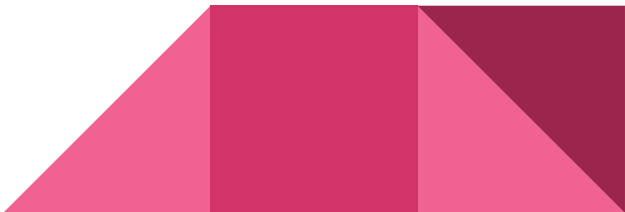




Describing Design Patterns

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The information in a design pattern documentation will be described as follows:

1. Pattern name and classification: Name & type
 2. Intent: Purpose
 3. Also Known As: Aliases
 4. Motivation: Reason providing insight why the pattern was developed.
 5. Applicability: Usage
 6. Structure: Framework - A graphical representation
 7. Participants: Roles
 8. Collaborations: Interactions of participants
 9. Consequences: Outcomes / Benefits
 10. Implementation: Execution
 11. Sample Code: Example
 12. Known Uses: Instances
- 

Pattern name and classification

The pattern name specifies the essence of the pattern precisely. A **good name** is a key as it will become a part of our design vocabulary. Classification specifies **the type of pattern**.

Intent

A short statement that tells us **what the pattern does and which design issue or problem the pattern addresses**.

Also Known As

Other **well known names for the pattern**, if any.



Motivation


A scenario that illustrates a design problem and **how the class and object structures solve that problem**. The scenario will help us understand the abstract pattern definition.

Applicability

This specifies **in which situations a design pattern can be applied**. What are the examples of poor designs that the pattern can address? How to recognize these situations?

Structure

A graphical representation of the classes involved in the pattern following the notations of Object Modeling Technique (OMT). We also use interaction diagrams to illustrate sequences of the requests and the collaborations between objects.



Participants

The classes and / or objects participating in the pattern and their responsibilities.

Collaborations

How the classes and objects collaborate(work jointly) to carry out their responsibilities.

Consequences

Tells us **what are the costs and benefits of using the pattern.** Also tells us which part of the system can be changed independently.



Implementation

Specifies what **techniques** we should be aware of when implementing the pattern and also tells us if there are any **language specific** issues.

Sample Code

Code fragments that tell us **how to implement the pattern in java**.

Known Uses

Example usage of the patterns in the real world.

Related Patterns

Specifies which other patterns are **related to this pattern and what are the differences between them**.



Thank You

