

# Simple Life System

## Introduction

Simple and easy to use life component for F2P games with ready to use prefabs of different styles: minimalistic, cartoon, sci-fi, medieval, wooden and so on. Uses PlayerPrefs to store player data, but you can easily change data provider.

Life system component indicates, how much lives player has and when consumed life will be restored.

It is very easy to use with 2 steps:

- drop prefab on a scene
- setup player data provider to get it working

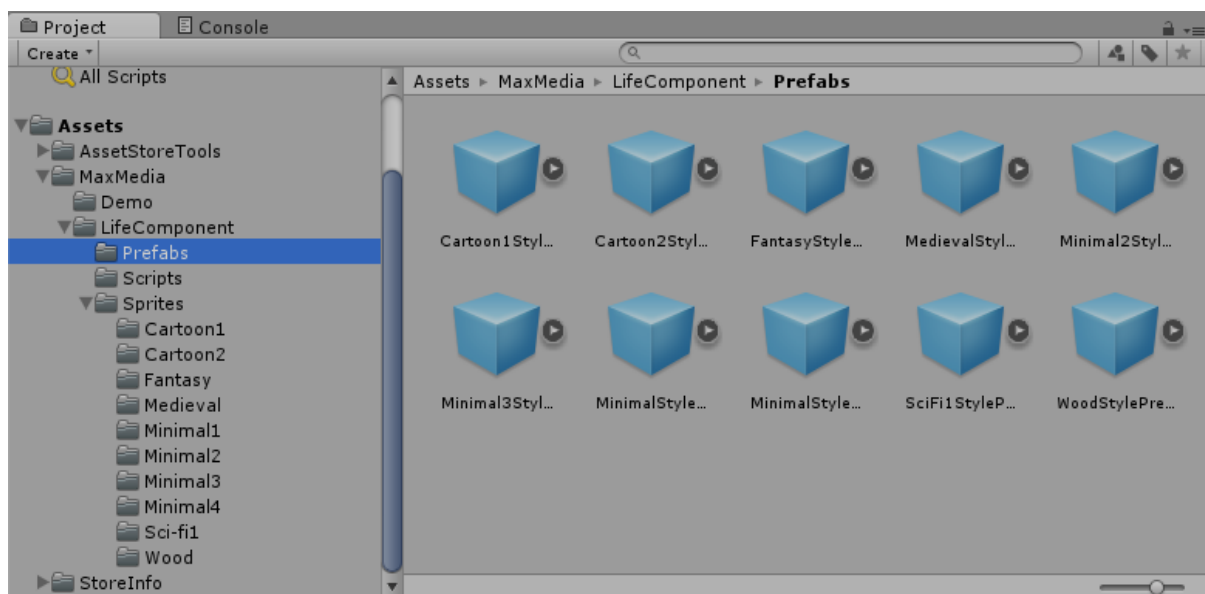
## Features

- Consume and restore player lives
- Configurable max lives count
- Configurable life restore time
- Unlimited lives mode support
- Prefabs of different styles: minimalistic, cartoon, sci-fi, medieval, wooden

## How it works

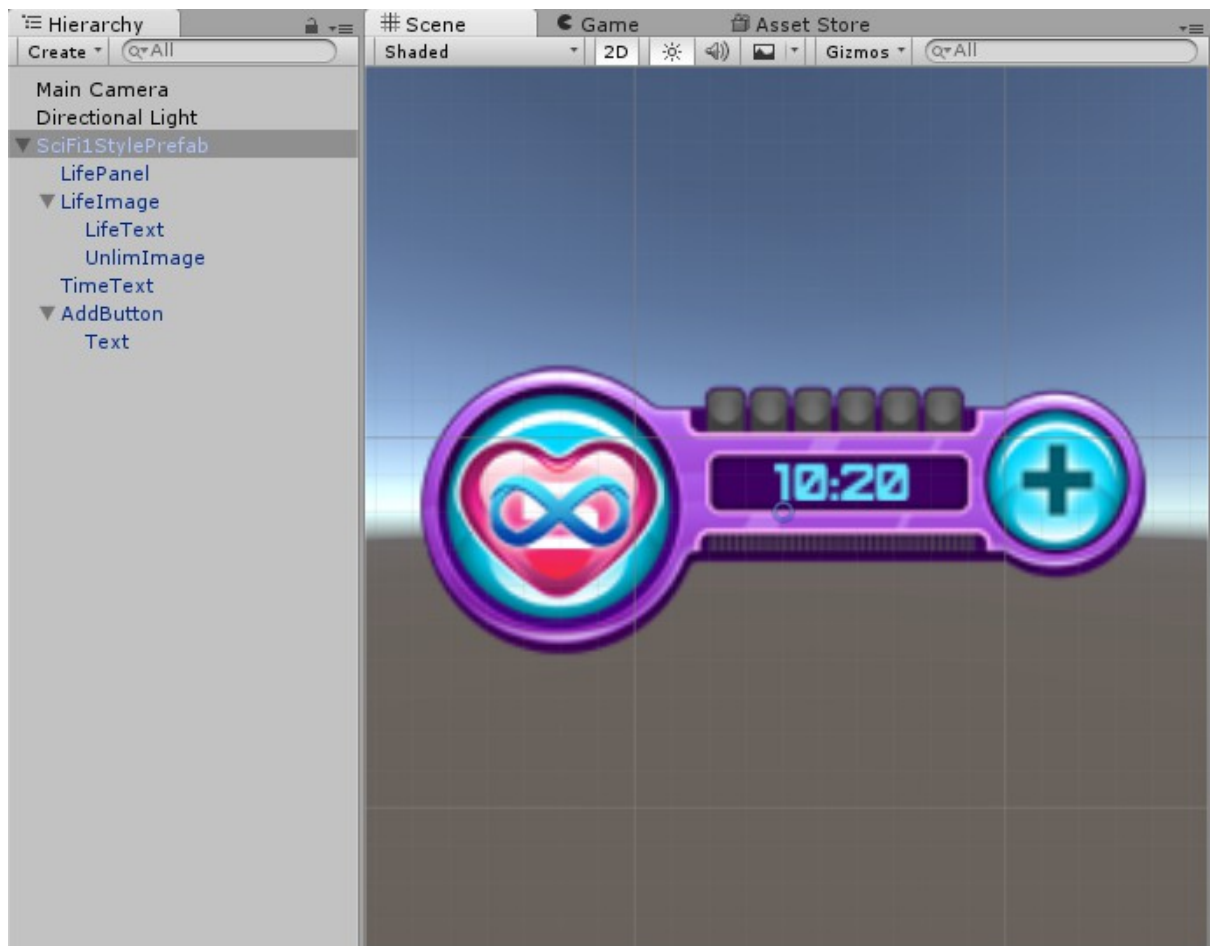
**Step 1:** Drop life component prefab on your scene

Prefabs folder contains ready to use prefabs:



Pick one of the prefabs and drop it on your scene, e.g:



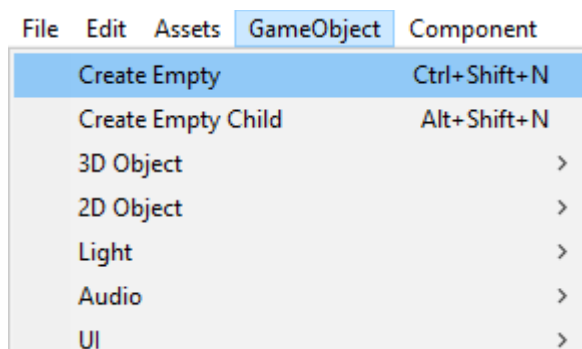


**Step 2:** Connect player data provider to the life component prefab

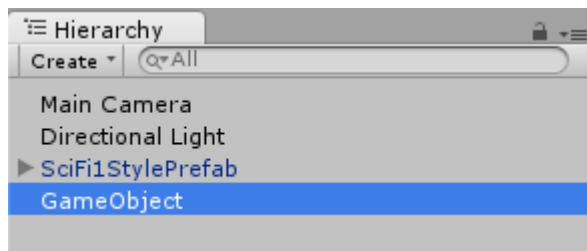
You will need to setup player data provider for the life component prefab. You can customize player data provider and implement your own logic for this.

We have included ready to use player data provider for you, it works via PlayerPrefs API. To use it please follow the steps below:

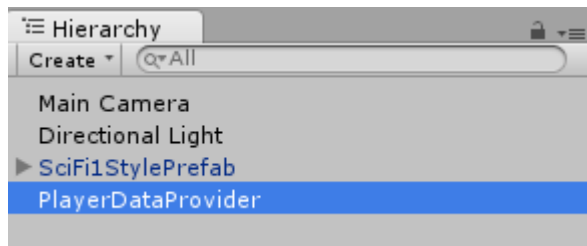
Click the “GameObject\Create Empty” menu item to create new empty game object:



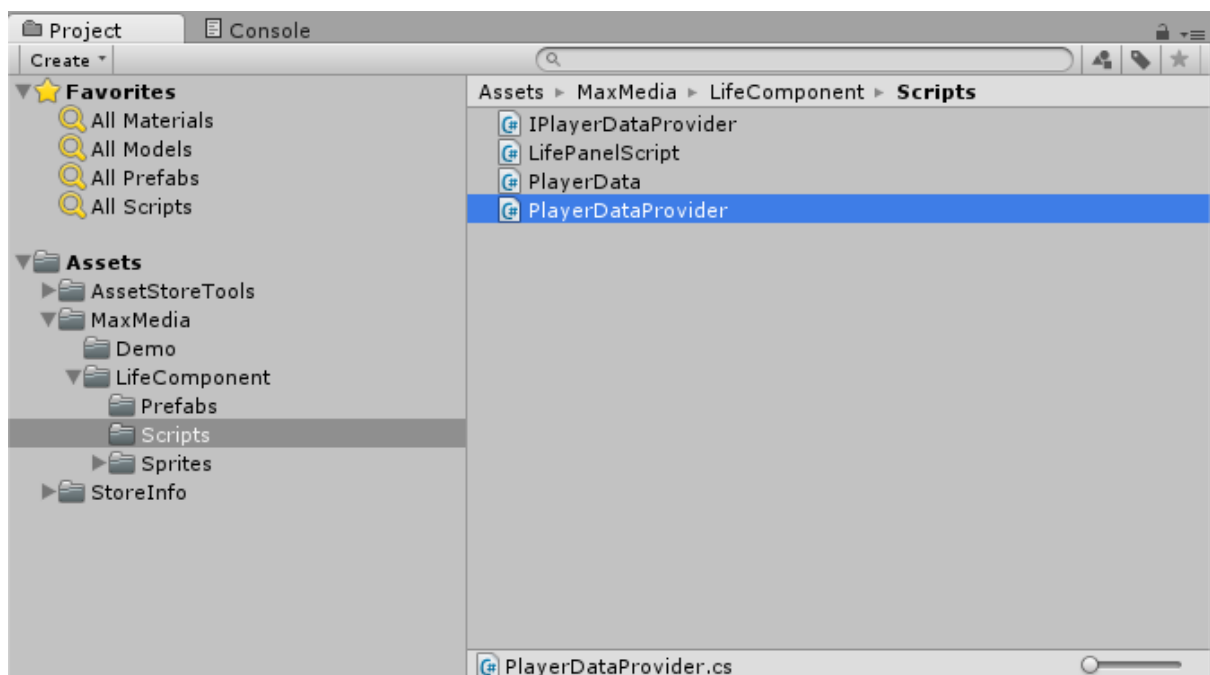
You will see a new empty game object added to the scene hierarchy:



Press F2 and rename the game object to e.g. "PlayerDataProvider" (note that you can use any name you like):

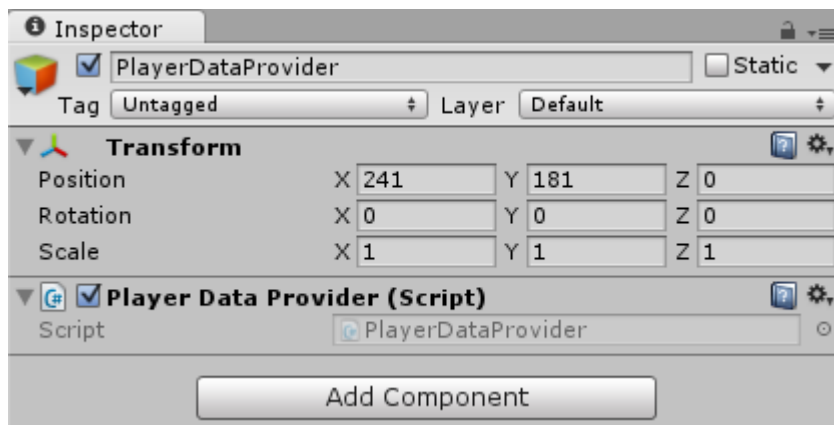


Find "PlayerDataProvider.cs" script inside the Scripts folder:

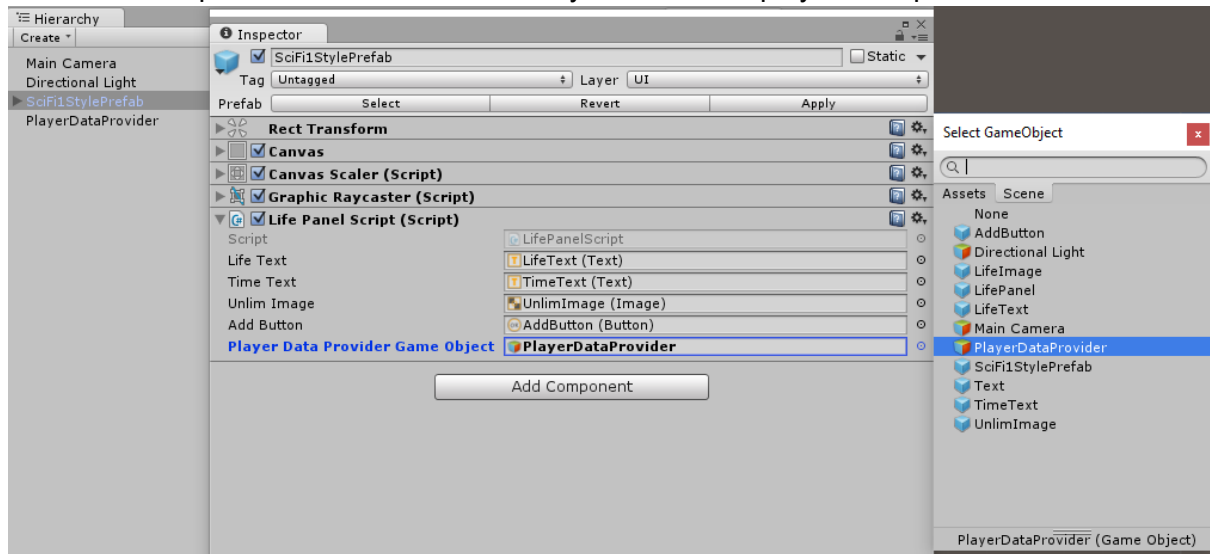


Drop it to the PlayerDataProvider game object:



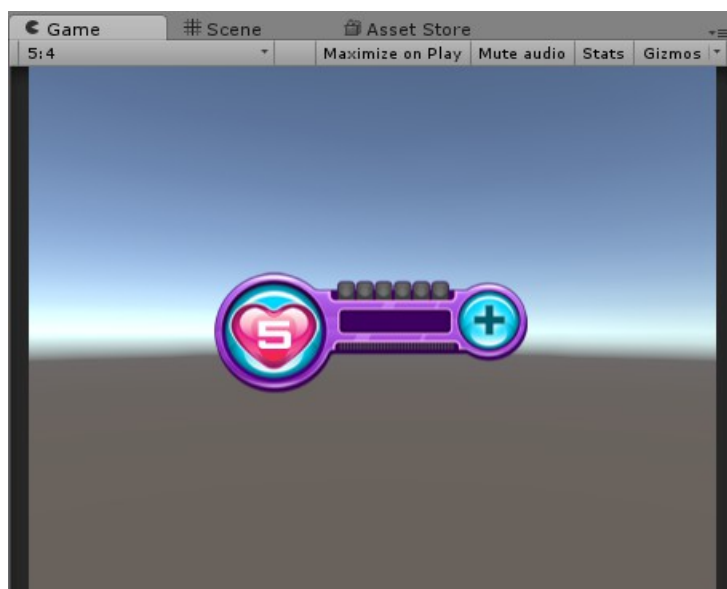


Select life component in the scene hierarchy and connect player data provider to it:



### Step 3: Click play

You will see life component showing 5 player lives:



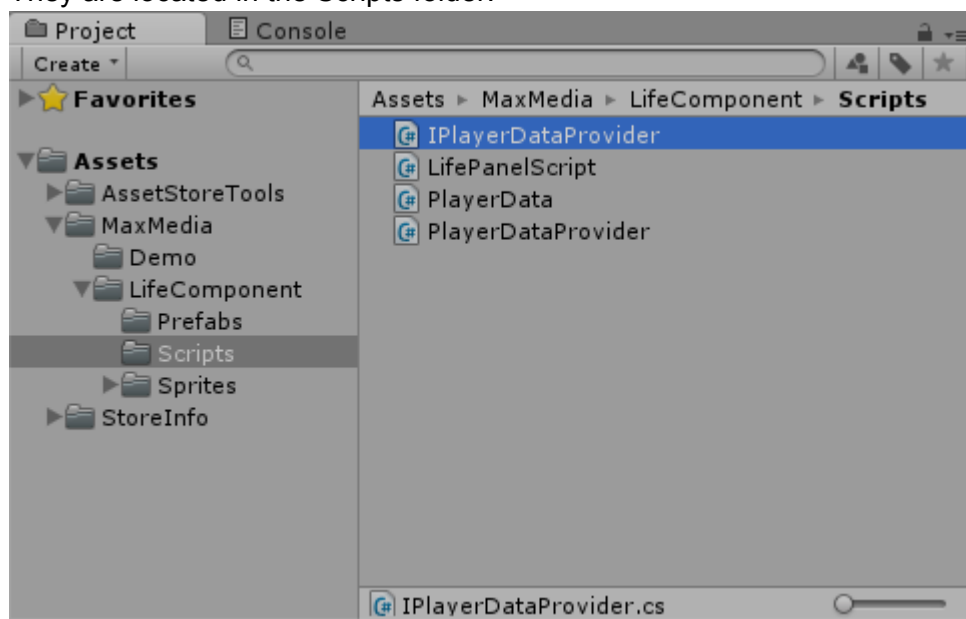
Next you will need to use life component and data provider in your game to consume and restore player lives. Next section will describe scripts included into the package and will show how to work with the life component from your code.

## Scripts

The package includes the following scripts files:

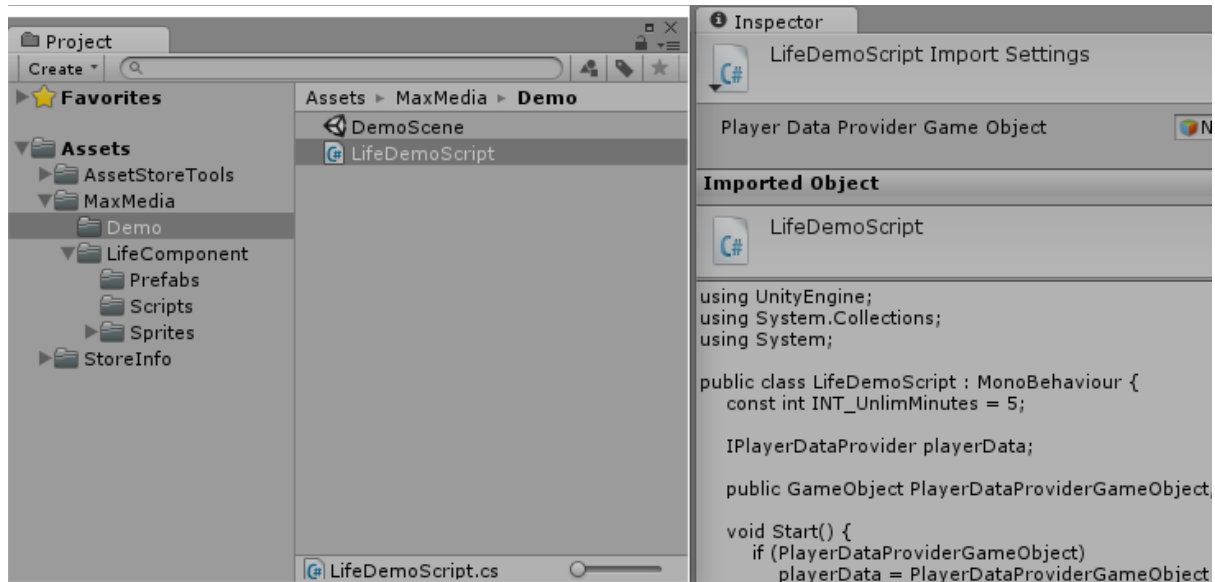
- IPlayerDataProvider.cs - interface to work with player data.
- LifePanelScript.cs - life panel script controls visual representation of the life component.
- PlayerData.cs - works with player data and contains logic to consume and restore lives.
- PlayerDataProvider.cs - default implementation of the IPlayerDataProvider interface, you can use your own implementation however if you need to support some custom logic.

They are located in the Scripts folder:



Demo folder contains LifeDemoScript.cs which illustrates how you can work with life component from scripts:





To work with life component you will need to store reference to the player data provider and use `IPlayerDataProvider` methods, see how this is done in the `LifeDemoScript`:

```

IPlayerDataProvider playerData;
public GameObject PlayerDataProviderGameObject;

void Start() {
    if (PlayerDataProviderGameObject)
        playerData =
PlayerDataProviderGameObject.GetComponent<PlayerDataProvider>() as
IPlayerDataProvider;
}

```

Call `ConsumeLife` method to consume life :

```
playerData.ConsumeLife();
```

Call `GiveNewLife` method to restore life:

```
playerData.GiveNewLife();
```

Call `AddUnlimTime` method to add unlimited lives time:

```
var timeSpan = TimeSpan.FromMinutes(5);
playerData.AddUnlimTime((float)timeSpan.TotalHours);
```

## Demo

An example scene is included in the project that will show how life system is working. Open `DemoScene` from the `Demo` folder and click play button, you will see the following on the screen:





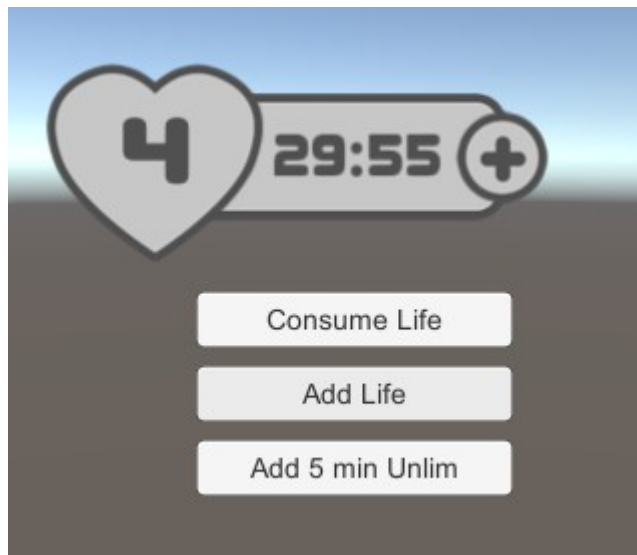
“Consume Life” button - decrease player life.

“Add Life” button - restore player life.

“Add 5 min Unlim” - adds unlimited lives to player for 5 minutes.

Click the “Consume Life” button, player life will be consumed and life restore timer will be activated:





The timer will show how much time is left for the next life restore.

Click the “Add Life” button and all player lives will be restored to maximum.

Click the “Add 5 min Unlim” button to add unlimited lives for 5 minutes:



Lives indicator will now show that player has unlimited lives, and the timer will show when this period will be finished.

