

CS468 – Project Stage 2

PS2

Overview

- Analyze your users
- Analyze your tasks
- Analyze your domain
- Identify your usability goals

Task Analysis I

- **A set of human actions that contributes to a functional objective and to the goal of the system**
- **Finds reasons for some problems, helps attending to problems**
- **Organising information about a system**

Task Analysis II

- **Hierarchical Task Analysis (HTA)**
 - Flexible method, complex tasks, in context
- **Cognitive Task Analysis (GOMS)**
 - Combines cognitive aspects with an analysis of a task
- **Knowledge-based Analysis (TAKD, etc.)**

Domain Analysis

- **Identify the entities of the domain**
 - People
 - Physical Objects
 - Information Objects
- **Find How they are related to each other**

Usability Goals

- **Usability:**

How well user can use the functionality of the system

- **Qualitative Usability Goals** : used to maintain the required quality at the final design
- **Quantitative Usability Goals**: considers quantitative tasks to be achieved

Report

- **Introduction**
- **Persona & User Tasks**
- **Task Analysis**
- **Domain Analysis**
- **Usability Goals**
- **Conclusion**

Report – Persona & User Tasks

- **Personas:** descriptions of typical users along with stories about how they would use the system to meet their goals
- Create imaginary but realistic person descriptions namely persona for each user category



Realistic representation

Fictitious details

Accurate characterization

Report – Persona Example

- *Student : Bob is a 20-year old male MIT junior studying Civil Engineering. He is a diligent student who goes to class and takes good notes, but he sometimes has trouble on his problem sets, which can be quite challenging. He sometimes works with one of his fraternity brothers who is also Course 1 and is in one of his classes together, but he has trouble finding other collaborators. He wants to be able to work with other people.*

Report – Task Analysis

- Choose 4 risky tasks, the selected tasks should not be simple such as login/logout/sign in/sign out etc...
- Make a detailed task analysis for these 4 risky tasks with textual HTA descriptions
- Make a simple task analysis for the remaining tasks

Report – Textual HTA Example

Hierarchy description ...

0. in order to clean the house
 1. get the vacuum cleaner out
 2. get the appropriate attachment
 3. clean the rooms
 - 3.1. clean the hall
 - 3.2. clean the living rooms
 - 3.3. clean the bedrooms
 4. empty the dust bag
 5. put vacuum cleaner and attachments away

... and plans

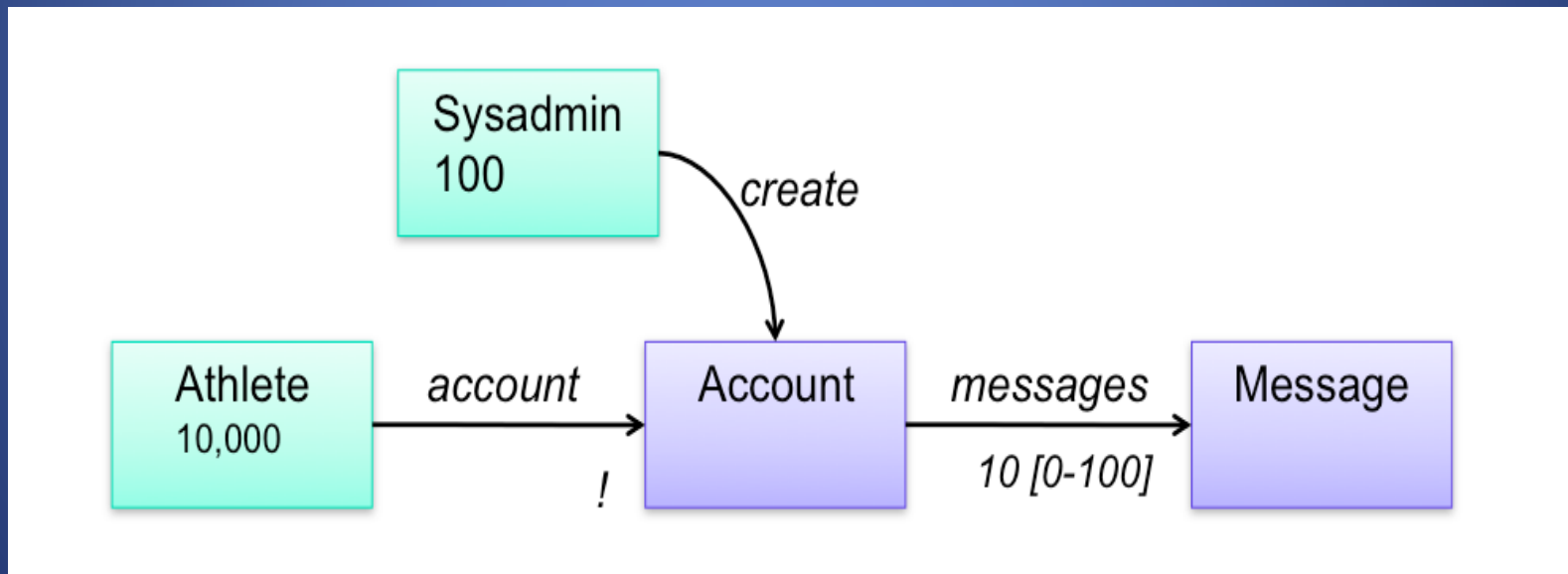
Plan 0: do 1 -2 -3 -5 in that order. when the dust bag gets full do 4

Plan 3: do any of 3.1, 3.2 or 3.3 in any order depending on which rooms need cleaning

N.B. only the plans denote order

Report – Domain Analysis

- Find what the entities, relationships are and draw its diagram.

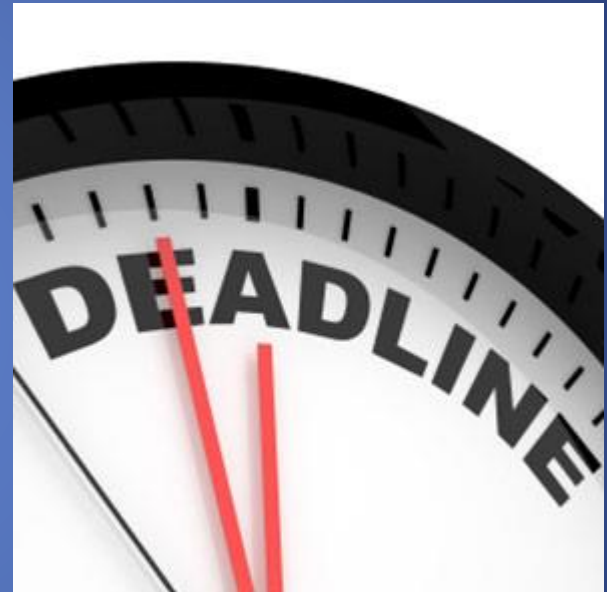


Report – Usability Goals

- Write 5 quantitative and 10 qualitative usability goals for your task. (1 sentence for each)
- **Qualitative Usability Goal Example:**
 - *The design must support users working in a high-interrupt environment, with lots context information on screen to remind users where they are when they get distracted.*
- **Quantitative Usability Goal Example:**
 - *Experienced users should take no longer than 3 minutes on average to finish conducting a transaction.(For a bank teller machine)*

Submission

- **Deadline : 10.03.2014**



http://www.cs.bilkent.edu.tr/~nail.akinci/cs468_s14/

Questions?

