

Code Examples

Key Points

- Variables can be given custom **Get and Set** methods, turning them into **Properties**.
- This typically involves creating a **second public variable**, to access the first, which is kept private.
- **Auto-Implemented Properties** allow you to set access limits without creating a second variable.
- Trying to put logic inside of an auto-implemented properties get or set functions will usually **Crash Unity**.

Code Examples

Manually Implemented Property

1. using UnityEngine;
2. using System;
- 3.
4. public class Bank : MonoBehaviour
5. {
6. public Action<float> OnMoneyValueChanged;
- 7.
8. private float money;
9. public float Money
10. {
11. get { return money; }
12. private set
13. {
14. money = value;
15. OnMoneyValueChanged?.Invoke(money);
16. }

```
17. }
18.
19. public void ResetMoneyValue(float amount)
20. {
21.     Money = amount;
22. }
23.
24. public bool Transaction(float amount)
25. {
26.     if ((Money + amount) < 0)
27.     {
28.         // Not Enough Funds
29.         return false;
30.     }
31.
32.     Money += amount;
33.     return true;
34. }
35. }
```

Auto Implemented Property

```
1. public float Health { get; private set; }
```