

The Design of an Interaction Design Pattern Library

Interaction Design Patterns for ZKBconnect, an advisor-workbench application

Software Ergonomics Event
Zurich, February 26, 2009

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TYPICAL APPLE PRODUCT...

TOUCH

A GOOGLE PRODUCT...

FIND

YOUR COMPANY'S APP...

FIRST NAME: TYPE CD:
LAST NAME: TQP STAT:
SSN: FT/PT: VER:
ID: CAT CD:
PHONE 1: ... CITY:
PHONE 2: STATE:
ADDR 1: ZIP: ...
ACCT #: ORD #:

4 - K
AA2-
DK9B
KKA?
CN3
AA-9

NEW
DEL

OKAY APPLY SAVE UNDO HELP DELETE EDIT

SELECT BROWSE ERRORS

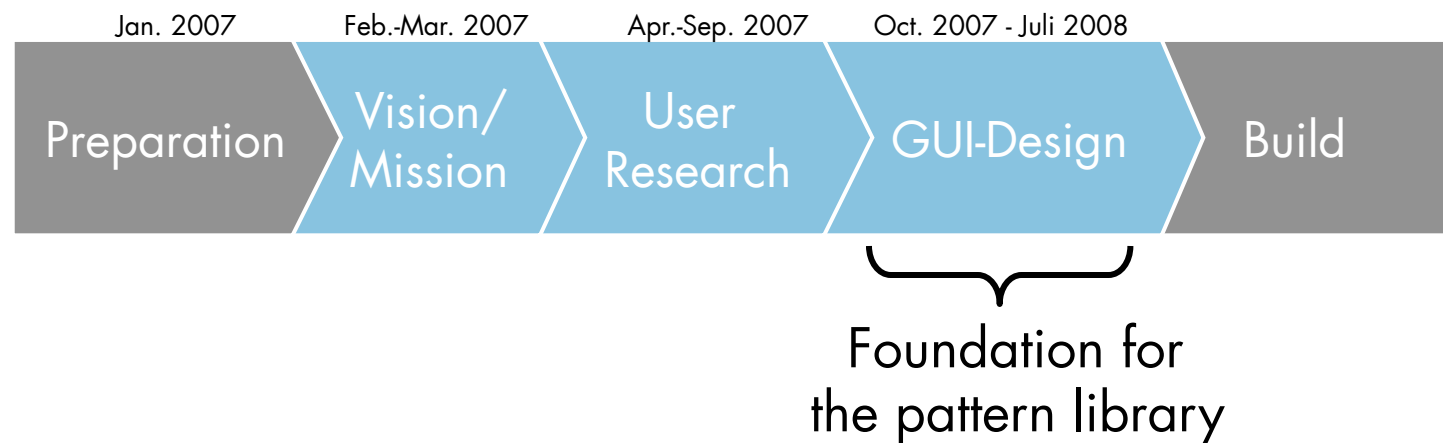
Content

- About the Project UCD ZKBconnect
- Testing of the Patterns
- Current Work and Next Steps

About the Project UCD ZKBconnect

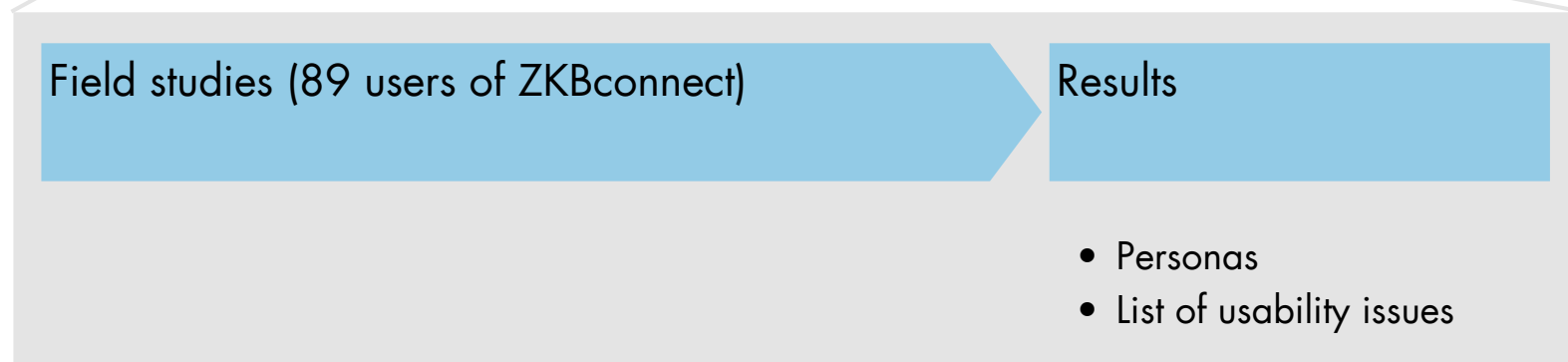
The redesign of the CRM and distribution application ZKBconnect.

The project overview:



A project to shift the focus from functionality to usability.

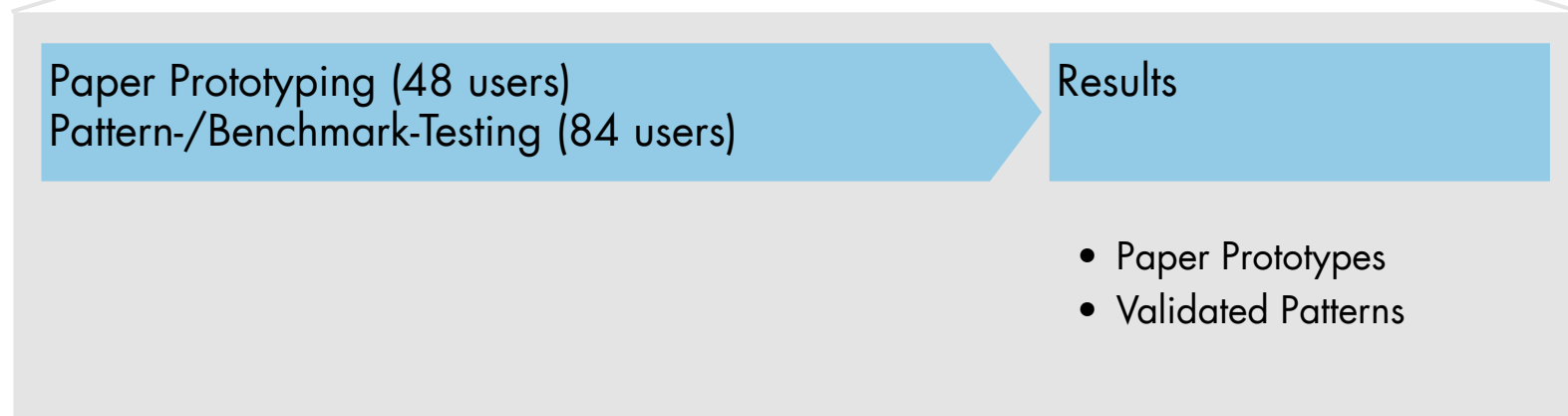
User Research



User Research: ZKBconnect Personas



GUI Design

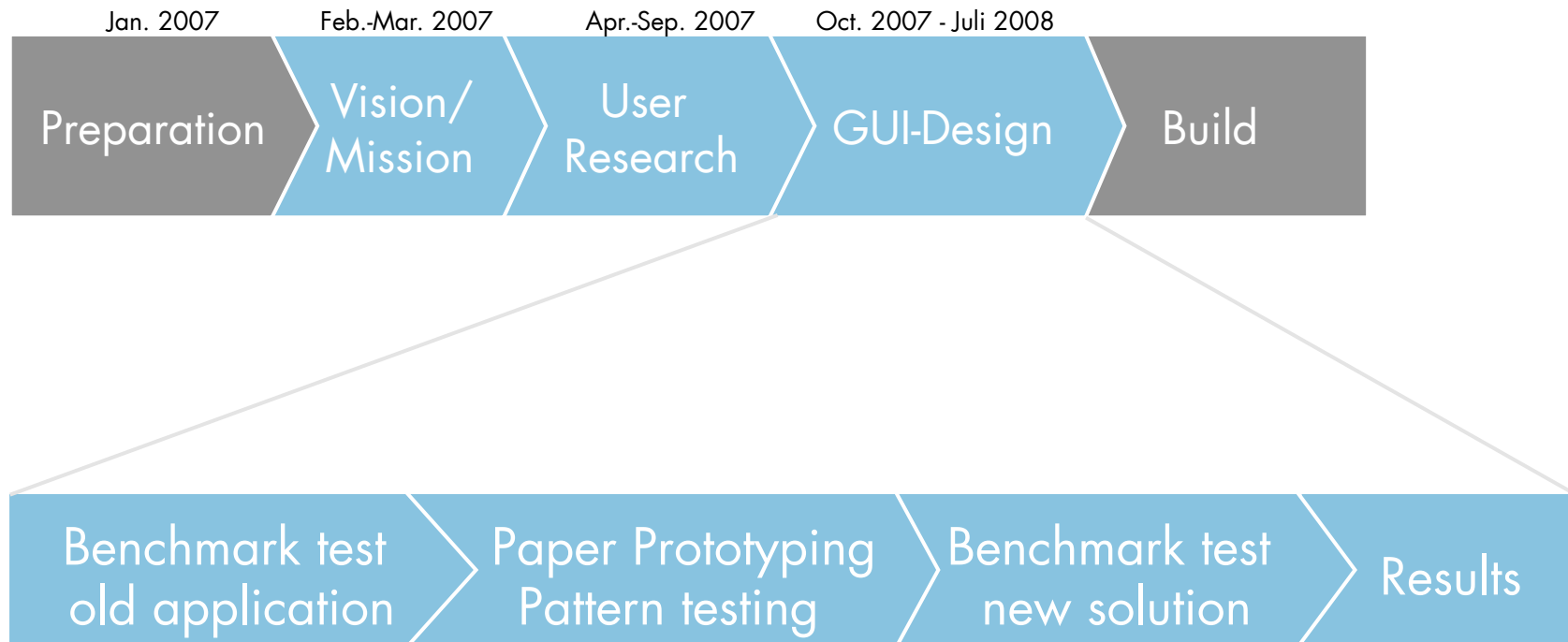


Content



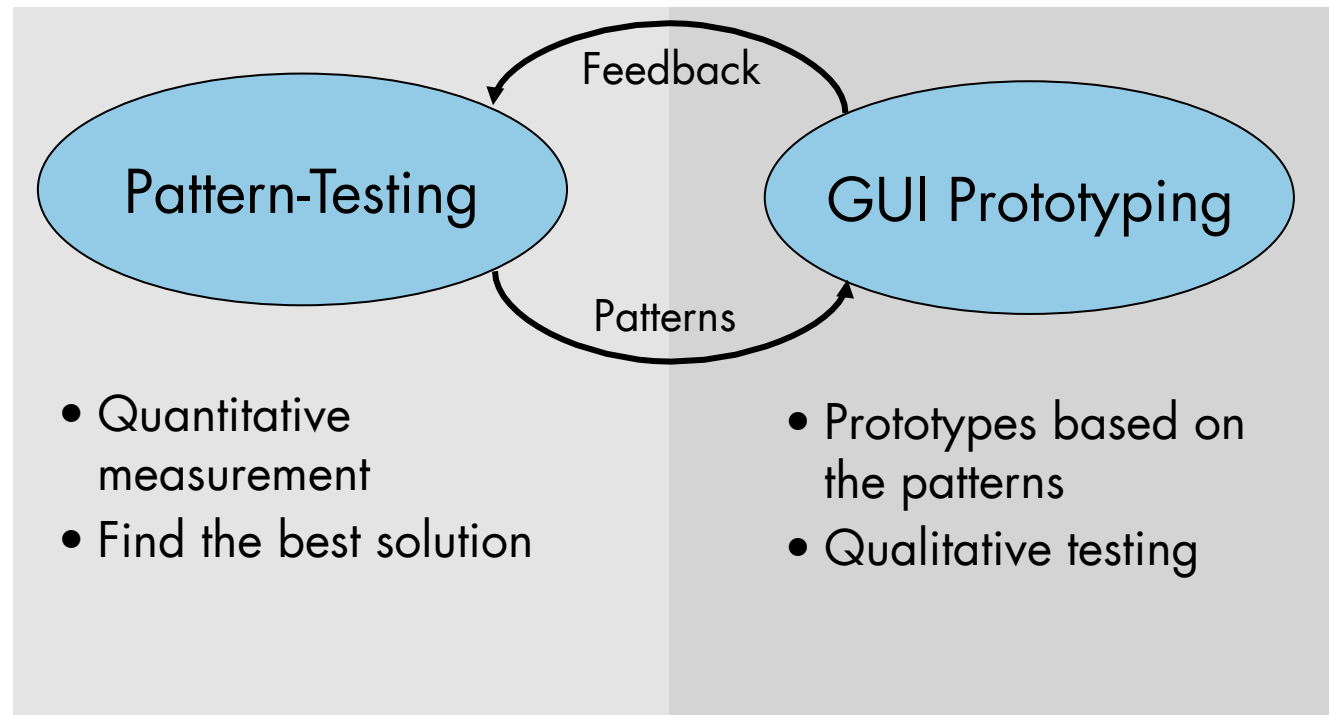
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Testing of the Patterns



Testing of the Patterns

→
User Research



↓
Pattern catalogue
(initial version)

Testing of the Patterns



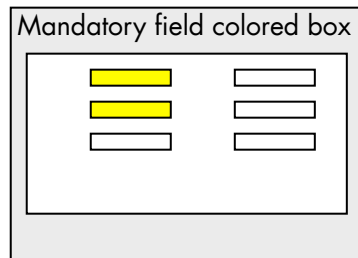
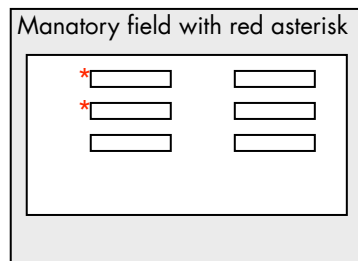
Pattern testing:

Different alternative solutions (patterns) – discovered in prototyping – have been tested against each other with users of ZKBconnect.

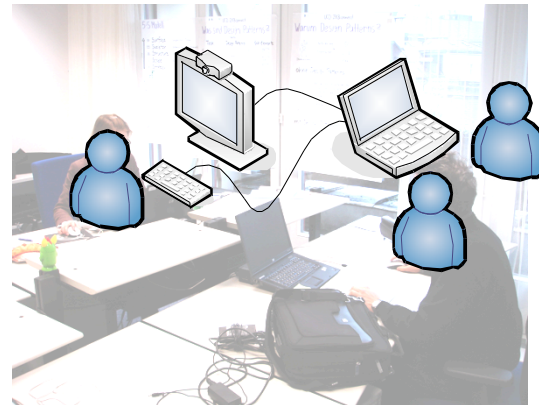
Testing of the Patterns



Prototypes

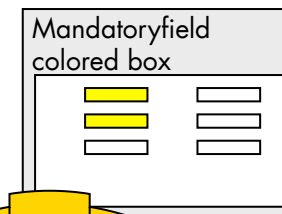


Usability testing



Measuring the performance of patterns in terms of...

- Efficiency
- Effectiveness
- Satisfaction



Finding the best solution



Testing of the Patterns






Measuring the performance of patterns in terms of:

- Efficiency
 - Measurement of task completion time (tracked by *Morae*)
- Effectiveness
 - Counting of Errors (logged in *Morae*)
- Satisfaction
 - Short version of QUIS questionnaire

Results of the Benchmark Testing

Results of testing 8 important tasks with 19/25 users:

	A. Betreuer 	N. Call 	W. Backes 	cumulated
No of errors	- 72%*	- 26%	- 4%	- 37%
Mouse movement*	- 32%*	- 24%	- 5%	- 21%*
Satisfaction	+ 13%	+10%	+ 20%	+ 12%*

* Significant ($p < 0.05$)

Prototype of new solution with "winner-patterns" compared to a prototype of the current ZKBconnect

★ Instead of time we used mouse movements for efficiency measures. In the benchmark tests we asked the users to think aloud. Time would have distorted the results.

With the improved prototypes fewer errors are made and shorter mouse movement distances are needed. Also all users are happier.

Content



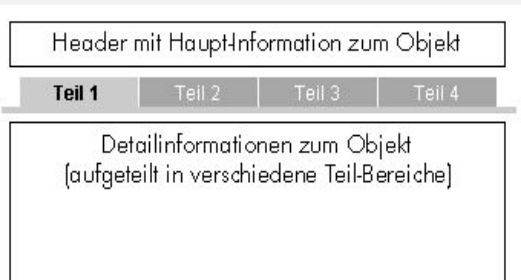
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Example of a Pattern (Layoutpattern)



Header Detail (Pattern)

Überblick



Im "[Header](#)" wird das Objekt identifiziert - im Bereich "Detail" werden die Details zum Objekt dargestellt.

Ziel der Benutzer

Der Benutzer schaut sich verschiedene Detailinformationen zu einem Objekt an und möchte immer sicher sein, "in welchem Objekt" er sich befindet.

Wann wird dieses Pattern verwendet?

Die Detailinformationen zu einem Objekt sind so umfangreich, dass sie nicht auf einer einzelnen Seite dargestellt werden können. Das Pattern wird auf [Objekt Detailseiten](#) angewendet.

Verwandte Patterns

Übergeordnete Patterns

- [Objekt Detailseite](#)

Alternativen

-

Untergeordnete Patterns

- [Header](#)
- [View Tabs](#)

Current Challenges



- Make the pattern catalogue usable (!)
- Build awareness
- Training of business analysts
- Establish a pattern management process

Thank you for your attention!

Interaction design patterns – an important step
towards a usable ZKBconnect.

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