# Study of Strategy Pattern

Introduction –

Strategy pattern is used for selecting an algorithm's behavior at runtime. With the use of strategy pattern, we can define family of algorithms, encapsulate the algorithms with use of an interface and use any algorithm in that family interchangeably.

This pattern can be best explained with sorting algorithms. We can have family of algorithms consisting of ShellSort, BubbleSort, QuickSort, MergeSort which are encapsulated with one interface Sortable. With this class structure in place, the client who invokes sort() method on Sortable object can change the implementation of sorting anytime.
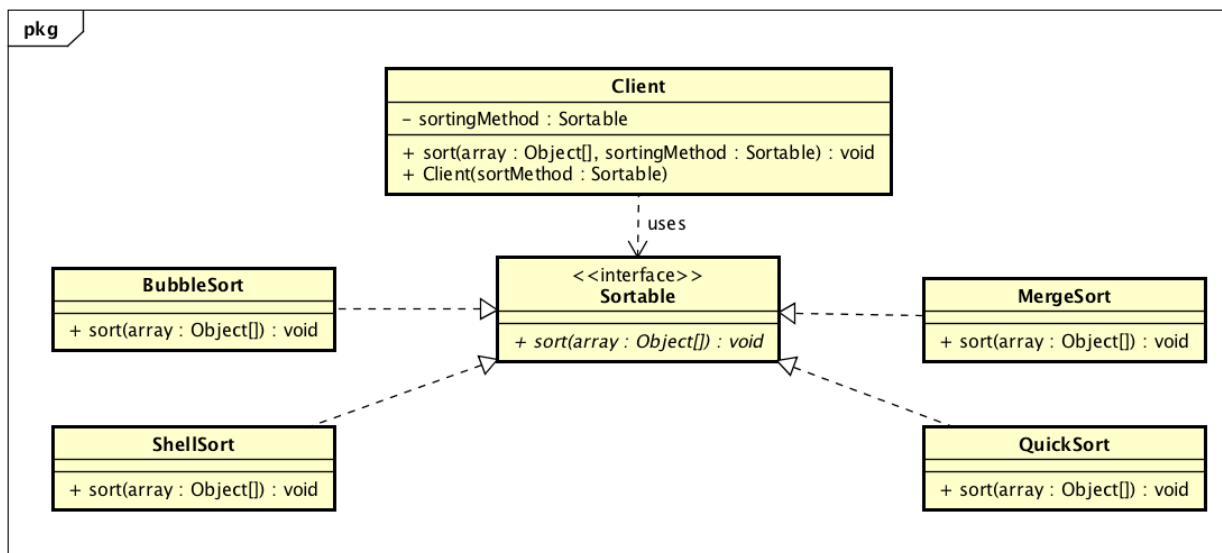
This design pattern can be used for developing strategy for having different strategies for different levels of a game. We can have different winning and losing strategies for easy, medium and hard levels of the game.