





## Observer Pattern:

```
class ScoreTracking
```

```
// value of our current score
```

```
// Text Mesh Pro field for the score
```

```
// function for Incrementing Score(parameter for points)
```

```
{
```

```
    // Update the score;
```

```
    // Write the updated score;
```

```
}
```

```
class TargetBehavior
```

```
// has a function for taking damage  
which updates the score, notifying  
the observers from ScoreTracking
```



# Binary Saving System

class **BinarySavingService**

Save(saveObject) method

```
{  
    //instantiates new Binary formatter  
    //Creates save file for saveObject.score property  
}
```

Load(binarySaveObject) method

```
{  
    if (//check if save exists)  
    {  
        //Open save file  
        //call LoadScore(int) on ScoreTracking class  
    }  
}
```

class **ScoreTracking**

// contains public, serializable  
score value

//LoadScore(score) method is  
called on BinarySavingService to  
update score when Load() method  
is used

class **PlayerControl**

//Call BinarySavingService.Save()  
when “Return” is pressed

//Call BinarySavingService.Load()  
when “Right Shift” is pressed

## JSON Saving System:

```
public interface ISaveable
{
    // save ID & JSON ID, load from SaveJSON
}
public class SavingService
{
    // Unity Save Actions, SaveGame function,
    LoadGame function, save keys
}
```

```
public abstract class SaveableBehaviour : MonoBehaviour, ISaveable,
ISerializationCallbackReceiver
{
    // public Save IDs, before serialize & after deserialize, load
    from SaveJSON data
}
```

```
public class TargetBehavior : TransformSaver,
IPoolableObject
{
    // LoadFromData override that gets positions
    of the targets and places them
}
```

```
public class TransformSaver : SaveableBehaviour
{
    // savedData override that returns serialized
    transform keys
    // LoadFromData override that sets transform
    vectors to deserialized keys
}
```

Used for the Player and the Goons