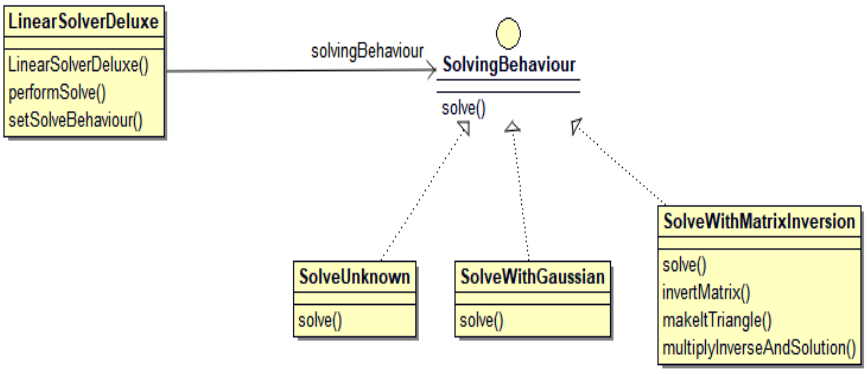
CSE 443 HW1 REPORT

Part1:

The customer can use more than one method while solving linear equation problems. Solution method is taken as a behavior style. **Strategy pattern** architecture is applied, in which this behavior changes dynamically.

There is an interface called "Solving behavior". Problem solving methods implement this interface. In this way, the solution method of a LinearSolverDeluxe class that holds a "Solving Behavior" object can be changed dynamically.

Diagram

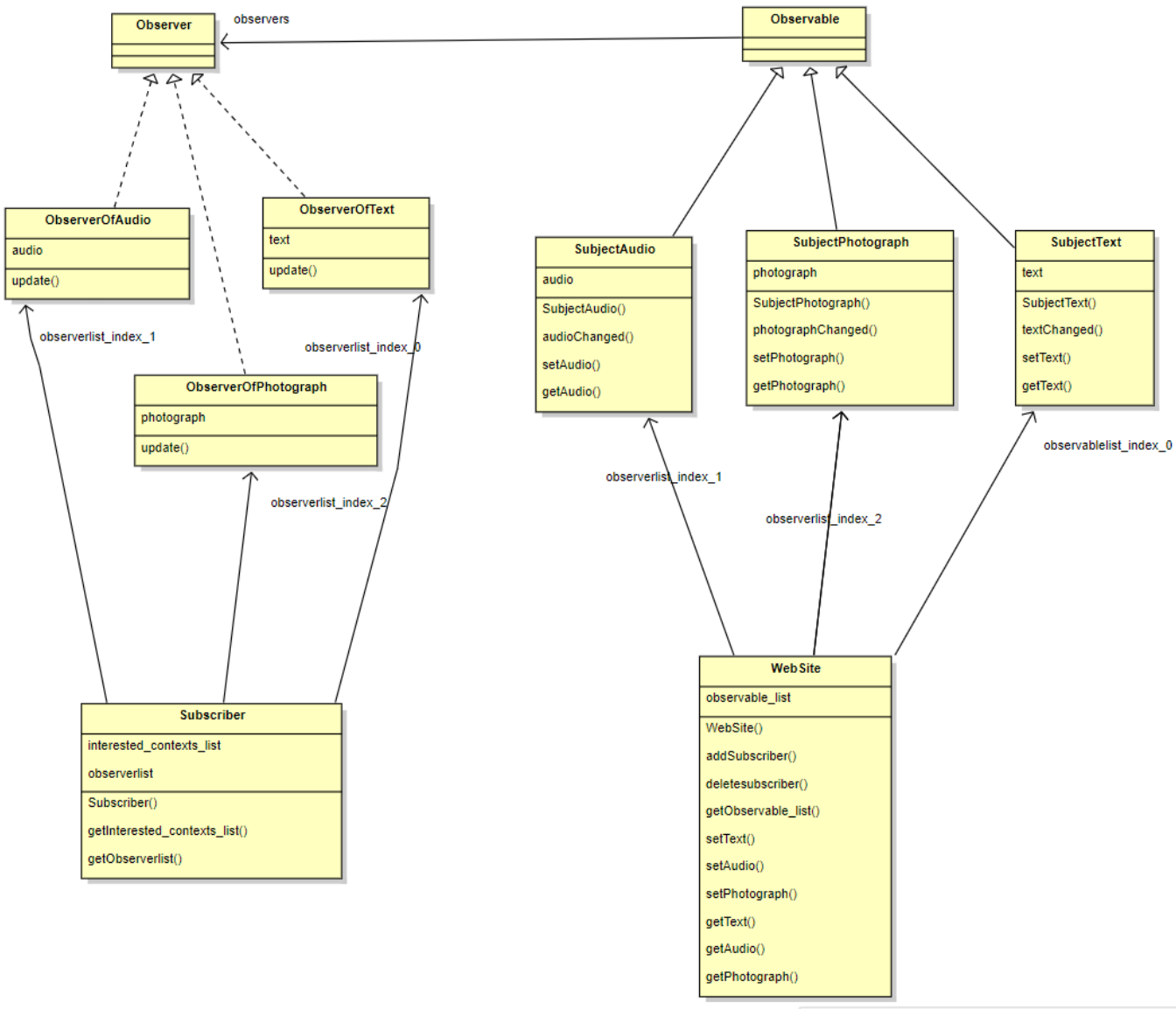


Part2:

WebSite class have a list of Observables. Observables are classes that are inherited from Observable of Java.Utill. Each content channel have an observable class and an observer class. Subscriber class have a list of Observers. When a subscriber subscribed to a website, its observers channels observe the website's observable channels according to interested content information. Thankst to interested content information , a subscriber dont take update from uninterested content type. Obviously, **Observer pattern** is applied here

If there is a 4th type of content, a set function is written for that type in the WebSite class. This is all that needs to be done. Thus, it has become very easy to add new content type when requested. Because the established structure is very flexible.

Diagram



Part3:

The customer can equip different types of suit with a combination of different weapons. The cost and weight of this suit should be calculated according to each combination. Therefore, the pattern that should be applied here is **decorator pattern**.