# Observer Design Pattern

Observer design pattern is one of the behavioral patterns that defines a one-to-many dependency between objects. The pattern promotes flexibility and maintainability by allowing objects to communicate without being tightly coupled. When one object (the subject) changes state (State is the current information in the application), all its dependents (observers) are notified and updated automatically.

**Components of the Observer Design Pattern**

1. **Subject: (Event, Observable)** The subject has a list of observers to notify them when state changes.
2. **Observer:** The observer interface defines the methods for concrete observer classes.
3. **Concrete Subject:** A class that implements the subject interface and manages the observers.
4. **Concrete Observer:** A class that implements the observer interface and receives notifications.