### **FACTORY DESIGNER**

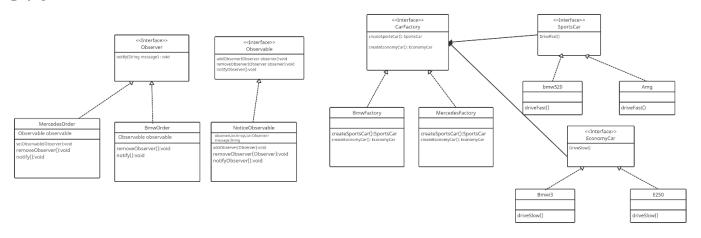
#### 1.Statement of Work:

Nowadays, every person needs special cars to improve their living standards. A car dealership that sells cars in different brands and models works with two different car factories, economy and sports car types are produced in both factories. This program has been developed for order tracking and communication with the factory.

# 2.Design Patterns:

In this study, I preferred to use factory pattern and observer pattern to solving the problem. These models can be a useful solution for him. Okay why? Because I used a observer model so that after the people who come to order to the gallery make the choice they want, this message is sent from the gallery to the desired factories. Second, I used an factory model because after the order reaches the factory, the desired car is started to be produced. When the economy or sports car is chosen, that car is started to be produced in the factory. Thanks to the factory pattern, there will be no confusion.

#### 3.UML:



#### 4. Research:

I researched free and open source car plan and arrange car freely, I saw a lot of projects on the internet about of this. These projects usually works with programs installed on the computer. So, I need to do a more detailed and comprehensive research.

## **Testing Class:**

```
public class Main {
_
      public static void main(String[] args) {
        BmwOrder bmw = new BmwOrder();
       MercedesOrder mercedes = new MercedesOrder();
       NoticeObservable noticeObservable = new NoticeObservable();
       mercedes.setObservable (noticeObservable);
       noticeObservable.addObserver(bmw);
      noticeObservable.addObserver(mercedes);
       //noticeObservable.removeObserver(mercedes);
       noticeObservable.notifyObserver();
          System.out.println("********");
      CarFactory factory1 = new BmwFactory();
      CarFactory factory2 = new MercedesFactory();
      SportsCar car1 = factory1.createSportsCar();
      EconomyCar car2 = factory1.createEconomyCar();
      SportsCar car3 = factory2.createSportsCar();
      EconomyCar car4 = factory2.createEconomyCar();
```

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