Short Scale String

PolyLabs LLC

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To report issues or bugs, contact support@polylabs.co

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Introduction

Short Scale String is a method that converts a numeric input (int, float, or double) and returns a string of the short scale representation of that value. When large numbers need to be represented in an easily readable fashion it is advantageous to use this method.

Short scale representation is a number naming system for powers of ten. In short scale representation, each term is a thousand times greater than the previous. This method is adopted throughout the US and UK as a recognized numbering scale. For example, the number 1,000,000 in short scale is written as 1 million. This continues through all accepted short scale terms up to and including centillion.

Remember that ShortScaleString returns a string type of the input value.

Parser Methods

The ShortScaleString script has 3 methods for parsing through the value types of int, float, and double. It is important to be conscious of the limitations of each value type. The three methods are:

ShortScaleString.parseDouble(double value, int precision, double startShortScale, bool useSymbol);

ShortScaleString.parseFloat(float value, int precision, flaot startShortScale, bool useSymbol);

ShortScaleString.parseInt(int value, int precision, int startShortScale, bool useSymbol);

value: the int, float, or double value for the corresponding parser that is the value to parse through.

precision: the decimal value of precision to represent when representing as a short scale value. Recall that each value type has limitations to the amount of precision that can be displayed. By default, this value is set to 3.

startShortScale: the value to begin showing numbers in short scale. This is useful if the user does not want to begin representing in short scale until a certain value point. All values lower than 1000 are represented by their regular value. By default, this value is set to 1,000,000.

useSymbol: when set to true, this will use single symbols to represent the postfix in place of the full written version postfix. Currently as of version 1.1, the single symbol postfix supports only up to Decillion. Customizing the internal list is possible, and per case is recommended as there is no universal agreed upon notation for Short Scale notation symbols.

Example

The following code snippet shows the ease of using the ShortScaleString method. This example is used in the demo scene of the asset.

```
1 using UnityEngine;
2 using System.Collections;
3 using UnityEngine.UI;
4
5 public class ShortScaleExample : MonoBehaviour {
6
7     public InputField inputTarget;
8     double inputValue;
9     public Text outputTarget;
10
11    void Update () {
12
13        inputValue = double.Parse (inputTarget.text);
14        outputTarget.text = ShortScaleString.parseDouble (inputValue);
15
16    }
17 }
```

On line 14, the text component of the outputTarget text object is set to the string returned form the method. Notice that “inputValue” is the only parameter provided. This is allowed because the other parameters automatically take on their default values if they are left out.

Because the given example pulls the string from an inputField, the double.Parse method is used to retrieve the correct value on line 13.