Media Computing Project

Lecture 1: Field Gathering Techniques
Goals

- Who are the users?
- What do the users want?
- How do they use current systems?
- What are design problems?
- What are design opportunities?
User & Task Analysis

- **Users**: Who is using the system?
- **Goals**: What do they want to achieve with the system?
- **Tasks**: How do they achieve their goals?
User Description: Persona

- Fictitious Character
- Representative of user type
- Representation:
  - Name
  - Photo
  - Quote
  - Background Story

Mittwoch, 22. April 2009
Goals

• Life goals
  • “I want to be the best at what I do”

• Experience goals
  • “I want to feel competent and confident”

• End goals
  • “I want to watch a movie”
Task Decomposition

- Divide complex task into subtasks
- State machine to define decisions
Data Acquisition

- Surveys
  - mass-deployable
  - quantitative data
- Interviews
  - adaptive
  - qualitative data
- Contextual Inquiry
  - deep insights into the work domain
Surveys

• What questions?
  • Fowler: Improving Survey Questions

• Where to deploy?
  • Internet (surveymonkey.com)

• How to interpret?
  • t-Test
Survey Questions

- Formulate clear objectives
- Gather user profiles
- Lickert Scale
  - 1: poor, 2: fair, 3: good, 4: very good, 5: excellent
  - Allows quantification of survey results
- No leading questions
  - Which of the two systems would you prefer?
- Run a pilot study
t-Test

- Statistical hypothesis test
- Variants:
  - test whether given value is mean of measured data
  - one- / two-tailed
  - test whether two populations are equal
  - paired / unpaired
  - test whether slope of regression line is different from 0
Interviews

- Be polite
- Do not waste the user’s time
- Make the user comfortable
- Bribe (with gummy-bears)
- Inform the user
Notes

• Paper
  • good: flexible, easy, reliable
  • bad: distracting, slow

• Audio
  • good: non-intrusive
  • bad: does not include interface

• Video
  • good: very detailed
  • bad: intrusive, time-consuming to analyze
Contextual Inquiry

• Observe the user in her context
• Master / Apprentice Model
• Principles
  • Go where the user is
  • Involve the user
  • Interpret immediately
  • Focus on the design
Contextual Inquiry

- Very high effort (2-4h per session)
- Very intrusive for the user
- Dependent on work situation
- Can reveal major design problems
- Findings are discussed immediately with the user
Assignment

• Create Weblog
  • http://www.wordpress.org

• Perform Task Analysis
  • Who are the users?
    • create at least two distinct personas
  • What are their goals?
    • include in persona description
  • What are tasks?
    • perform tree decomposition and create state machines