-monthly, ... checkups, often for several years to manage their rehabilitation.]

Project done by CSIRO in 2005-2007 with the Royal Children's Hospital, Melbourne as the research partner.

Project brief and observations

- The surgeons came to us in Canberra to explain what they needed.
- Several of us then visited the hospital and observed these surgeons conducting outpatient clinics.
- From this set of data we created an early prototype and a scenario which we presented to the surgeons at one of our project meetings.
- We gave a spoken presentation of our scenario and drew diagrams (the prototype) by hand on their whiteboard. This is a written version of that scenario.

The old Royal Children's Hospital



Outpatient clinic room



Tele-health floor plan for one of the use-cases

Written description of the scenario

The written description of this scenario is in a PDF file on Wattle (section for Week 3).

Adjusting the style of the scenario

You can adjust the style of your scenarios depending on what you want to do with them:

- If you are at an early stage of design you are likely to want a descriptive scenario to use as part of conversations with clients and colleagues. You will probably use a simple paper prototype (or the digital equivalent) with this scenario.
- If you are doing usability studies your prototype may be more detailed and your scenario may be in a simpler, list-of-actions-and-responses form [Assignment 3]

I think you need to be able to write both types of scenario.

Examples of scenarios using video

- This example is the video that the group who won the OZCHI Student Design Challenge produced as part of their design submission. They used a few simple scenarios which they acted to illustrate their ideas.
- 2. Telehealth for emergency care in a hospital. This was made as part of a training package for staff at the two hospitals.

Small group exercise

Remember your earlier discussion of public transport information and ticketing in Melbourne.

Write a short scenario to illustrate the way passengers on trains would use contactless smart-cards to travel by train. Write it so that the board of management of Public Transport Victoria could understand your idea.