Design & Evaluation of User Interfaces - notes

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Contents

Chapter 1

Requirement Analysis

*"What is a **requirement**"*
Something the product must do or a quality that the product must have.
Functional requirement, what the system must do.
Non-functional requirement, qualities that the system must have. Characteristics and/or parameters. Think qualitative.

Requirements needs to be testable

- What people do
- What people want to do
- How people do what they do

1.1 Terms used for activity

Requirement gathering, pre-existing specifications:

- Laws/legislatsion
- Documents from customer/user

Requirement generation, build from various sources.
Requirement solicitation, going deeper than user request.
Requirement engineering, active role, building the requirements.

requirements table

ID	Priority	Summary	Source(s)	Dependencies/conflicts	Satisfaction criteria	Change history
C4.1	1	View list of assignments, their status and type for the geographical area where the inspector is responsible.	Interview 3b.	None identified.	All assignments of the geographical area are shown. Only inspectors from the particular area can see these.	02-10-2007: Interview 3b -> Constraint on who can see the assignments.
...						

Figure 1.1: Requirements table

Prioritizing requirements, can be done using MoSCoW model.

Chapter 2

Data collection methods

Methods for Gaining an Understanding

Gather stories from stakeholders - examples of their work, struggles, processes, etc.

Interviews

Structered interview, with predetermined order and questions.
Semi-structured, loose understanding of questions, but more so followint the flow of conversations.
Unstructured, loose understanding of questions, but more focused understanding general concern of customer.

Contextual Inquiry

Understand the actual work they are doing. Understanding their expertise of their needs and work. Abstraction, find communalities and describe for the general user, not just the individual interviewed. Find the right granularity of the interview and understanding to not loose focus or getting overdetailed in descriptions.

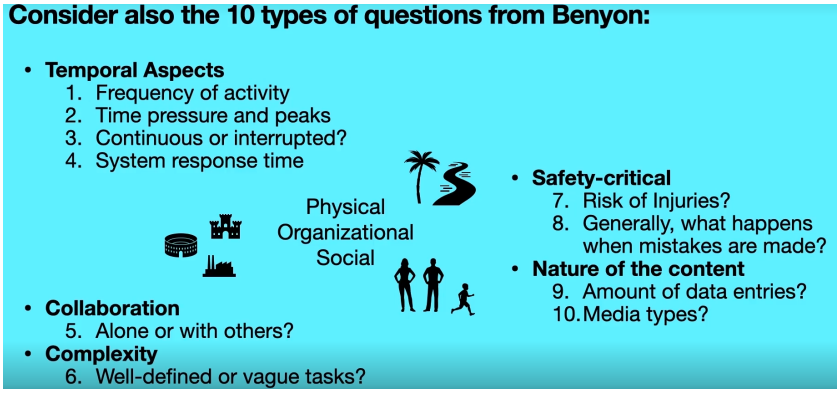

Figure 2.1: Benyons 10 questions

Quantifiable data

Usually a questionaires. These can be first implemented into the development team to test, before sending to a customer. Keep it short.Preferably use a validated questions. Allows for comparing mulitiple users experience and wants for the potential system. Questionaires can be found on pages like Google Scholar.

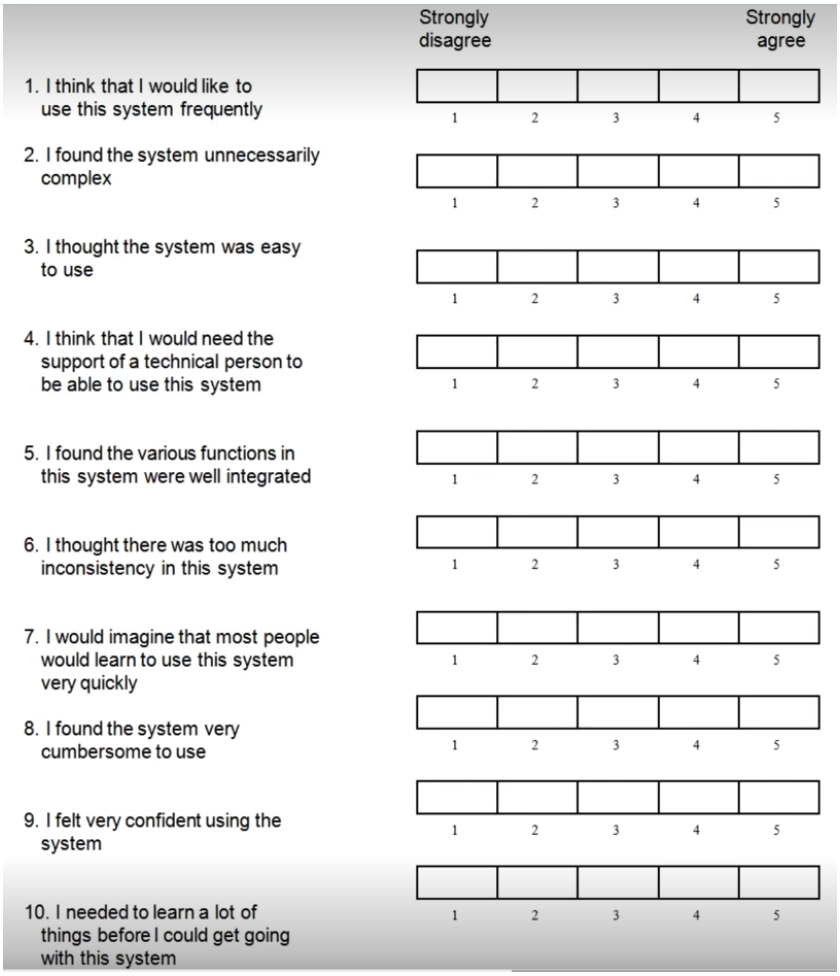

Figure 2.2: Usability scale (SUS) - validated questionaires

Cultural Propes

Gather information in a given activity, by letting user do activity without the designer being present. Where the user collects the data in their home or workplace. This allows the user to collect important information for them, whereas the design would have to guess.

Field Observations

It's difficult for users to express all details in interviews and surveys. Using field observations, common behaviour that is not thought about like keyboard shortcut can be

found. Usually done after interview to know what to look for. Being unobtrusive is important as to not distract or impeding them.