Code Examples

Key Points

- The simplest way to connect to scripts is by dragging it to a serialised field in the **Inspector.**

- **Get Component** can be used to search for a type of component on another object.

- To get a reference to an object remotely, you can use a **Find** operation, but this is generally very slow so use it sparingly.

- Other methods include **static variables**, which are basically global variables.

- Statics and static-based methods, such as **Singletons**, work well, but should only be used for truly unique systems, like game managers.

- Using a static reference to get **player data** *will* work, but will cause you problems if you want to add a second player later on.

Code Examples

Get Component

```
1.  public class Player : MonoBehaviour
2.  {
3.      AudioSource playerAudioSource;
4.
5.      void Awake()
6.      {
7.          playerAudioSource = GetComponent<AudioSource>();
8.      }
9.  }
```

Try Get Component

```
1.  public class Enemy : MonoBehaviour
2.  {
3.      [SerializeField] float enemyDamage = 20;
```

```
4.
5.    private void OnTriggerEnter(Collider other)
6.    {
7.      if (other.tag == "Player")
8.      {
9.        if (other.TryGetComponent(out PlayerHealth playerHealth))
10.       {
11.         playerHealth.TakeDamage(enemyDamage);
12.       }
13.     }
14.   }
15. }
```

Singleton Example

```
1.  public static Singleton Instance { get; private set; }
2.
3.  private void Awake()
4.  {
5.    // If there is an instance, and it's not me, delete myself.
6.
7.    if (Instance != null && Instance != this)
8.    {
9.      Destroy(this);
10.   }
11.   else
12.   {
13.     Instance = this;
```

14.   }

15. }