

## Chapter 2. Requirements Elicitation

Reyes Grangel Seguer

EI1030. Analysis of Inf. Systems / EI1032. Software Analysis / MT1046. Integrated Inf. Systems  
Computer Engineering / Computational Mathematics  
Dept. of Computer Systems and Languages



February 6, 2019

# Outline

- ① Requirements Elicitation
- ② Techniques to collect information
  - Interviewing
  - Prototyping

# Outline

- 1 Requirements Elicitation
- 2 Techniques to collect information

# Objectives

- To identify key users
- To collect information on requirements using different techniques

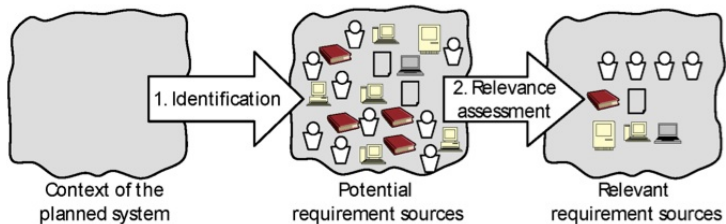
# Motivation

Requirements origin  
Elicitation Problems

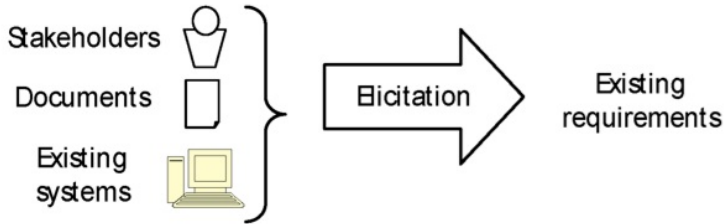
## Sub-activities [Pohl 2010]

- Identifying relevant requirement sources
- Eliciting existing requirements
- Developing new and innovative requirements

# Identifying relevant requirement sources

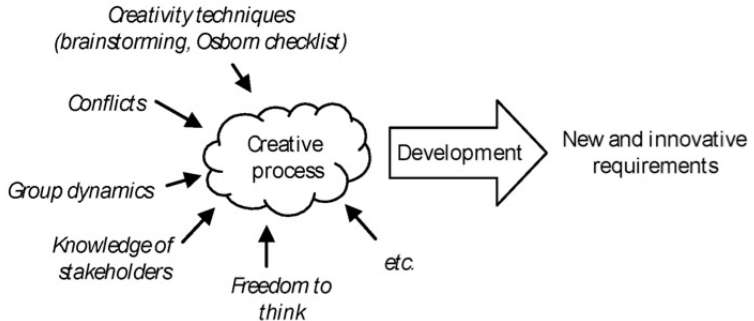


# Eliciting existing requirements





# Developing new and innovative requirements



# Outline

- 1 Requirements Elicitation
- 2 Techniques to collect information
  - Interviewing
  - Prototyping

# Elicitation Techniques [Pohl 2010]

- Interviewing
- Questionnaire
- Workshop
- Focus group
- Observation
- Perspective-based reading

# Assistance Techniques [Pohl 2010]

- Prototyping
- Brainstorming
- KJ Method or Affinity Diagram
- Mind Mapping
- Elicitation check-lists

# Motivation

Traditonal techniques  
Other techniques

# Ten Gold Rules to Elicit Requirements

- 1 To prepare the physical space
- 2 To prepare the interview script
- 3 To define key user's profile
- 4 To define the scope of the interview
- 5 To make the six basic questions  
who? what? where? when? how? why?
- 6 To make short questions from one topic
- 7 To listen
- 8 To maintain contact visual
- 9 To take notes or register the interview
- 10 To lead the interview

## More about decalogues ...

- <http://reqtest.com/requirements-blog/how-to-use-interviews-to-gather-requirements/>
- <http://www.clasesdeperiodismo.com/2010/12/13/20-claves-para-hacer-entrevistas/>

# Success Factors [Craig 2006]

- ① Establishing rapport
- ② Encouraging communication
  - Eye contact
  - Body language
  - Silence
- ③ Asking the right questions: open or closed
- ④ Active listening
  - Encourages
  - Clarifying
  - Reflection
  - Paraphrasing
- ⑤ Summarising and consolidating what you have heard
- ⑥ Managing bias
- ⑦ Trouble shooting difficult interviews



# Common Mistakes [Craig 2006]

- Asking a question, getting an answer, and going straight on with the next question, instead of exploring the provided answer
- Not following a key thread from a given answer
- The interviewee says the same thing many times, thinking you haven't listened to them
- Jotting down an answer and not asking the reasons behind it, then you review your notes and wonder why the interviewee said that
- The interviewee often says *didn't I just answer that earlier?* or *I just said that*
- You say *so you do that because ...*, and the interviewee frequently says *no, that's not it ...*
- Asking too many closed questions, getting monosyllabic answers, and having the interview end in half the expected time
- Finding that your notes don't help with defining the end users' requirements, so you fill in the gaps with what you think they meant

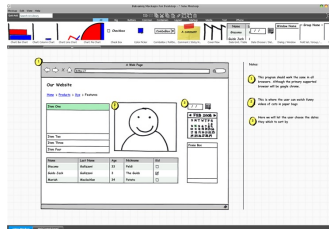
# Overview

## Concept

Prototypes are a valuable tool for providing a context (specify) within which users are able to better understand the system they want to build [escalona 2004]

## Types

- Mock-ups of screen designs
- Functional prototypes



# Web Links

- <http://www.balsamiq.com/>
- <http://www.justinmind.com/>
- <http://www.mockflow.com/>
- <https://gomockingbird.com/>
- <http://pencil.evolus.vn/>

# Developing new and innovative requirements

