



User Research and Requirements

Lecture 10, Week 5

February 4, 2015

CSC318HIS

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I

Phase 2: Components

- Detailed user research plan
- Instruments
 - Study protocol (template provided)
 - Informed consent form (template provided)
 - Three different instruments: interview scripts, observation scripts, questionnaires, etc.

Must-Read

Participant Observation (Mack 2005)

Designing useful and usable questionnaires
(Wilson 2007)

Semi-structured interviewing for user-centered
design (Wood 1997)

Week 5 To-Do List

- Watch good/bad interview video
- Submit Phase 2
- Bring at least 5 copies of instruments to tutorial this week for pilot testing

User Research & Requirements

Hierarchical Task Analysis

Understanding the steps required in critical tasks at multiple levels of abstraction is important to correctly designing for the task.

There are many techniques for this, and they can take many formats. We will focus on one particular technique: **Hierarchical Task Analysis** *[Annett & Duncan 1967]*.

HTA produces a list of design-agnostic numbered hierarchical steps required to achieve a task. Steps are grouped into **plans** to indicate how a task might be accomplished.

HTA Example

0. Borrow a book from the library *[SRP 2011]*:

1. Go to library

2. Find the required book

2.1. access library catalogue

2.2. access the search screen

2.3. enter search criteria

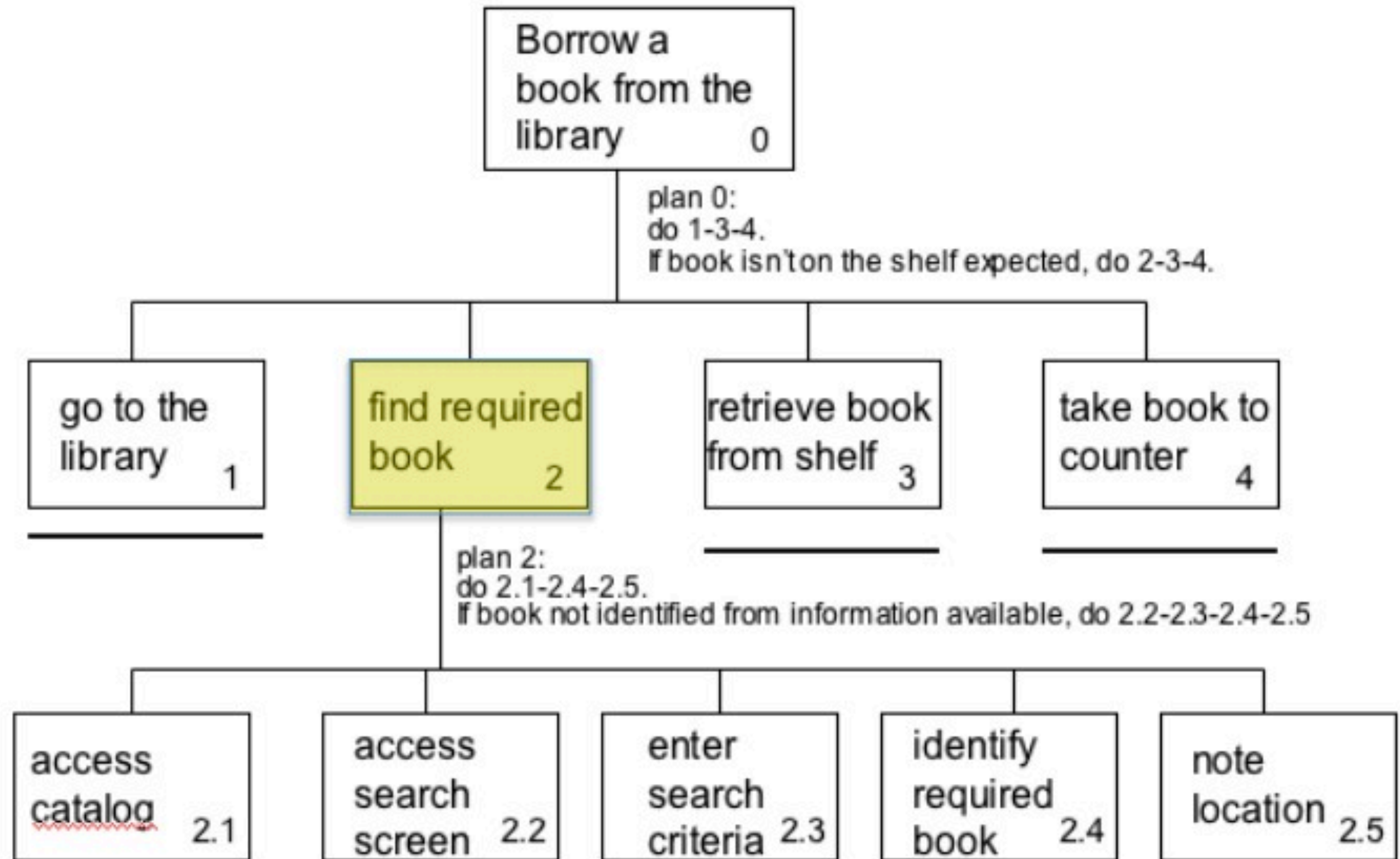
2.4. identify required book

2.5. note location

3. Go to correct shelf and retrieve book

4. Take book to checkout counter

HTA Graphical Example



HTA Pros and Cons

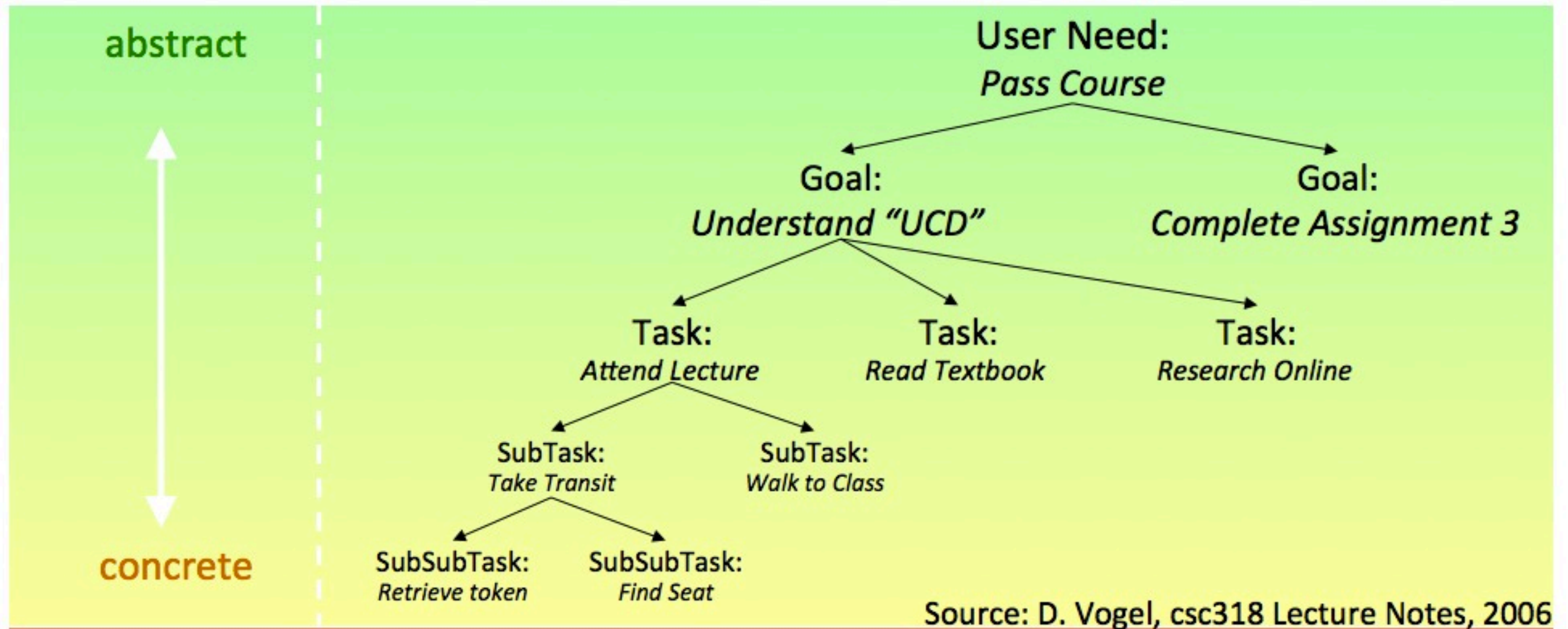
Pros:

- Lets you compare alternative designs based on number of steps and support for users' planned tasks and subtasks
- provides an understanding of the interaction at the appropriate level of abstraction

Cons:

- Does not scale well to real tasks
- Limited to non-concurrent, non-overlapping, uninterrupted tasks

Task Analysis



Assignment 3 Requirements

Assignment 3

In A3, you will individually conduct research on users, using one or more of:

- interviews
- questionnaires
- observations

Remember to **overlap** and **triangulate** when assigning instruments.

In addition, each of you will pay attention to users' environments and analyze any relevant artifacts found there.

Assignment 3 Deliverables

- Summary of research results (4%):
 - Executive summary (abstract)
 - Methodology
 - Results: what you learned about
 - users
 - environments
 - artifacts
- User needs uncovered through research (1%)
- Stakeholder description (1%)
- One detailed primary persona + additional personas (2%)
- One scenario detailing the current situation (1%)
- Task analysis for one of the relevant tasks (1%)

Questions?

This lecture is based on slides and content by:
ILONA POSNER

Materials from:

Interaction Design: Beyond Human-Computer Interaction. Rogers, Sharp and Preece. 2011

References:

Participant Observation, Mack 2005.

Designing useful and usable questionnaires, Wilson 2007.

Semi-structured interviewing for user-centered design. Wood, 1997.

An introduction to personas. http://www.steptwo.com.au/papers/kmc_personas/