

Modeling and Gang of Four Design Patterns

GOF

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- Creational Patterns
- Structural Patterns
- Behavioral Patterns

4. Chapter: Creational Patterns

1. Creational Patterns Questions

4.1.1. Which pattern is most appropriate when a decision must be made at t...

Author: JavaChamp Team

Which pattern is most appropriate when a decision must be made at the time a class is instantiated?

Please choose only one answer:

- Bridge
- Composite
- Factory Method
- Command

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4.1.2. Given the following scenario:
You want to create families of relat...

Author: JavaChamp Team

Given the following scenario:

You want to create families of related objects, to be used interchangeably to configure you application. What is the most appropriate GoF pattern to use?

Please choose only one answer:

- Chain of Responsibility
- Abstract Factory
- Builder
- Observer

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4.1.3. It is also known as Virtual Constructor and it is used to define an...

Author: JavaChamp Team

It is also known as Virtual Constructor and it is used to define an interface for creating an object

but letting the subclass decide which class to instantiate, this pattern is :

Please choose only one answer:

- Builder
- Abstract Factory
- Prototype
- Factory Method

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4.1.4. You want all the clients using class A to use the same instance of ...

Author: JavaChamp Team

You want all the clients using class A to use the same instance of class A, what should you do to achieve this goal?

Please choose only one answer:

- mark class A final
- mark class A abstract
- apply the Singleton pattern to class A
- apply the Memento pattern to class A

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4.1.5. Which of the following are participants in the GOF abstract factory...

Author: Yasser Ibrahim

Which of the following are participants in the GOF abstract factory design pattern ?

Please choose all the answers that apply:

- Factory methods
- Factory constructors
- Abstract factory
- Abstract product
- Concrete factory

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4.1.6. When would you use the GOF abstract factory pattern?

Author: Yasser Ibrahim

When would you use the GOF abstract factory pattern?

Please choose all the answers that apply:

- To design a structure which has a uniform interface for both compositions of objects and individual objects.
- To ensure that a certain group of related objects are used together
- The client which uses your design is not dependent on how the object are created or connected together
- To decouple the creation of objects from their usage

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4.1.7. What are the consequences of applying the abstract factory patter?

Author: Yasser Ibrahim

What are the consequences of applying the abstract factory patter?

Please choose all the answers that apply:

- it will be much easier to introduce new family of products
- it makes it easier for a certain family of objects to work together
- it makes it easier for the client to deal with tree-structured data
- it makes the designed product families exchangeable

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4.1.8. Which design pattern you would you use to decouple the creation pro...

Author: Yasser Ibrahim

Which design pattern you would you use to decouple the creation procedure of a complex object from it's concrete instance to be able to apply that procedure on variety of implementations.

Please choose only one answer:

- Factory builder design pattern
- Method Builder design pattern
- Builder design pattern
- Factory method design pattern

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4.1.9. What would lead you to apply the builder design pattern?

Author: Yasser Ibrahim

What would lead you to apply the builder design pattern?

Please choose all the answers that apply:

- To abstract steps of construction of objects so that different implementations
- To apply the same object construction procedure on variety of representations
- To translates one interface for a class into a compatible interface
- To restrict instantiation of a class to one object

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4.1.10. Which of the following are participants in the GOF builder design p...

Author: Yasser Ibrahim

Which of the following are participants in the GOF builder design pattern?

Please choose all the answers that apply:

- Builder interface
- Constructor Interface
- Director Interface
- Concrete Builder class
- Concrete constructor class

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4.1.11. What are the consequences of applying the Builder design pattern?

Author: Yasser Ibrahim

What are the consequences of applying the Builder design pattern?

Please choose all the answers that apply:

- it makes the designed product hierarchies exchangeable
- it's easier to introduce new product implementation
- it separates the product construction from its representation
- the director has fine control over the product creation procedure

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4.1.12. When would you use the GOF builder design pattern?

Author: Yasser Ibrahim

When would you use the GOF builder design pattern?

Please choose all the answers that apply:

- to abstract steps of construction of complex objects
- to build different representations of complex objects based on the concrete implementations of construction procedure
- to establish an interface for creating an object, but let the concrete implementations decide which subclass to instantiate
- to encapsulate a family of individual factories that have a common theme

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4.1.13. Which design pattern you would you use to control the creation of a...

Author: Yasser Ibrahim

Which design pattern you would you use to control the creation of an object based on a established interface, while allowing the concrete implementation to determine the subclass to construct.

Please choose only one answer:

- Singleton design pattern
- Builder Factory design pattern
- Prototype factory design pattern
- Factory method design pattern

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4.1.14. The factory method design pattern is also known as:

Author: Yasser Ibrahim

The factory method design pattern is also known as:

Please choose only one answer:

- Abstract factory
- Abstract Constructor
- Virtual factory
- Virtual Constructor

Check the answer of this question online at QuizOver.com:

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4.1.15. When would you use the GOF Factory method design pattern?

Author: Yasser Ibrahim

When would you use the GOF Factory method design pattern?

Please choose all the answers that apply:

- To ensure that a certain group of related objects are used together
- To control the creation of an object based on a established interface
- To allow the concrete implementation to determine the subclass to construct.
- To abstract steps of construction of complex objects

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4.1.16. Which of the following are participants in the GOF builder design p...

Author: Yasser Ibrahim

Which of the following are participants in the GOF builder design pattern?

Please choose all the answers that apply:

- Creator
- Product
- Refined Abstraction
- Abstract factory

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4.1.17. What are the consequences of applying the GOF factory method pattern?

Author: Yasser Ibrahim

What are the consequences of applying the GOF factory method pattern?

Please choose all the answers that apply:

- it decouples the client code from the application specific classes
- it makes the designed product families exchangeable
- it establishes a flexible mechanism for instantiating an object in comparison to the usual java constructor instantiation.

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4.1.18. Which design pattern is used in the Java Database connectivity JDBC...

Author: Yasser Ibrahim

Which design pattern is used in the Java Database connectivity JDBC(TM)?

Please choose only one answer:

- Builder design pattern
- Factory method design pattern
- Abstract Factory design Pattern
- Singleton design Pattern

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4.1.19. Which design pattern you would you use to have a prototypical insta...

Author: Yasser Ibrahim

Which design pattern you would you use to have a prototypical instance determine the concrete class of object being created?

Please choose only one answer:

- Prototype factory design pattern
- Virtual prototype design pattern
- Abstract prototype design pattern
- Prototype design pattern

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4.1.20. Which of the following are participants in the GOF Prototype design...

Author: Yasser Ibrahim

Which of the following are participants in the GOF Prototype design pattern?

Please choose all the answers that apply:

- Prototype
- Abstract Prototype
- Virtual Prototype
- Concrete Prototype

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4.1.21. When would you use the GOF Prototype design pattern?

Author: Yasser Ibrahim

When would you use the GOF Prototype design pattern?

Please choose all the answers that apply:

- To abstract steps of construction of complex objects
- To determine the classes to be instantiated at run time
- To avoid the proliferation of the class hierarchy
- To restrict class instantiation to one object

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4.1.22. What are the consequences of applying the GOF Prototype pattern?

Author: Yasser Ibrahim

What are the consequences of applying the GOF Prototype pattern?

Please choose all the answers that apply:

- each concrete prototype class must implement the clone method
- it makes it easier for a certain family of objects to work together
- it enable the client code to register an new concrete prototype instance at run time
- it reduces of the class hierarchy as compared to the other factory design patterns

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4.1.23. Which design pattern you would you use to limit the class instantia...

Author: Yasser Ibrahim

Which design pattern you would you use to limit the class instantiation to one object?

Please choose only one answer:

- Factory Method Design Pattern
- Builder design pattern
- Prototype design pattern
- Singleton design pattern

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4.1.24. When would you use the GOF Singleton design pattern?

Author: Yasser Ibrahim

When would you use the GOF Singleton design pattern?

Please choose all the answers that apply:

- to ensure that a certain group of related objects are used together
- to limit the class instantiation to one object
- to provide global access to once instance across the system
- to abstract steps of construction of complex objects

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4.1.25. Which of the following are participants in the GOF Singleton design...

Author: Yasser Ibrahim

Which of the following are participants in the GOF Singleton design pattern?

Please choose all the answers that apply:

- Abstract Singleton
- Singleton
- Concrete Singleton
- Singleton factory

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4.1.26. Which of the following code snippet represents a Singleton design p...

Author: Yasser Ibrahim

Which of the following code snippet represents a Singleton design pattern implementation?

Please choose only one answer:

- ```
public class PrintSpooler {
 public PrintSpooler INSTANCE = new PrintSpooler();
 public PrintSpooler () {}
 public static PrintSpooler getInstance() {
 return INSTANCE;
 }
}
```
- ```
public class PrintSpooler {
    private PrintSpooler INSTANCE = new PrintSpooler();
    private PrintSpooler () {}
    public static PrintSpooler getInstance() {
    return INSTANCE;
    }
}
```
- ```
public class PrintSpooler {
 private static final PrintSpooler INSTANCE = new PrintSpooler();
 private PrintSpooler () {}
 public static PrintSpooler getInstance() {
 return INSTANCE;
 }
}
```
- ```
public class PrintSpooler {
    private final PrintSpooler INSTANCE = new PrintSpooler();
    private PrintSpooler () {}
    public static PrintSpooler getInstance() {
    return INSTANCE;
    }
}
```

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4.1.27. Which GOF design pattern is applied in the code snippet below?

Author: Yasser Ibrahim

Which GOF design pattern is applied in the code snippet below?

```
public class PrintSpooler {  
private static final PrintSpooler INSTANCE = new PrintSpooler();  
private PrintSpooler() {}  
public static PrintSpooler getInstance() {  
return INSTANCE;  
}  
}
```

Please choose only one answer:

- PrintSpooler design pattern
- Spooler design pattern
- Singleton design pattern
- Factory design pattern
- Abstract Singleton design pattern

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4.1.28. how to implement the Singleton design pattern? specify all the need...

Author: Yasser Ibrahim

how to implement the Singleton design pattern? specify all the needed steps that apply.

Please choose all the answers that apply:

- add final modifier to the Class declaration
- add final modifier to the constructor declaration
- add private or protected modifier to the constructor declaration
- introduce a final static constructor of the Singleton class
- introduce a static getter method for the Singleton instance
- The class name must be Singleton

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4.1.29. What are the consequences of applying the GOF Singleton pattern?

Author: Yasser Ibrahim

What are the consequences of applying the GOF Singleton pattern?

Please choose all the answers that apply:

- it introduces thread safety issue when the singleton instance is instantiated on demand
- the client code can create multiple instances at run time
- it reduces the class hierarchy as compared to the other factory design patterns
- it makes it easier for a certain family of objects to work together

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4. Chapter: Structural Patterns

1. Structural Patterns Questions

4.1.1. Which of the following is a Gang of Four (GoF) Structural Design Pa...

Author: JavaChamp Team

Which of the following is a Gang of Four (GoF) Structural Design Pattern?

Please choose all the answers that apply:

- Composite
- Flyweight
- Singleton
- Method Factory

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4.1.2. You are trying to add a class already written in another applicatio...

Author: JavaChamp Team

You are trying to add a class already written in another application to serve clients, beside other classes, in your system. All other classes have the same interface, the incoming class has a totally different interface than the clients expect, but contains all required functionalities.

What kind of refactoring is needed to make this class fit in with minimum changes in your system?

Please choose only one answer:

- apply the Proxy Pattern
- apply the Adapter Pattern
- create a new class which implements the expected interface and copy and paste the code from the class in the other application to this new class

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4.1.3. What is the difference between an adapter and a decorator?

Author: JavaChamp Team

What is the difference between an adapter and a decorator?

Please choose all the answers that apply:

- The adapter adds no functionalities to the adaptee class, whereas the Decorator extends the functionality of the object
- The adapter is a creational pattern, whereas the decorator is a structural design pattern
- Both introduce a level of indirection between a client class and a class it uses

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4.1.4. Which best defines the use of the Composite Design Pattern?

Author: JavaChamp Team

Which best defines the use of the Composite Design Pattern?

Please choose only one answer:

- the Composite design pattern allows the clients to build a complex object of smaller different ones
- the Composite design pattern allows adding and removing functionality dynamically
- the Composite design pattern allows the clients to treat individual objects and compositions uniformly

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Question: [when to use the gang of four composite design pattern?](#)

Flashcards:

<http://www.quizover.com/flashcards/when-to-use-the-gang-of-four-composite-design-pattern?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/when-to-use-the-gang-of-four-composite-design-pattern?pdf=1505>

4.1.5. It is also known as Wrapper, it is used when subclassing is not pos...

Author: JavaChamp Team

It is also known as Wrapper, it is used when subclassing is not possible or practical to add functionality and it is used to add functionality at runtime. This pattern is :

Please choose only one answer:

- Composite
- Adapter
- Decorator
- Proxy

Check the answer of this question online at QuizOver.com:

Question: [gang of four wrapper pattern](#)

Flashcards:

<http://www.quizover.com/flashcards/gang-of-four-wrapper-pattern?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/gang-of-four-wrapper-pattern?pdf=1505>

4.1.6. Big portion of clients are remotely invoking methods in your system...

Author: JavaChamp Team

Big portion of clients are remotely invoking methods in your system, the surface area exposed to clients includes fine-grained methods, which of course causes network overhead.

Which pattern would improve your system performance in this case?

Please choose only one answer:

- Chain of Responsibility Pattern
- Facade Pattern
- Command Pattern
- Adapter Pattern

Check the answer of this question online at QuizOver.com:

Question: [when to use gang of four facade pattern?](#)

Flashcards:

<http://www.quizover.com/flashcards/when-to-use-gang-of-four-facade-pattern?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/when-to-use-gang-of-four-facade-pattern?pdf=1505>

4.1.7. It is a pattern used to minimize memory use by letting similar obje...

Author: JavaChamp Team

It is a pattern used to minimize memory use by letting similar objects share as much data as possible stored in a sharable object.

Please choose only one answer:

- Flyweight
- Composite
- Iterator
- Momento

Check the answer of this question online at QuizOver.com:

Question: [what is gang of four flyweight pattern?](#)

Flashcards:

<http://www.quizover.com/flashcards/what-is-gang-of-four-flyweight-pattern?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/what-is-gang-of-four-flyweight-pattern?pdf=1505>

4.1.8. Which pattern is utilized in this example ?

Every character object...

Author: JavaChamp Team

Which pattern is utilized in this example ?

Every character object in a word document has data about the graphical representation and the position, but to avoid redundant graphical representation data for objects to the same character, it is advisable to extract out these representation data to one shared object between these objects, and store only the position of each character internally in each object.

Please choose only one answer:

- Abstract Factory
- Method Factory
- Builder
- Flyweight

Check the answer of this question online at QuizOver.com:

Question: [flyweight pattern example](#)

Flashcards:

<http://www.quizover.com/flashcards/flyweight-pattern-example?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/flyweight-pattern-example?pdf=1505>

4.1.9. A pattern known as Surrogate is :

Author: JavaChamp Team

A pattern known as Surrogate is :

Please choose only one answer:

- Adapter
- Proxy
- Facade
- Method Factory

Check the answer of this question online at QuizOver.com:

Question: [which pattern is known ad surrogate pattern?](#)

Flashcards:

<http://www.quizover.com/flashcards/which-pattern-is-known-ad-surrogate-pattern?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/which-pattern-is-known-ad-surrogate-pattern?pdf=1505>

4.1.10. Which design pattern can be used to implement Lazy Loading?

Author: JavaChamp Team

Which design pattern can be used to implement Lazy Loading?

Please choose only one answer:

- Adapter
- Mediator
- Proxy
- Chain of Responsibility

Check the answer of this question online at QuizOver.com:

Question: [lazy loading design pattern](#)

Flashcards:

<http://www.quizover.com/flashcards/lazy-loading-design-pattern?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/lazy-loading-design-pattern?pdf=1505>

4.1.11. A Proxy Pattern is best used to :

Author: JavaChamp Team

A Proxy Pattern is best used to :

Please choose all the answers that apply:

- control access to a remote object
- assemble complex objects
- fetch a resource-intensive object when requested by a client
- store common redundant data between large number of objects
- extract out from the calling client the access or connection logic needed to call an object

Check the answer of this question online at QuizOver.com:

Question: [when to use remote proxy pattern?](#)

Flashcards:

<http://www.quizover.com/flashcards/when-to-use-remote-proxy-pattern?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/when-to-use-remote-proxy-pattern?pdf=1505>

4.1.12. You design an application for an advertisement company, which prod...

Author: Yasser Ibrahim

You design an application for an advertisement company, which produces different sort of publications such as books, articles, leaflets, etc.

The company publishes those products in many media formats such as printed material, CD, DVD, online websites, etc.

How you would model the company products hierarchy (Publications, Media)?

Please choose only one answer:

- Use composite design pattern to enable the publication and media hierarchies to be treated in the same way as a single instance of an object.
- Use the adapter design pattern to translates publication interface into a compatible media interface.
- Use bridge design pattern to build separate hierarchies for the publications and the media, to decouple the abstraction from its implementation so that the two can vary independently

Check the answer of this question online at QuizOver.com:

Question: [gang of four bridge design pattern](#)

Flashcards:

<http://www.quizover.com/flashcards/gang-of-four-bridge-design-pattern?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/gang-of-four-bridge-design-pattern?pdf=1505>

4.1.13. Which design pattern you would you use to decouple an abstraction f...

Author: Yasser Ibrahim

Which design pattern you would you use to decouple an abstraction from its implementation so that the two can vary independently?

Please choose only one answer:

- Adapter design pattern
- bridge design pattern
- Facade design pattern
- Composite bridge design pattern

Check the answer of this question online at QuizOver.com:

Question: [gof bridge design pattern forces](#)

Flashcards:

<http://www.quizover.com/flashcards/gof-bridge-design-pattern-forces?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/gof-bridge-design-pattern-forces?pdf=1505>

4.1.14. Which of the following are participants in the GOF bridge design pa...

Author: Yasser Ibrahim

Which of the following are participants in the GOF bridge design pattern ?

Please choose all the answers that apply:

- Abstraction
- Bridge
- RefinedAbstraction
- Class Generalization
- Implementor

Check the answer of this question online at QuizOver.com:

Question: [what are the bridge design pattern participants?](#)

Flashcards:

<http://www.quizover.com/flashcards/what-are-the-bridge-design-pattern-participants?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/what-are-the-bridge-design-pattern-participants?pdf=1505>

4.1.15. Which design pattern you would you use to translates an existing cl...

Author: Yasser Ibrahim

Which design pattern you would you use to translates an existing class interface into a compatible target interface?

Please choose only one answer:

- Proxy design pattern
- Adapter design pattern
- Facade design pattern
- Adapter factory design pattern

Check the answer of this question online at QuizOver.com:

Question: [gang of four adapter pattern forces](#)

Flashcards:

<http://www.quizover.com/flashcards/gang-of-four-adapter-pattern-forces?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/gang-of-four-adapter-pattern-forces?pdf=1505>

4.1.16. Which of the following are participants in the GOF Adapter design p...

Author: Yasser Ibrahim

Which of the following are participants in the GOF Adapter design pattern?

Please choose all the answers that apply:

- Adapter
- Adaptee
- Bridge
- Target interface

Check the answer of this question online at QuizOver.com:

Question: [gang of four adapter design pattern participants](#)

Flashcards:

<http://www.quizover.com/flashcards/gang-of-four-adapter-design-pattern-participants?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/gang-of-four-adapter-design-pattern-participants?pdf=1505>

4.1.17. When would you use the GOF Adapter design pattern?

Author: Yasser Ibrahim

When would you use the GOF Adapter design pattern?

Please choose all the answers that apply:

- to translates an existing class interface into a compatible target interface
- to improve your system performance
- to transforming the client code data into appropriate format expected by the target interface
- to allow classes with incompatible interfaces to work together

Check the answer of this question online at QuizOver.com:

Question: [gang of four adapter design pattern applicability](#)

Flashcards:

<http://www.quizover.com/flashcards/gang-of-four-adapter-design-pattern-applicability?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/gang-of-four-adapter-design-pattern-applicability?pdf=1505>

4.1.18. What are the consequences of applying the GOF Adapter pattern?

Author: Yasser Ibrahim

What are the consequences of applying the GOF Adapter pattern?

Please choose all the answers that apply:

- it will improve the system performance
- it makes the client code easier by interacting with a single uniform interface
- it must modify the adaptee class
- it establishes a flexible mechanism for instantiating an object in comparison to the usual java constructor instantiation.

Check the answer of this question online at QuizOver.com:

Question: [gang of four adapter design pattern consequences](#)

Flashcards:

<http://www.quizover.com/flashcards/gang-of-four-adapter-design-pattern-consequences?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/gang-of-four-adapter-design-pattern-consequences?pdf=1505>

4.1.19. What are the common implementation strategies of the GOF Adapter pa...

Author: Yasser Ibrahim

What are the common implementation strategies of the GOF Adapter pattern?

Please choose all the answers that apply:

- Factory Adapter
- Object Adapter
- Class Adapter
- Interface Adapter

Check the answer of this question online at QuizOver.com:

Question: [gof adapter pattern implementation strategies](#)

Flashcards:

<http://www.quizover.com/flashcards/gof-adapter-pattern-implementation-strategies?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/gof-adapter-pattern-implementation-strategies?pdf=1505>

4.1.20. Which design pattern you would you use to arrange object hierarchie...

Author: Yasser Ibrahim

Which design pattern you would you use to arrange object hierarchies such that the client code can access both the individual objects and compositions in a uniform manner ?

Please choose only one answer:

- Adapter design pattern
- Composite design pattern
- Composite adapter design pattern
- Composite factory design pattern

Check the answer of this question online at QuizOver.com:

Question: [gang of four composite design pattern forces](#)

Flashcards:

<http://www.quizover.com/flashcards/gang-of-four-composite-design-pattern-forces?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/gang-of-four-composite-design-pattern-forces?pdf=1505>

4.1.21. Which of the following are participants in the GOF Composite design...

Author: Yasser Ibrahim

Which of the following are participants in the GOF Composite design pattern?

Please choose all the answers that apply:

- Component
- Compound
- Leaf
- Connection
- Composite

Check the answer of this question online at QuizOver.com:

Question: [java composite pattern example](#)

Flashcards:

<http://www.quizover.com/flashcards/java-composite-pattern-example?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/java-composite-pattern-example?pdf=1505>

4.1.22. What are the consequences of applying the GOF Composite pattern?

Author: Yasser Ibrahim

What are the consequences of applying the GOF Composite pattern?

Please choose all the answers that apply:

- the client code can traverse tree structures of arbitrary depth recursively
- increases the coupling between the client code and the composite structure
- it will improve the system performance
- the client code can access both the individual objects and compositions in a uniform manner

Check the answer of this question online at QuizOver.com:

Question: [gang of four composite design pattern consequences](#)

Flashcards:

<http://www.quizover.com/flashcards/gang-of-four-composite-design-pattern-consequences?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/gang-of-four-composite-design-pattern-consequences?pdf=1505>

4.1.23. When would you use the GOF Composite design pattern?

Author: Yasser Ibrahim

When would you use the GOF Composite design pattern?

Please choose all the answers that apply:

- to decouple an abstraction from its implementation so that the two can vary independentl
- to translates an existing class interface into a compatible target interface
- to arrange object hierarchies such that the client code can access both the individual objects and compositions in a uniform manner
- to improve the system overall performance

Check the answer of this question online at QuizOver.com:

Question: [gang of four composite design pattern applicability](#)

Flashcards:

<http://www.quizover.com/flashcards/gang-of-four-composite-design-pattern-applicability?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/gang-of-four-composite-design-pattern-applicability?pdf=1505>

4.1.24. Which design pattern is used in the Java AWT Abstract Window Toolkit?

Author: Yasser Ibrahim

Which design pattern is used in the Java AWT Abstract Window Toolkit?

Please choose only one answer:

- Adapter design pattern
- Composite design pattern
- Bridge design pattern
- Proxy design pattern

Check the answer of this question online at QuizOver.com:

Question: [gang of four composite design pattern java usages](#)

Flashcards:

<http://www.quizover.com/flashcards/gang-of-four-composite-design-pattern-java-usages?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/gang-of-four-composite-design-pattern-java-usages?pdf=1505>

4.1.25. What are the consequences of applying the GOF Bridge pattern?

Author: Yasser Ibrahim

What are the consequences of applying the GOF Bridge pattern?

Please choose all the answers that apply:

- it makes implementing the client code easier by interacting with a single uniform interface
- it decouples an abstraction from its implementation so that the two can vary independently
- it will decrease the system extesibility
- the client code can traverse tree structures of arbitrary depth recursively

Check the answer of this question online at QuizOver.com:

Question: [java bridge method](#)

Flashcards:

<http://www.quizover.com/flashcards/java-bridge-method?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/java-bridge-method?pdf=1505>

4.1.26. When would you use the GOF Bridge design pattern?

Author: Yasser Ibrahim

When would you use the GOF Bridge design pattern?

Please choose all the answers that apply:

- to implement lazy loading of expensive objects
- to improve system reliability and scalability
- to decouple an abstraction from its implementation so that the two can vary independently
- to hide the implementation details from the client code of your design

Check the answer of this question online at QuizOver.com:

Question: [gang of four bridge design pattern applicability](#)

Flashcards:

<http://www.quizover.com/flashcards/gang-of-four-bridge-design-pattern-applicability?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/gang-of-four-bridge-design-pattern-applicability?pdf=1505>

4.1.27. Which design pattern you would you use to assign more functionality...

Author: Yasser Ibrahim

Which design pattern you would you use to assign more functionality to an object without sub-classing it?

Please choose only one answer:

- Bridge design pattern
- Adapter design pattern
- Composite design pattern
- Decorator design pattern

Check the answer of this question online at QuizOver.com:

Question: [decorator pattern example in java](#)

Flashcards:

<http://www.quizover.com/flashcards/decorator-pattern-example-in-java?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/decorator-pattern-example-in-java?pdf=1505>

4.1.28. Which of the following are participants in the GOF Decorator design...

Author: Yasser Ibrahim

Which of the following are participants in the GOF Decorator design pattern?

Please choose all the answers that apply:

- Abstract Decorator
- Virtual Decorator
- Decorator
- Concrete Decorator
- Component

Check the answer of this question online at QuizOver.com:

Question: [gang of four decorator design pattern participants](#)

Flashcards:

<http://www.quizover.com/flashcards/gang-of-four-decorator-design-pattern-participants?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/gang-of-four-decorator-design-pattern-participants?pdf=1505>

4.1.29. What are the consequences of applying the GOF Decorator pattern?

Author: Yasser Ibrahim

What are the consequences of applying the GOF Decorator pattern?

Please choose all the answers that apply:

- it makes the client code easier by interacting with a single uniform interface
- the client code can traverse tree structures of arbitrary depth recursively
- it will will not alter the class inheritance hierarchy to accommodate for the additional functionality
- it allows to nest layers of decorators to add more functionality

Check the answer of this question online at QuizOver.com:

Question: [gang of four decorator design pattern consequences](#)

Flashcards:

<http://www.quizover.com/flashcards/gang-of-four-decorator-design-pattern-consequences?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/gang-of-four-decorator-design-pattern-consequences?pdf=1505>

4.1.30. When would you use the GOF Decorator design pattern?

Author: Yasser Ibrahim

When would you use the GOF Decorator design pattern?

Please choose all the answers that apply:

- to translates an existing class interface into a compatible target interface
- to assign more functionality to an object without sub-classing it
- to decouple an abstraction from its implementation so that the two can vary independently
- to nest layers of decorators to add more functionality

Check the answer of this question online at QuizOver.com:

Question: [gang of four decorator design pattern applicability](#)

Flashcards:

<http://www.quizover.com/flashcards/gang-of-four-decorator-design-pattern-applicability?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/gang-of-four-decorator-design-pattern-applicability?pdf=1505>

4.1.31. What are the consequences of applying the GOF Decorator pattern?

Author: Yasser Ibrahim

What are the consequences of applying the GOF Decorator pattern?

Please choose all the answers that apply:

- the client code can gradually add more functionality as it nests more layers of decorators
- it assigns more functionality to an object without sub-classing it
- it makes it harder to identify the the decorated and the decorator objects
- the client code can traverse tree structures of arbitrary depth recursively

Check the answer of this question online at QuizOver.com:

Question: [gof decorator design pattern](#)

Flashcards:

<http://www.quizover.com/flashcards/gof-decorator-design-pattern?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/gof-decorator-design-pattern?pdf=1505>

4.1.32. Which design pattern is used in the Java InputStream, OutputStream,...

Author: Yasser Ibrahim

Which design pattern is used in the Java InputStream, OutputStream, Reader, Writer hierarchies?

Please choose only one answer:

- Adapter design pattern
- Decorator design pattern
- Composite design pattern
- Bridge design pattern

Check the answer of this question online at QuizOver.com:

Question: [gof decorator design pattern java usages](#)

Flashcards:

<http://www.quizover.com/flashcards/gof-decorator-design-pattern-java-usages?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/gof-decorator-design-pattern-java-usages?pdf=1505>

4.1.33. You are building an online makeup website, which provides beside te...

Author: JavaChamp Team

You are building an online makeup website, which provides beside text articles, makeup tutorials as videos files.

Which pattern is recommended to use in such a website to deliver these media resources?

Please choose only one answer:

- value list handler
- virtual proxy
- intercepting filter
- composite view

Check the answer of this question online at QuizOver.com:

Question: [what to use virtual proxy pattern?](#)

Flashcards:

<http://www.quizover.com/flashcards/what-to-use-virtual-proxy-pattern?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/what-to-use-virtual-proxy-pattern?pdf=1505>

4. Chapter: Behavioral Patterns

1. Behavioral Patterns Questions

4.1.1. Which pattern to use when more than one object can handle a request...

Author: JavaChamp Team

Which pattern to use when more than one object can handle a request, and the handler is unknown?

Please choose only one answer:

- Chain of Responsibility
- Command
- Strategy
- Observer

Check the answer of this question online at QuizOver.com:

Question: [when to use gang of four chain of responsibility pattern?](#)

Flashcards:

<http://www.quizover.com/flashcards/when-to-use-gang-of-four-chain-of-responsibility-pattern?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/when-to-use-gang-of-four-chain-of-responsibility-pattern?pdf=1505>

4.1.2. Which is considered an example of Chain of Responsibility Pattern?

Author: JavaChamp Team

Which is considered an example of Chain of Responsibility Pattern?

Please choose all the answers that apply:

- `java.awt.event.ComponentAdapter`
- The Java Servlet filter framework
- `javax.jms.QueueConnectionFactory`
- `java.awt.Toolkit`
- Java exception handling

Check the answer of this question online at QuizOver.com:

Question: [java exception handling as an example of chain of responsibility pattern](#)

Flashcards:

<http://www.quizover.com/flashcards/java-exception-handling-as-an-example-of-chain-of-responsibility-pattern?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/java-exception-handling-as-an-example-of-chain-of-responsibility-pattern?pdf=1505>

4.1.3. It is known as Action or Transaction and is used to encapsulate a r...

Author: JavaChamp Team

It is known as Action or Transaction and is used to encapsulate a request as an object to support rollback, logging, or transaction functionality

Please choose only one answer:

- Chain of Responsibility Pattern
- Command Pattern
- Observer Pattern
- Strategy Pattern

Check the answer of this question online at QuizOver.com:

Question: [which pattern is known as action or transaction?](#)

Flashcards:

<http://www.quizover.com/flashcards/which-pattern-is-known-as-action-or-transaction?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/which-pattern-is-known-as-action-or-transaction?pdf=1505>

4.1.4. java.util.Enumeration is an example of which pattern?

Author: JavaChamp Team

java.util.Enumeration is an example of which pattern?

Please choose only one answer:

- Iterator
- Command
- Observer
- Strategy

Check the answer of this question online at QuizOver.com:

Question: [where is gang of four iterator design pattern is used?](#)

Flashcards:

<http://www.quizover.com/flashcards/where-is-gang-of-four-iterator-design-pattern-is-used?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/where-is-gang-of-four-iterator-design-pattern-is-used?pdf=1505>

4.1.5. In the Publish-Subscribe messaging model, the subscribers register ...

Author: JavaChamp Team

In the Publish-Subscribe messaging model, the subscribers register themselves in a topic and are notified when new messages arrive to the topic. Which pattern does most describe this model?

Please choose only one answer:

- Adapter
- Notifier
- Observer
- State

Check the answer of this question online at QuizOver.com:

Question: [when to use the observer pattern?](#)

Flashcards:

<http://www.quizover.com/flashcards/when-to-use-the-observer-pattern?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/when-to-use-the-observer-pattern?pdf=1505>

4.1.6. A pattern that is intended to provide a means to define a family of...

Author: JavaChamp Team

A pattern that is intended to provide a means to define a family of algorithms and encapsulate each one as an object for interchangeable use:

Please choose only one answer:

- Strategy Pattern
- Abstract Factory Pattern
- Visitor Pattern
- State Pattern

Check the answer of this question online at QuizOver.com:

Question: [what is gang of four strategy pattern?](#)

Flashcards:

<http://www.quizover.com/flashcards/what-is-gang-of-four-strategy-pattern?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/what-is-gang-of-four-strategy-pattern?pdf=1505>

4.1.7. Which are considered forces to select a Strategy Pattern?

Author: JavaChamp Team

Which are considered forces to select a Strategy Pattern?

Please choose all the answers that apply:

- A client needs to use a family of related objects
- A change to an object requires changing other objects
- A client needs to choose from multiple algorithms
- Multiple classes are the same but differ only in their behaviors

Check the answer of this question online at QuizOver.com:

Question: [when is strategy pattern used?](#)

Flashcards:

<http://www.quizover.com/flashcards/when-is-strategy-pattern-used?pdf=1505>

Interactive Question:

<http://www.quizover.com/question/when-is-strategy-pattern-used?pdf=1505>