

PROXY DESIGN PATTERN

client Request Real-object

Here we introduce proxy object

● Use Case :-



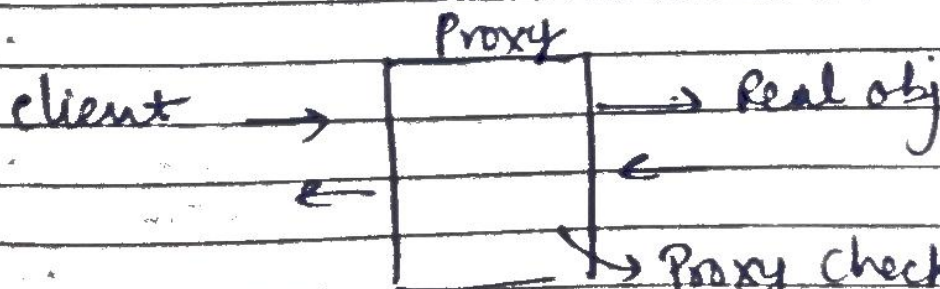
1. Access Restriction.

User



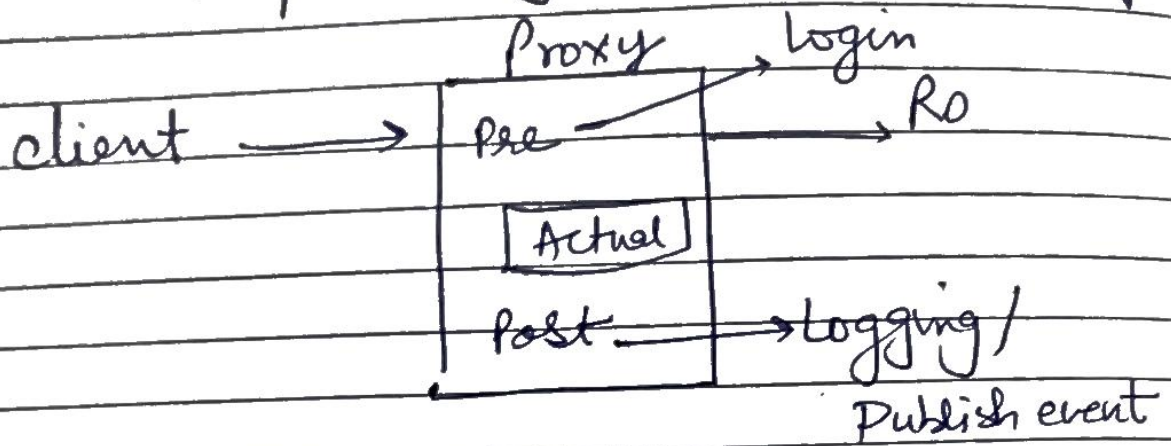
Here we have blocklist if the req is in blocklist then access denied will be return

2. Used in caching



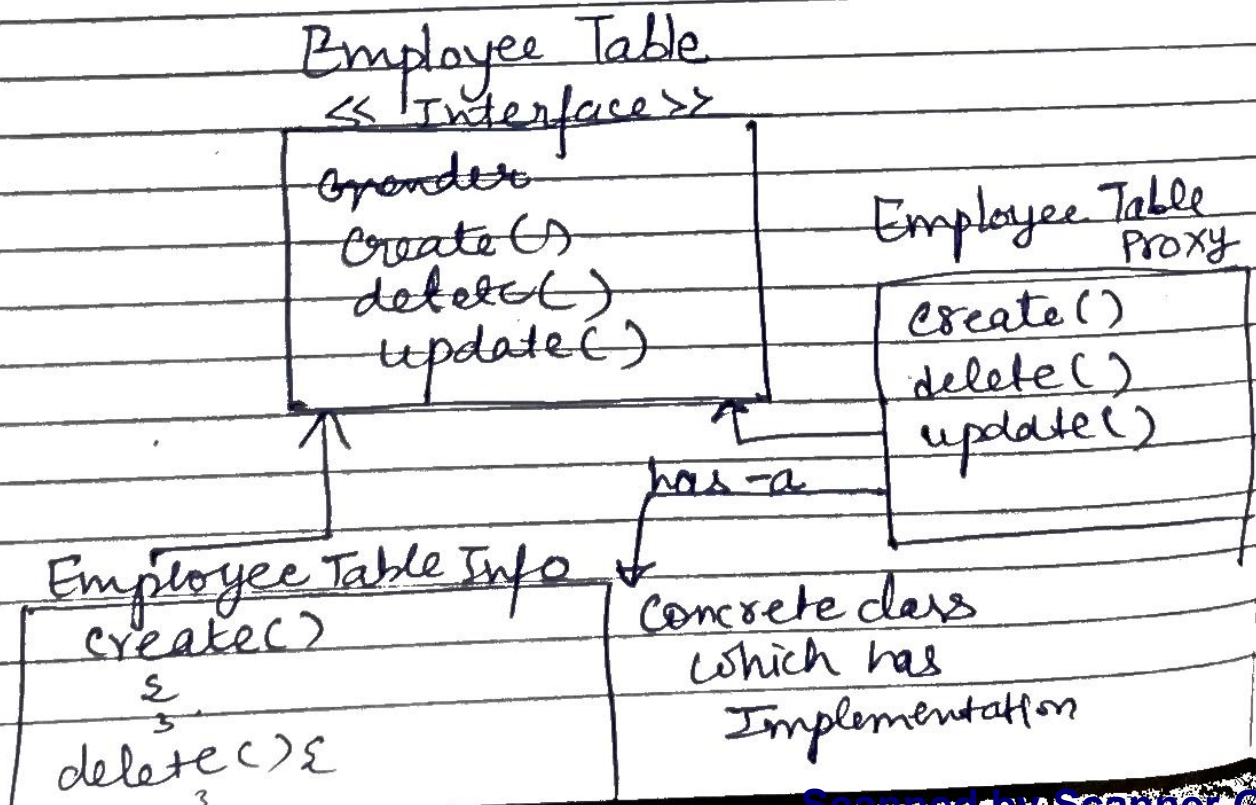
Proxy check whether data is present in cache

3. Used in Pre-processing and Post-Processing



- Basically this pattern is useful when you want to add an extra layer of control over access to a real object.
- Proxy act as intermediary, controlling access to real object.

Ex.



Employee Table Proxy has an object of Employee Table concrete class

When a request for CRUD operations is done by client, first proxy will validate it first and then after doing that it will call the actual function from concrete class

In Employee Proxy

```
void create (String client, EmployeeDo ob)
    throws Exception {
```

```
    if (client.equals("Admin"))
```

```
    {
        employeeDBObj.create(client, ob);
```

```
    }
    throw new Exception("Access Denied");
```

Similarly we have implementations for delete, update functions.

Here we can also have multiple proxy chain

Client → Proxy₁ → Proxy₂ → Proxy₃ → ... → soon

Chain of Responsibility Principle