

Unit 14 - Week 12 :

Course outline
How does an NPTEL online course work?
Week 0 :
Week 1 :
Week 2 :
Week 3 :
Week 4 :
Week 5 :
Week 6 :
Week 7 :
Week 8 :
Week 9 :
Week 10 :
Week 11 :
Week 12 :
<div><div></div><div>Lecture 56 : Proxy Pattern - II</div></div> <div><div></div><div>Lecture 57 : Decorator Pattern - I</div></div> <div><div></div><div>Lecture 58 : Decorator Pattern - II</div></div> <div><div></div><div>Lecture 59 : Decorator Pattern - III</div></div> <div><div></div><div>Lecture 60 : Iterator Pattern</div></div> <div><div></div><div>Lecture Materials For Week 12</div></div> <div><div></div><div>Quiz : Assignment 12</div></div> <div><div></div><div>Feedback for week 12</div></div>
Download Videos
Assignment Solution
Live Interactive Session
Text Transcripts

Assignment 12

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-12-09, 23:59 IST.

- 1) Suppose you are creating a drawing editor. You wish to allow attaching header and footer frames to a drawing object recursively and dynamically, which one of the following design patterns would you use?
- Chain of responsibility
 - Adapter
 - Decorator
 - Composite

- ☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
c

- 2) Which one of the following is **FALSE** regarding the decorator pattern?
- When a decorator gets a call, it relays to one of the many objects that it recursively nests based on a decision process.
 - The Decorator is indistinguishable from the object that it contains and from any other concrete instances, including other decorated objects.
 - Designers can recursively nest decorators without any other object being able to tell the difference.
 - The decorator pattern can be used to add additional functionality to a particular object at run time as opposed to statically adding additional functionality a class of objects by subclassing.

- ☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
a

- 3) Which one of the following class structures most closely corresponds to the decorator design pattern?
-
- a. A
b. B
c. C
d. D

- ☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
a

- 4) Which one of the following statements is **FALSE** concerning the Decorator pattern?
- Decorators recursively nest objects in the form of a tree hierarchy in which some objects are atomic objects and others are groups of objects
 - Decorators are the same base type as the objects they decorate
 - Decorators contain a reference to the object they are decorating
 - It is possible to chain decorators, that in effect realizes behavior similar to applying multiple extensions

- ☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
a

- 5) Which one of the following patterns is not a wrapper pattern?
- Adapter
 - Decorator
 - Proxy
 - Bridge

- ☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
d

- 6) Which Design Pattern should you use when you want to add responsibilities to individual objects dynamically and transparently without affecting other objects?
- Bridge
 - Adapter
 - Proxy
 - Decorator

- ☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
d

- 7) Suppose you have developed a photo album application that can contain up to 10,000 photographs. The average size of each photograph is 5 Mbytes. You want the photo album application to have very good response time. Which one of the following design patterns can help you to achieve that?
- Decorator
 - Proxy
 - Bridge
 - Composite

- ☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
b

- 8) Suppose you have developed a gaming application. The game's configuration is stored in a configuration object. You want all players to be able to see the game's configuration, but only the expert players should be able to modify it. Which one of the following design patterns will help you to achieve this in the most meaningful way?
- Decorator
 - Proxy
 - Bridge
 - Composite

- ☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
b

- 9) Suppose you have developed a students' grading software. The Grade information shared by teachers and students. However, only the teachers should be able to post and modify grades. Which one of the following design patterns will help you to achieve this in the most meaningful way?
- Decorator
 - Proxy
 - Bridge
 - Composite

- ☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
b

- 10) Consider an application in which several client objects share a server object, as the server object is heavy weight. However, when any client object tries to change any internal data of the server object, it should be given a copy of the server object. The remaining client objects continue to share the original server object. Which one of the following design patterns will help you to achieve this in the most meaningful way?
- Decorator
 - Proxy
 - Bridge
 - Composite

- ☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
b

- 11) Which one of the following well-known design patterns has the class structure as shown below?
-
- a. Decorator
b. Iterator
c. Proxy
d. Composite

- ☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
b

- 12) Which one of the following is not a basic method supported by an iterator?
- Reset
 - next
 - Get
 - hasNext
 - delete

- ☐ a.
☐ b.
☐ c.
☐ d.
☐ e.

No, the answer is incorrect.
Score: 0
Accepted Answers:
e