

Some Thoughts on a Computer-supported Pattern Community

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Idea: An Online Pattern Community System (PCS)

Informally distinguish *producers* and *consumers* of patterns. An author of a pattern is a producer, any person making use of a pattern is a consumer. Assume that the number of producers is considerably smaller than the number of consumers.

Any *member* of the PCS can be a producer, a consumer, both, or none. In the beginning of the lifetime of the PCS, the number of members being producers will probably be higher than the number of members being just consumers.

Desired outcome:

- consumers get up-to-date information on patterns
- producers get reputation (or even money)
- wannabe-producers (e.g. researchers, pattern miners) get information on missing patterns/uncovered areas

Desired values:

- completeness: Any pattern ever described should be addable
- credibility: supported by at least five key players in the pattern scene
- openness: anybody can become a member
- searchable: several search dimensions should be supported
- Usability: pattern authors should easily be able to maintain their patterns (e.g. add a newly introduced tag to a group of patterns)

It should be possible to add a full pattern description (e.g. as a PDF file) or just the descriptor of a pattern, because some patterns are copyrighted when they are published in books or journals.

The PCS should be more than just a repository; it should be a community system with defined *roles* for its members. Why? Because it should not just contain a descriptor for each pattern, it should also contain qualified comments. A comment is more qualified if it comes from a person with a solid pattern reputation. Everybody should be able to make a comment, but not all comments should be equally weighted.

Possible roles:

- registered community member
- PLoP participant
- PLoP shepherd
- PLoP conference chair
- Pattern book author

Different *quality levels* for a pattern:

- 0: described in a paper
- 1: accepted for a PLoP conference
- 2: published in PLoP proceedings
- 3: published in a book
- 4: published in Transactions on PLoP journal

It should be possible to filter the patterns according to their quality level.

Only *moderators* should be allowed to raise the quality level of a registered pattern. All chairs of the PLoP conferences (todo: identify set of all chairs) should be moderators automatically. They can assign the moderator status also to other members of the pattern community.

Open questions:

- Concept of an owner of a pattern? Special rights?
- Unique identifier provided by the community system?

Unique Identifier (ISPN):

- Year of discovery (4 digits)
- Proposer id (9 digits, member id provided by PCS)
- Sequence number (4 digits, generated by PCS)

When registering a pattern, the proposer is first asked for the year and in return gets a new ISPN; he then is asked for the author of the pattern, which can be a different member. This way it is possible to register a pattern for another author who then can raise the quality level of the pattern depending on his/her role.

Scenario of misuse: member A wants to register a copyrighted pattern of another member B again, because the version already registered just contains descriptor information and A wants a version with full information to be registered (and accepts it to stay on a low quality level). If A gives at least credits to B, B can easily find out about it (any author can get an overview of his own patterns). If A does not give credits to B, B can find out about it via a search for patterns with the same name. In any case it should be possible to remove rights from member A, up to the removal from the community.