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1. Write a design pattern template in detail.

Term	Description
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.
Participants	Describes how the participants collaborate to carry out their responsibilities.

Term	Description
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 Java / C#
known use	Examples from the real world.

2. What are the limitations of OOP technology.

- Object oriented programs are slower than other programs, because of their size.
- Compiler overhead
- Runtime overhead
- Not suitable for all types of programs.

- oop are much larger than other programs.
- Requires intensive testing procedures.
- It requires a lot of work to create.

3. What are the advantages of design patterns.

- The benefit of design patterns lies in reusability and extensibility of the already developed applications.
- Design patterns improve software development process.
- Design patterns use object-oriented concepts like decomposition, inheritance and polymorphism.
- Collaboration
- Consequences
- Patterns describe how software is structured.
- Design patterns are more sophisticated and advanced approaches than basic design structures than basic design structures.

4. Give one example and describe solution problem and content.

→ Yesterday I have to attend a important meeting online but my mobile data was finished, how do I attend meeting on time.

Problem:- Attend meeting online on time.

Context:- Mobile data was finished

Solution:-

- Immediately recharge
- Get wi-fi
- Attend meeting on another phone.

5. Write classical definition of design pattern.

- Solution to a problem in a context.
- It is a documented base practice of software architecture.
(problems and solutions have been documented from what ever experience we have got while solving real life problems)