Observer
Design Pattern

Name: Hussnain Asghar

Name: Muhammad Khurram

Observer Design Pattern:

Observer Design pattern is a Behavioral Design pattern.

The observer pattern is a software design pattern in which an object, called the subject, maintains a list of its dependents, called observers, and notifies them automatically of any state changes, usually by calling one of their methods.

Problem statement:

Observer pattern is used when there is one to many relationships between objects such as if one object is modified, its dependent objects are to be notified automatically and corresponding changes are done to all dependent objects.

Real Life Example

- Any social media platform like Facebook/tweeter.

- When a person update his/her status all his/her followers get the notification.

- A follower of that person can unfollow at any time.

Structure Of Observer:
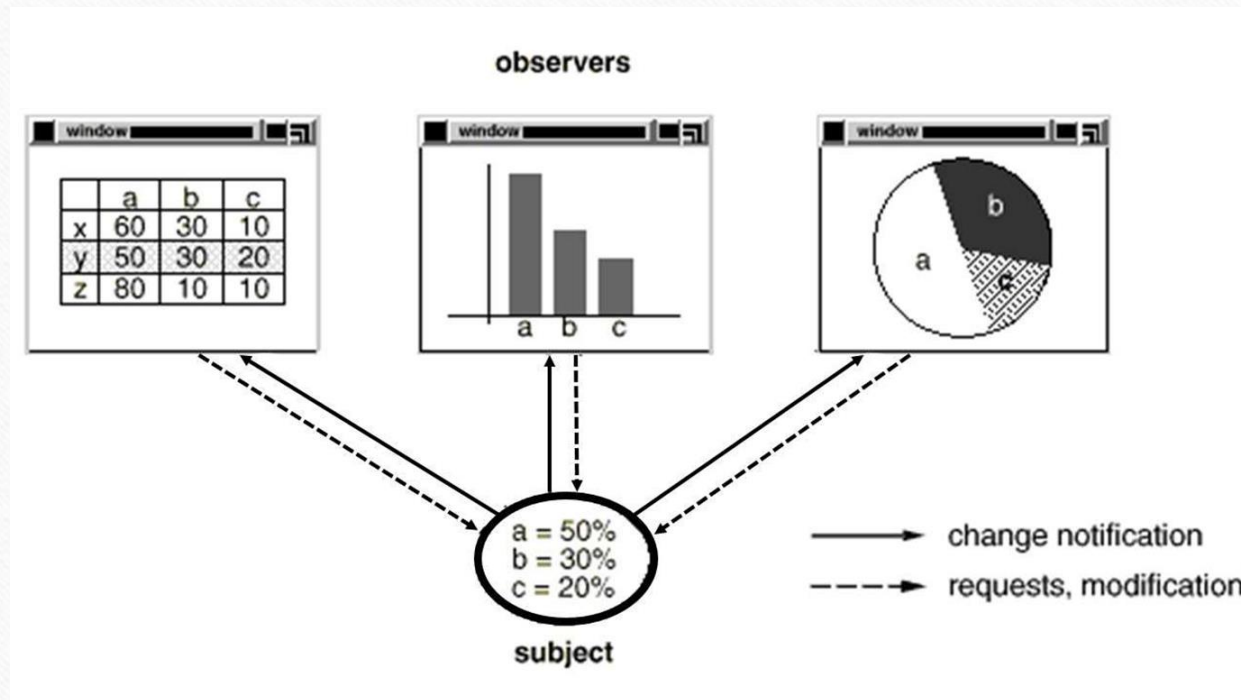
Advantages:

- Allows you to send data to many other objects in a very efficient manner.

- No modification is need to be done to the subject to add new observers.

- Observer can add/remove at any point in time.

- It allows sending data to other objects effectively without any change in the subject or observer classes

Disadvantage:

- If not used carefully the observer pattern can add unnecessary complexity

- The order of Observer notifications is undependable

Any Quarry

Thank you very much