FullTween

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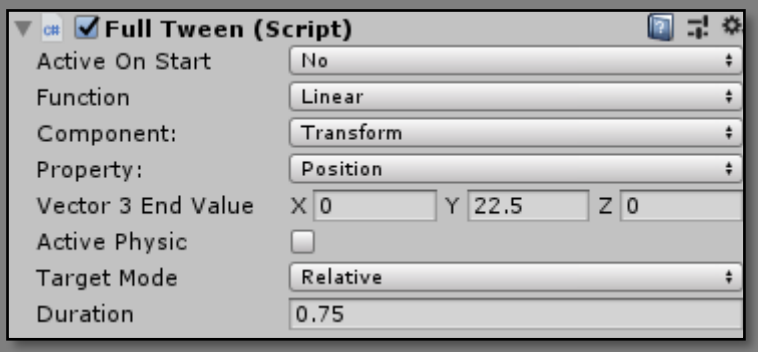
Presentation Video: https://youtu.be/iLzbTRM14M4
Tutorial Video: https://youtu.be/hFU4TSJA66k

(1) : https://easings.net/

PRESENTATION

Fulltween is a tool created to interpolate more easily a value to another, by using the basics Easing functions. The rule is simple, the user of this tool must select a component, (among the component list associated to the object), a property (for example, the position if the component chosen is a transform) and different characteristics.
The Fulltween component will interpolate the chosen property.

DESCRIPTION OF THE FUNCTIONALITIES



1. **Active On Start**
   The variable « Active On Start » is capable of determinate the Fulltween activation. Several options will be suggested to the user:
   - **No**: Isn't active during the scene starting.
   - **Yes**: Active during the scene starting. (A->B)
   - **Loop**: Interpolation loop between the initial value and the final value (A->B, A->B, …)
   - **Ping Pong:** The interpolation will be made in the 2 directions over and over again. (A->B, B->A, …)
2. **Function**
   The user has the possibility to choose which functions will be apply to the interpolation. 28 will be suggested.
3. **Component**
   Determines on which component the Fulltween can be apply.
4. **Property**
   Determines on which component variable selected, the Fulltween can be apply.
   The different types of properties are: Int16, Int32, Int64, UInt16, UInt32, UInt64, Single (float), Double (double), Vector3, Vector3Int, Vector2, Vector2Int, Vector4, and Color.
   Be careful, some variables of some component does not have to be interpolated. The user must choose its variable with precaution.
5. **End value or offset**
   This value can represent the final value if the target mode is absolute or if an offset is relative.
   In this case, the offset will be ad to the initial value of the chosen property.
6. **Active Physic**
   Fulltween will be updated in the Update () function or FixedUpdate ().
7. **Target Mode**
   Determines if the final value is calculated in a relative or absolute way.

Duration
Duration of the interpolation between the two values.

FullTween

DESCRIPTION OF THE SCRIPT

Seven functions will be suggested to the user.

- `void StartFullTween(EStartValue value)`

This function allow the activation of the interpolation. Its parameters are based on a variable of EstartValue type. EStarValue is an enum composed of two values (InitialValue or CurrentValue).
The initial value is determined during the Awake () function. The CurrentValue is the actual value of the chosen property.

- `void Stop(EStopType type)`

The Stop function can stop the interpolation. Its parameters are based on a variable of EStopType type. EStopType is an ennum composed of three values (CurrentValue, StartValue or EndValue).

- `void SetEndValue(object value)`

Assign of the final value. The user will be capable of enter, an absolute value or, a relative value. The value must be entered among the available types, showed in the description of the functionalities. Fulltween does not allow to modify the property in outstanding editor. So, the user must choose a same type value, as the property showed in the editor.

- `object GetEndValue()`

Return the absolute final value of the interpolation. The user must cast it in the property type showed in the editor.

- `void Reverse()`

Change the way of the interpolation.

- `void Pause()`

The Pause function pause the interpolation on its actual value.

- `void Resume()`

Restart the interpolation.

Besides of the functions, the user has access to various properties.

EFunction Function: Interpolation Type

Mode Mode: NORMAL, PING PONG or LOOP.

ETargetMode TargetMode: ABSOLUTE or RELATIVE.

float Duration: Duration of the interpolation

Estate State (Read Only): State of the FullTween.
Start (FullTween inactivated), Progress (In progress), End (Over).

float Progress (Read Only): Progress of the interpolation between 0 and 1.

Two actions are available, and will appear on precise states of the Fulltween.

```
Action OntweenStart;
Action OntweenEnd;
```