

Day:- Wednesday

Date:- 15-04-2020

Design Pattern

Assignment - 2

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3rd B.Tech CSE - C

1. Write the sample code for proxy pattern?

```
1. class subject {  
    public void request () {  
        // implement the code  
    }  
}  
class real subject extends subject {  
    public void request () {  
        // implement the code  
    }  
}  
class proxy extends subject {  
    public void request () {  
        // implement the code  
    }  
}
```

2. Give the examples for real subject and image proxy?

Ans: Examples for real subject and image proxy are:

- virtual memory
- credit card proxy
- remote program proxy
- wrapper objects

3. How related patterns supports to the design problem when we apply the proxy pattern. Justify your answer

Ans: * Adapter provides a different interface to the

wrapper object, proxy provides it with the same interface and decorator provides it with an enhanced interface.

* Facade is similar to proxy in that both buffer a complex entity and initialize it on its own. Unlike facade proxy has the same interface as its service object, which makes them interchangeable.

4. Define some of the pitfalls for the proxy pattern?

- A.
- Introduces another level of the abstraction.
 - real subject code is accessed by some of the directly and some of them access the proxy ~~pass~~ ~~between~~ classes.
 - Sometimes the proxy pattern might cause the disparate behaviour.

5. Explain how proxy pattern helps to solve design problem in the framework?

- Ans
- * A proxy object hides the original object and control the access ~~to the~~ it.
 - * we can use proxy when we may want to use a class that can perform as an interface to something else.
 - * In the framework proxy used to add an additional security layer.
 - * It controls around the original object accessing.
 - * proxy heavily used to implement lazy loading related user cases.