

Object Technology '99

Mining for Patterns

Workshop WS8
Tuesday 0900-1200

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The use of patterns for capturing and documenting knowledge is growing. However, it is still difficult for those who wish to build a pattern repository in their organization to stimulate interest and acquire support from others in the organization. This is important because the development of patterns and pattern languages is time-consuming. One must sift through large amounts of information to acquire knowledge from "experts" and other sources, assimilate it into patterns, and then iterate through reviewing and refining it. These tasks are known as ***pattern mining***. This workshop will address the many challenges in transitioning to and mining for patterns, with the goal of uncovering techniques for meeting these challenges and, in turn, writing more practical and usable patterns.

Topics

- transitioning to patterns; gaining organizational support
- mining the patterns
- building the repository
- encouraging widespread use of patterns throughout the organization

Benefits

Patterns are not grown or created. They are present in the artifacts that already exist (DeLano 1998). However, finding the patterns in these "artifacts" can be tedious and challenging and therefore, will require a large amount of organizational support. The objective of this workshop is to

continue the work begun at the OOPSLA'98 pattern mining BoF session. Individual experiences with patterns (even bad experiences!) will be shared. Attendees will learn from one another and work towards developing effective techniques that can help make the process of pattern mining fruitful and even fun!

Level

Basic and Intermediate; anyone who has worked with patterns and/or developed patterns in any way on any level

Format¹

- Introduce workshop; form groups
- Reflect on the challenges in mining for patterns; discuss, collate, and rank these challenges
- Discuss and document ways to meet the challenges
- Record the challenges and the techniques for meeting the challenges into first drafts of potential patterns

¹ This is an adaptation of the format used in John Daniel's *Agents of Change* workshop at OT'98. Thanks, John, for encouraging me to use it again.

Challenges

The challenges in transitioning to and mining for patterns in an organization will be explored. The list below contains challenges uncovered at previous workshops and through interviews and surveys. Please tick your opinion about the influence of each one. In the space provided, add any challenges that are not shown on this list. (Leave the last column empty for now.)

[illegible]

A Challenge and the Solution

In this section, we begin drafting some *pattern mining* patterns. Even though these will be first drafts, everyone is encouraged to contribute his or her idea to a work-in-progress web page about “mining for patterns”. (This web page will be created after this workshop.)

Your name _____ **Your email** _____

Challenge

Describe the challenge.

Influences

List the things that were occurring which made the challenge a challenge.

a.

b.

c.

d.

(continued on the next page)

Technique

Describe the technique you or your organization used to ease or eliminate the challenge.

Consequences

What happened when this technique was used? Describe the aftermath of using the technique.

Issues to Consider

Are there any trade-offs, constraints, and/or potential pitfalls in using the technique? (*There usually are.*) If so, describe these.

Name

State one or more handy name(s) for this potential pattern.

Another Challenge and the Solution

Don't stop with just one idea!

Your name _____ **Your email** _____

Challenge

Describe the challenge.

Influences

List the things that were occurring which made the challenge a challenge.

a.

b.

c.

d.

(continued on the next page)

Technique

Describe the technique you or your organization used to ease or eliminate the challenge.

Consequences

What happened when this technique was used? Describe the aftermath of using the technique.

Issues to Consider

Are there any trade-offs, constraints, and/or potential pitfalls in using the technique? (*There usually are.*) If so, describe these.

Name

State one or more handy name(s) for this potential pattern.