

# 1 Scripting Overview

The whole note is devoted to introduce some special techniques towards engine.

## 1.1 Creating and Using Script

The `GameObject` is controlled by the *Component*, and script is used to modify and customize.

### 1.1.1 How to create script

### 1.1.2 Anatomy of Script File

`Start()`: It's called by Unity before gameplay begins.

`Update()`: Handling the frame update for the `GameObject`

The constructor is not needed as it's handled by the editor and may not take place at the start of gameplay.

### 1.1.3 Controlling a GameObject

Script instance must be attached to a `GameObject` to control.

`Debug.Log("message")` can output to the console in the engine.

## 1.2 Variables and the Inspector

Variables are declared public to be access in the Inspector. You can also make changes to the variables during the gameplay temporarily.

## 1.3 Controlling GameObject Using Component

### 1.3.1 Accessing Components

*GetComponent* function can be used to get reference to the component properties.

```
Rigidbody rb = GetComponent<Rigidbody>();
```

you can use it to access the parameter and manipulate the instances.