

Before we get into how to implement classes in javascript. Let me clarify how to do object oriented programming in general.

```
class Person {  
    string name;  
    int age;  
    void HandleFire();  
}
```

```
class Dog {  
    string type;  
    void HandleFire();  
}
```

```
class FireAlarm {  
    Array<Person> persons;  
    Array<Dog> dogs;  
    void AddPersonForFireEvent(Person p);  
    void AddDogForFireEvent(Dog d);  
    void OnFire() {  
        foreach(Person p in persons)  
            p.HandleFire();  
        foreach(Dog d in dogs)  
            d.HandleFire();  
    }  
}
```

Imagine another type Sprinkler needs to know about the Fire Event we would have to change the FireAlarm class to AddFireAlarmHandler that accepts Sprinkler

```
class Sprinkler {  
    void HandleFire();  
}  
  
class FireAlarm {  
    Array<Person> persons;  
    Array<Dog> dogs;  
    Array<Sprinkler> sprinklers;  
    void AddPersonForFireEvent(Person p);  
    void AddDogForFireEvent(Dog d);  
    void AddSprinklerForFireEvent(Sprinkler s);  
    void OnFire() {  
        foreach(Person p in persons)  
            p.HandleFire();  
        foreach(Dog d in dogs)  
            d.HandleFire();  
        foreach(Sprinkler s in sprinklers)  
            s.HandleFire();  
    }  
}
```

Everytime a new class is interested in handling the fire event, the FireAlarm class needs to be modified

Interfaces to the rescue

```
interface IFireAlarmHandler {  
    void HandleFire();  
}
```

```
class Person implements IFireAlarmHandler {  
    string name;  
    int age;  
    void HandleFire();  
}
```

```
class Dog implements IFireAlarmHandler {  
    string type;  
    void HandleFire();  
}
```

```
class Sprinkler implements IFireAlarmHandler {  
    void HandleFire();  
}
```

```
class FireAlarm {  
    Array<IFireAlarmHandler> handlers;  
    void AddHandlerForFireEvent(IFireAlarmHandler h);  
    void OnFire() {  
        foreach(IFireAlarmHandler h in handlers)  
            h.HandleFire();  
    }  
}
```

The FireAlarmHandler does not need to know about Person, Dog or Sprinkler. Its job is just to notify about fire to anyone who is interested.

Anyone who implements the FireAlarmHandler interface is able to register itself for the fire event