

## Assignment 3

- In each of the following cases, a number of patterns have been associated with a specific situation. For each of the situations, compare the associated patterns as to <u>when (in what circumstances)</u> and <u>how (in what way)</u> each pattern can be useful in resolving the situation, and highlight the <u>negative</u> <u>consequences</u> of applying each pattern to its associated situation.
  - Situation: Loops have complicated the logic of the program.
    Patterns: 1) Split Loop; 2) Replace Loop with Pipeline.
  - Situation: An object-oriented program has been written without observing object-oriented principles and rules.
    Patterns: 1) Encapsulate Collection; 2) Convert Procedural Design to Objects.
  - Situation: Changing (or extending) one part of the code necessitates changing other parts (change propagation).
    Patterns: 1) Separate Domain from Presentation; 2) Extract Interface.

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