

1) write a design pattern template in details.

Design pattern Template

Pattern Name :- Describes the essence of the pattern in a short, but expressive name.

Intent :- Describes what the pattern does.

Also known as :- List any synonyms for the pattern.

Motivation :- provides an example of a problem and how the pattern solves that problem.

Applicability :- Lists the situations where the pattern is applicable.

Structure :- Set of diagrams of the classes and objects that depict the pattern.

Participant :- Describes the classes and objects that participate in the design and their responsibility.

Collaborations :- Describes how the participants collaborate to carry out their responsibilities.

Consequences :- Describes the forces that exist with the pattern and the benefits, trade-offs, and the variable that is isolated by the pattern.

Sample code :- Sample code in

known user :- Examples from the real world.

2) what are the limitations of oop technology

Limitation of oop

- Steep learning curve
- Larger program size
- Slower programs
- Not suitable for all types of problems
- Huge project

- lots of classes - lots of objects
- object creation are scattered.

3) what are the advantages of design pattern

Advantages of design pattern

- knowledge / design re-use.
- Build easily adaptable solutions
- language independent
- provides more value for the money
- Reusability in countless projects to solve the problem.

4) Give one example and discussible solution problem and content.

Last Tuesday when I was on the way to college my scooter tyre was punctured. How do I get to college on time?

- problem :- How do i get to college on time.
- Context :- Tyre was punctured.
- Solution :- Select other vehicle.

5) write classical definition of design pattern.

A design pattern is defined as a repeatable design solution to a common programming problem.

A design pattern is a formal way of documenting a solution to a design problem in a particular field or expertise.