

Software Engineering 2

Proposals, estimations, project history, measurement

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Outline

Software Engineering 2

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Intro

Connection to the
previous course

Proposals, estimations, project history, measurement

Proposals, estimating

History of projects

Measurement

Conclusion

Summary

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The 4 main activities of Software engineering:

- Specification
- Development
- Validation
- Evolution & maintenance

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How to get to a demand?

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- you know the client
- clients know you (a supplier)
- pro-active strategy vs. re-active strategy
- RFI, RFP business processes
 - a RFI is primarily used to gather information to help make a decision on what steps to take next.
 - a RFP reflects the business objectives, providing detailed insight upon which suppliers will be able to offer a matching perspective

Proposal types

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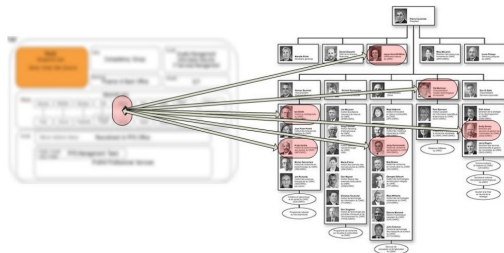
History of projects
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Literature

- a new system
- modifying an existing system
 - outside the standard range of changes management (i.e. maintenance)
 - a third-party system
- team lease
- bodyshop



A proposal creation process

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The process has to solve at least the following

- identification of proposals (including versions)
 - responsibilities
 - creating a proposal
 - a proposal content requirements (the best possible)
 - scope
 - labour intensity
 - dates
 - quality
 - resource requirements
 - risks
 - boundary conditions
- ... so the might may decide 😊
- the instructions for scope determination
 - estimations strategy
 - review
 - laboriousness evidence

A proposal example

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The scope determination

- the scope is determined exhaustively and in a structured way
- positive and negative definition
- using only the form of countable things
- written in defensive form
- the “*future refinements*” method
 - after analysis: the price can be adjusted
- all types of requirements
- boundary conditions
- claims on development process, documentation, ...
- client cooperation requirements

Estimations

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- history of projects
- pricing models
- experiences
- similarities
- . . .

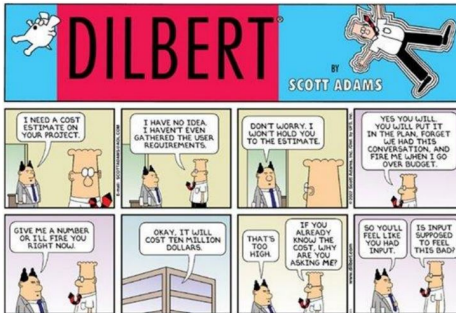


Estimations

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- models
 - decomposition
 - experiences
- remember: its not the implementation only!



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Why?

- proposals
 - estimations
 - boundary conditions
 - risks, problems
 - ...
- maintenance

} economy

⇒ after years is the ability to estimate
often the most interesting

Content?

- the overall effort, calendar time, the number of people
- labour intensity according to the types of activities
- calendar of time according to the types of activities
- the numbers of (screens, tables, prints, programs, ...)
- characteristics of the system and agenda
- problems, risks

How?

- simple
- structured
- schematic

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- necessary for good economy of project
 - history of projects
 - creating offers
 - creating a maintenance contract
- basic metrics
 - time
 - size (scope)
 - effort
 - quality
- its easy to get precise numbers
 - absolute and relative data
 - elementary mechanisms available
 - Bugzilla, Jira, ...
 - GITstat, SVNstat, ...
 - time sheets, ...



Measurement

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Bugzilla
Bugzilla - Bug 6304

Home | New | Search | Find | Reports | My Requests | Preferences | Log out tomas.kratky@profnit.cz

B07:Nasazeni formulare 14

Bug List: (1 of 22) First Last Prev Next Show last search results

Details

Summary: B07:Nasazeni formulare 14 pro zmeny

Bug: 6304

Product: CADRILL - interni

Component: Zmenova rizeni

Status: RESOLVED

Resolution: FIXED

Stav prace: ID: Implementace dodána

Faktura: N/A

Version: --

Priority: P2

Severity: normal

Target Milestone: ---

URL:

Depends on: 6644 7365 7378 7573 7700 7754 7770 7786

Blocks: 6644, 7365, 7378, 7573

Show dependency tree - Show dependency graph

People

Reporter: radek.vaclavik@profnit.cz

Assigned To: Hana Krizova <hkrizova@profnit.cz>

Add CC:

CC: hynek.novak@profnit.cz, lukas.jedlicka@profnit.cz, tomas.kratky@profnit.cz

☐ Remove sel

Orig. Est.	Current Est.	Hours Worked	Hours Left	%Complete	Gain	Deadline
0.0	500.5	500.5 + 0	0.0	100	-500.5	YYYY-MM-DD

Summarize time (including time for bugs blocking this bug)

quality

effort

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Keep all the statistics & measurements
they are an image of
your experience

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For Further Reading I

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