



TAMODIA 2007 tutorial: Task Modeling for the design of complex and highly interactive systems

TAMODIA
2007

November 7th 2007, Wednesday, IRIT, University Paul Sabatier, Toulouse, France

<http://liihs.irit.fr/tamodia2007/>

Tutorial Program

Morning session: 9h-12h - Task Modeling for the design of complex and highly interactive systems

Gerrit Van der Veer (Vrije University, The Netherlands)

1. Introduction:
 - Overview of this tutorial (and a pointer to Fabio's part)
 - What is "task analysis" and "task modeling"
 - Why task modeling
 - Task modeling in Literature: definitions (Dix, Preece) and examples of approaches: TKS, ATOM, MAD, CCT (just pointing to Fabio)
 - Phases in design and task models (GTA) – modeling the current task world vs. modeling the envisioned future vs. modeling future technology use
 - Basic concepts: task vs. goal; primary vs. secondary tasks; simple task (MAD) vs. unit task (GOMS) vs. basic task
2. Knowledge of existing task worlds – what should go in a "current" task model: Jordan & Henderson's sources of task knowledge
 - Analytic methods of knowledge elicitation (TKS, ATOM, MAD) + exercises
 - Implicit expert knowledge + exercise for a coffee break
 - Explicit group knowledge and Distributed cognition + exercises
 - Implicit group knowledge: ethnography & interaction analysis + exercise to take home
 - Agents (human and system actors, roles, organization)
 - Work (tasks, goals, hierarchy vs. flow, protocols vs. situated strategies)
 - Context (objects, environment, history, events)
3. Views on a task world
4. Ontology for task worlds
5. Model representations:
 - Formal modeling: Hierarchies; Flows; Templates; Use cases and UAN
 - Pictures and sketches
 - Scenarios
6. The big step in task modeling: from current knowledge to envisioned future
 - Design space analysis
 - Whom to ask
 - Formal modeling
 - Scenario building
 - Scenario analysis
7. Focusing on interaction
 - Detail scenarios
 - UAN revised
 - The required level of detail: activities
 - design patterns for activity design
8. Summary and web pointers

Lunch break: 12h-13h30

Afternoon session: 13h30-16h30: Tools and Methods for the design of multi-device user interfaces based on task models

Fabio Paternò (ISTI-CNR, Italy)

- Introduction to task analysis and modelling, and scenarios;
- Moving from informal to structured representations;
- Task models representations;
- ConcurTaskTrees;
- Tools for task modelling (CTTE);
- Exercise with CTTE;
- Design based on Task Models;
- Logical Design of User Interfaces;
- Demo of the TERESA Tool;
- Model-based design of multi-device interfaces;
- Model-based design of multi-modal interfaces;