How to create Student Peer Assessment (SPA) patterns:

Some general remarks/introduction:

What is a pattern?
- a pattern is an idea that has been useful in one practical context and will probably be useful in others
- they [patterns] present a template that is general in nature and can be applied to the construction of [...] over multiple projects
- [...] patterns capture solutions that have been developed and evolved over time … to specific problems
- a pattern addresses a recurring [...] problem that arises in specific [...] situations, and presents a solution to it. Patterns document existing, well-proven [...] experience

Name:

It must have a meaningful name. This allows us to use a single word or short phrase to refer to the pattern, and the knowledge and structure it describes. It would be very unwieldy to have to describe or even summarize the pattern every time we used it in a discussion. Good pattern names form a vocabulary for discussing conceptual abstractions. Sometimes a pattern may have more than one commonly used or recognizable name in the literature. In this case it is common practice to document these nicknames or synonyms under the heading of **Aliases** or **Also Known As**. Some pattern forms also provide a **classification** of the pattern in addition to its name

Context:
What is the goal of having the deliverable that has to be SPA'd? *When* and *why* should you consider using this SPA pattern?

The *preconditions* under which the problem and its solution seem to recur, and for which the solution is desirable. This tells us the pattern's **applicability**. It can be thought of as the initial configuration of the system before the pattern is applied to it

A concrete scenario which serves as the **motivation** for the pattern is frequently employed

Example text: "One of the general learning goals of the course is to be able to read a scientific paper and write a review."

Problem:
Why should we do SPA - what are we trying to gain/remedy by subjecting the deliverable to SPA? What is the purpose? What is the rationale behind this SPA pattern?

A statement of the problem which describes its **intent**: the goals and objectives it wants to reach within the given context and forces. Often the forces oppose these objectives as well as each other (one might think of this as a "wicked problem" reminiscent of DeGrace and Stahl, in their book **Wicked Problems, Righteous Solutions**)

Example text: "Too high workload from the teacher."

Solution:
What/how should it be done? The text here should also mention what the students get out of the SPA - both the reviewed student and the reviewing student.

Static relationships and dynamic rules describing how to realize the desired outcome. This is often equivalent to giving instructions which describe how to construct the necessary work products. The description may encompass pictures, diagrams and prose which identify the pattern's **structure**, its **participants**, and their **collaborations**, to show how the problem is solved. The solution should describe not only *static structure* but also *dynamic behavior*. The static structure tells us the form and organization of the pattern, but often it is the behavioral **dynamics** that make the pattern "come alive". The description of the pattern's solution may indicate guidelines to keep in mind (as well as pitfalls to avoid) when attempting a concrete **implementation** of the solution. Sometimes possible **variants** or specializations of the solution are also described

Example text:

Problem detail:
Most often probably not needed.
Example text:

Solution detail:
The use of an example application of the pattern could be considered ;-) A very concrete, operative and hands-on detailed description of how the solution is implemented.

One or more sample applications of the pattern which illustrate: a specific initial context; how the pattern is applied to, and transforms, that context; and the resulting context left in its wake. Examples help the reader understand the pattern's use and applicability. Visual examples and analogies can often be especially illuminating. An example may be supplemented by a *sample implementation* to show one way the solution might be realized. Easy-to-comprehend examples from known systems are usually preferred (see also **Known Uses**)

A justifying explanation of steps or rules in the pattern, and also of the pattern as a whole in terms of how and why it resolves its forces in a particular way to be in alignment with desired goals, principles, and philosophies. It explains how the forces and constraints are orchestrated in concert to achieve a resonant harmony. This tells us how the pattern actually works, why it works, and why it is "good". The solution component of a pattern may describe the outwardly visible structure and behavior of the

pattern, but the rationale is what provides insight into the *deep structures* and *key mechanisms* that are going on beneath the surface of the system

Example text:

Remarks:
Could be things like:
- unresolved issues
- variations to the pattern (solution)
- related patterns (solutions)

Practiced by:
A list of people who use (or have used) this pattern - to "ask for help" in using/interpreting it.
Example text: "Lars Bendix (lars.bendix@cs.lth.se)"

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