



ÉCOLE POLYTECHNIQUE
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Scenarios & Requirements

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OUTLINE

- What is the process that bridges between qualitative research and interaction design?
- What is a scenario in design?
- What is so particularly interesting to use narratives for scenarios?
- What are the different types of scenarios? in which stages of design were they used respectively?
- What are the key differences between persona-based scenarios and use cases?
- What does the word “requirement” mean?
- What is the requirement definition process? what does it comprise?



HOW TO GO FROM QR AND UM TO DESIGN?

- Review of previous chapters
 - qualitative research - interviewing and observing users, and identifying patterns of how they may interact with a product
 - user modeling - creating composite user archetypes so that we can visualize and empathize with them, and understand their goals, mental models, motivations, behaviors and tasks
 - task tree
- How do we go from this material towards design solutions?
- This design process consists of four activities:
 - scenarios
 - requirements
 - interaction framework (behavior)
 - prototypes (behavior and form)



The first two activities serve as the bridge



WHAT IS A SCENARIO IN DESIGN?

Scenario is a *narrative* (storytelling) to construct and illustrate design solution.

It describes how one or more personas *achieve* their goals.

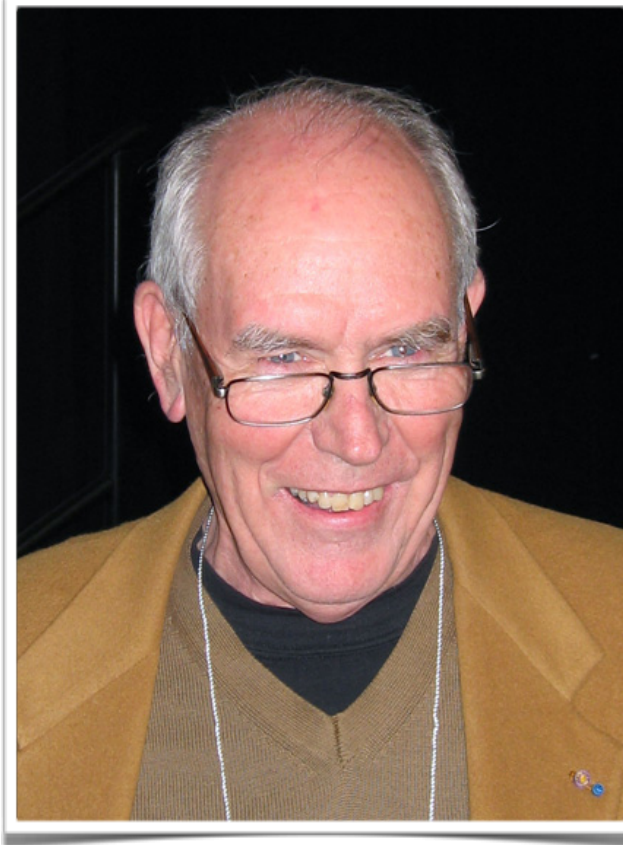


WHY USING STORYTELLING TO ILLUSTRATE DESIGN?

- We love to listen to stories
- We use them to communicate ideas and possibilities
- Good design narratives reflect users' mental models

NARRATIVES (STORIES)

- Story about a pioneer in HCI
- Who was considered the founding father of GUI?
 - a computer science student from MIT; his name is Ivan Sutherland
- What did he invent? when?



Sketchpad,
1963



THREE TYPES OF SCENARIOS

- Context scenarios - pre-design scenario focusing on user goals and the problem solving process (goal-subgoal chaining)
- Key path scenario - it is derived from context scenario; it emphasizes on interaction priorities, and introduces design vocabulary
- Validation scenarios - validation scenarios are used to test the design solution in different situations
- Notice these scenarios are used at different stages of design



WHAT IS A GOOD CONTEXT SCENARIO?

- it contains a plot
- it is succinct (brevity)
- it is concrete (personas and their day-in-life)
- it gives visual descriptions of interactive products
- it emphasizes on how personas achieve goals using the product
- it avoids discussing actual technology or business constraints
- it contains “magic”



SCENARIOS AND USE CASES

- Similarity - both describe a user's interaction with a system
- **Scenarios** describe not only the functionality of the system, but also *the priority of functions*, what the user sees and how she interacts with the system
- **Use cases** give *an exhaustive* list of functional requirements of the system



WHAT IS THE REQUIREMENT DEF. PROCESS?

Requirement definition answers the broad questions about *what* a product is and what it *should do*



REQUIREMENT DEFINITION

1. Creating problem and vision statements
2. Brainstorming (eliminate preconception and allow imagination)
3. Identifying persona expectations (mental model)
4. Constructing context scenarios
5. Identifying requirements (data, functional)

