Animated Health Bar Controller

Health bar controller that enables you to easily modify how your health bar displays HP of your player, enemies, objects or whatever you want.

Included

Source code Demo scene

Useage

To use controller, first You need to use namespace (one or both of these versions)

```
using Microlight.HealthBar;
using Microlight.HealthBar_NoTweens;
```

Then need reference to the health bar (one or both types)

```
[SerializeField] HealthBar _hpBar;
[SerializeField] HealthBar_NoTweens _hpBarNoTweens;
```

Before using health bar, it needs to be initialized with maxValue

```
_hpBar.Initialize(_maxHP);
```

After that any time You want to update health bar, just call UpdateHealthBar, passing in current health value, can be passed true bool to not use animation.

```
_hpBar.UpdateHealthBar(_hp);
```

If max health needs update, use SetMaxHealth (not animated, current hp value not changed)

```
_hpBar.SetMaxHealth(100f);
```

FadeBar enables You to fade in or fade out the health bar

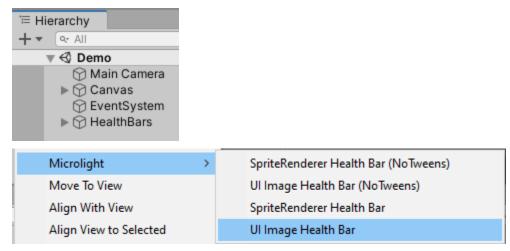
```
_hpBar.FadeBar(true, 1f);
```

If need to override shake or heal scale settings for just one call, override chaining is enabled

```
_hpBar.OverrideShake(0.5f, 50, 1f).UpdateHealthBar(_hp);
_hpBar.OverrideHealScale(0.5f).UpdateHealthBar(_hp);
```

Setup

Right click anywhere in your Hierarchy -> Microlight -> Choose one of the Health Bar types you need.



Controller is designed with DOTween library in mind but supports non Tween version which doesn't include animations.

Settings

The Tween version has all of the features while the non-Tween version has some of the features.



First option is the type of the bar, the Sprite Renderer version (World Object) which is suitable for world objects like health bars inside the world that follows the player. Second option is the Image version which goes onto the Canvas and is a regular UI image.



Here are references to the Sprite Renderers and Images that are representing the background of the health bar, primary bar that displays health points and ghost bar which can be turned off in settings.

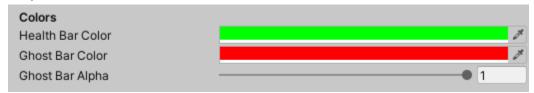


Adaptive color enables bars to change color based on which % bar is, for example red color at 10% and green color at 90% (modifiable).

Animated enables the bar to be animated, instead of just getting to position.

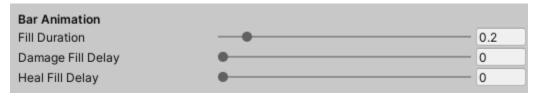
Ghost bar is a bar that is animated after the primary bar and basically displays how much damage the player took or how much the player has been healed, ghost bar is disabled if animation is turned off.

Dual ghost bars enable a different color of bar for displaying hurt or heal animation. Disabled if adaptive color is used.



Here color is selected for bars but differs based on settings. Hover over labels for more information.

Ghost bar alpha is shown when the ghost bar is enabled and determines alpha of ghost bar.



Fill duration sets duration over which bar will reach intended value.

Damage and Heal fill delay determine how long the fill duration waits before starting.



Shake can be modified how long it will last (seconds), how much it will move around and intensity which defines frequency of shake.



Adaptive shake enables shake to be stronger or weaker based on how much health has been changed. Threshold defines that % of hp. For example, the above image shows that if a player loses 50% of health, the bar will shake a lot but if loses 1% of health, bar shake will be very mild.

Heal Scale		
Heal Scale	✓	
Adaptive Heal Scale		
Heal Scale Intensity	-	1.15

Heal scale enables the bar to scale up as heal animation is played.



Adaptive heal scale just as damage shake, enables heal scale to change based on how much health changes.

Tips

- -You can use any sprite. Just replace the default sprite.
- -Background bar is controlled in inspector while other bars should be controlled in settings.
- -If source code doesn't work in your case, feel free to change it and adapt.
- -System uses DOTween library, if You don't want to use that library, just delete the HealthBar script.