Goals and Requirements

In general and for MM interactive applications

Goals-requirements: outline

- Stakeholders
- Goals
- Requirements
- Scenario
- How to relate goals to requirements
- How to relate requirements to design
- References and Bibliography
- Exercises

Stakeholders

Stakeholder: whoever has some interest about the application to be designed

Typical stakeholders:

- Client
- Users
- Financing partners
- Content provider
- Project leader
- Opinion maker
- Expert
- …..

Client

Whoever is officially signing the contract

- For small projects s(he) may play several roles
- For large projects s(he) may be marginally involved
- Often has global concern : the application fits in a global strategy, not well understood by the others stakeholders
- Often difficult to contact and to talk to
- Key stakeholder for understanding the context in which the application will fit

Users

Those who actually use the application

- Often vaguely defined (e.g. “all)
- Often difficult to know their opinion
- It is necessary to develop profiles: demographic, social background, cultural background, situation, context, …
- Several (niche) profiles well defined are better than a generic profile
- Necessary to establish priorities: Must, Also, May be, Excluded

Financing partners

Those who provide financial resources

- Sponsors, Agencies, Institutional, Own resources, …
- They are often not directly involved in the project, but ..
- They are motivations and expectations must be well understood and taken into account
- Milestones and checkpoints must be considered

In the end they must be happy too!

Content providers

Those who own the content or those who will develop it directly for the project

- They are the key-holders
- They can be unaware of (if not hostile to) interactive, multimedia technology
- They must be involved in the project and understand what it is aiming at

They may lead the project to success ("content is the king") or to failure

Project Leader

Whoever is managing the project for the client

- S(he) has (or s(he) lacks own ideas
- S(he) may have own list of priorities
- S(he) may be for (or against) the project
- S(he) may have a specific background and previous experiences (good or bad)
- S(he) may be willing to step in the design project

A workable relationship must be established

Opinion Makers

Those that can influence the mass opinion or the opinion within the organization

- High level management, key workers, journalists, …
- They often work on keywords
- They can be dangerous (since they may “kill” a project)
- They want to be considered and they “hate” to be neglected

They can be “bought” by building a preventive consensus

Experts

Those well known, in the field, as being "knowledgeable"

- They very often re conservative
- They very often know nothing about technology
- They have their own "values", their own jargon, their own stereotypes
- They are often influential in the "inner circle", and their influence can "spill" to the opinion makers

They are difficlut to handle but they need to be paid "homage"

Constraints

Those elements that can't be changed and that MUST be taken into account

- Financial resources
- Human resources
- Time
- Politics
- Technology (sometimes)
- Delivery issues (availability, costs, …)

They must be known from the beginning in order to stay in the right track

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Goals - 1

Whatever **each stakeholder** is expecting from the application

- Benefits (measurable?)
- Advantages (over the past, over the competition, ..)
- Gains
- Satisfaction
- Usefulness

Goals - 2

- They are not what stakeholder think that the application should be, but what they expect from it
- Sometimes difficult to elicit
- Sometimes official declaration of goals is different from real ones
- Each stakeholder may have multiple goals (priority is necessary)
- The different goals may be contradictory (between different stakeholders and sometimes even for a single stakeholder)
- Solving contradictions is a “difficult art”

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Requirements 1

What the application must satisfy

- Content
- Info-architecture
- Graphics
- Operations
- Special features
- --

Requirements 2

- They are not design
- They dictate recommendations to designers
- They must general first and detailed later
- They can’t be assumed as “gospel” but carefully analyzed
- They must take into account constraints
- They must be organized and prioritized

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Scenario 1

"An imagined story of usage"

- An EXAMPLE of how a user is going to use the application
- It must be realistic and important
- It is not a list of possibilities (e.g. the user can do this or that) but a real story (e.g. think of a specific itinerary for a trip)
- 1 or 2 for each major user types can be developed

Scenario 2

Scenarios can be used for several purposes

- To verify goals
- To very requirements
- To anticipate situations
- To speed up interviews with stakeholders (making them also less abstract)

Design by scenarios is wrong, but having scenarios in mind may help the designers

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Goals vs. requirements 1

- They have a complex many-to-many relationship
- One goal (of 1 or more stakeholders) may influence several requirements
- One requirement may derive from several goals (of 1 or more stakeholders)

Goals vs. requirements 2

- A matrix, depicting goals on the rows and requirements on the columns, may be used in order to clarify complex situations
- Verification:
  - Is every goal covered by requirements
  - Is every requirement sufficiently motivated by goals

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Requirements vs. Design 1

- Requirements are a crucial input to design, but not the only one
- There are several other input:
  - Knowledge of the domain
  - Obvious considerations
  - Expertise of the designer
  - Creativity of the designer
  - Constraints
  - Special needs …

Requirements vs. Design 2

- Requirements have a complex relationship with design elements
- A requirement may influence several design decisions
- A design decision may originate from several requirements (or from other factors)
- A matrix may help in complex situations

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Bibliography

Material about AWARE, a methodology developed between Lugano (Communication Science) and Politecnico di Milano

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Exercises

- Consider a situation that you know very well (e.g. a web site for your high school)
- List the stakeholders, describing them
- List the (presumed) goal for each stakeholder
- Derive requirements for each goal
- Draw the relationships between the set of goals and the set of requirements

END