

zFPS Pro – Measure FPS and Ticks

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Version: 1.1 (Unity 6.3 LTS, 6000.3 and newer)

Introduction

This drag-and-drop component gives you instant information about frames per second – at a configurable interval – and the amount of Ticks done inbetween each frame.

The Pro version has the extended functionality to visualize the Frames per second over any number of samplings, with statistics of Min/Max and Avg. performance during this period as well as Ticks.

The gathering and storing of data; frame-averages per time slice, the time actually spent and the number of ticks seen in the slice – has **zero impact on the GC** due to usage of a custom lightweight ring buffer solution.

Getting Started

- 1) Open the 'DemoScene' scene under 'Assets\DigitalSoftware\zFPS_Pro\DemoScene\'
- 2) Press Play
- 3) Select time-span in Ticks between spawning exploding balls, that impact other physical balls and cost CPU performance for each.

Using zFPS Pro in a project

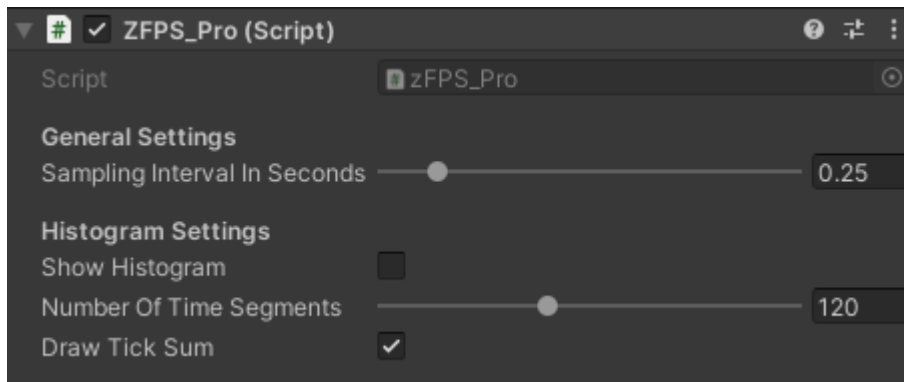
This is a very easy to use component – drag-drop the '*zFPS_Pro_MeasureFpsAndTicks*' prefab into a scene or another prefab to quickly add the Frames and Ticks measurement and displaying it in the UI.

The UI canvas is set to be auto-adjustable, on a 4K canvas.

This means it maintains the aspect ratio even for normal HD (1920x1080) and other resolutions. Only if using the solution on a mobile phone with an unusual aspect ratio, or a very modern fine-detail display, could there be a need to adjust the text size – this can be done by editing the prefab to your needs.

To enable the Histogram functionality, either check the prefab option 'Show Histogram' or call the public function `EnableHistogram` from code.

Configuring the zFPS Pro Settings



On the prefab '*zFPS_Pro_MeasureFpsAndTicks*' there is the following setting;

Sampling Interval in Seconds – this setting defines how long time-span we should segment each interval for averaging the FPS value at. Set a very low value to show instant indication of frame-drops, set a higher value for a more stable view of average frame count. Default value is 0.25, giving an update of 4 times per second. This is a good medium for most situations.

Show Histogram – Check this to enable showing the histogram showing the historical view of Frames per Seconds and Ticks.

Number Of Time Segments – Number of segments to keep in the history. Impacts the horizontal resolution of the graph as it is automatically resized to make sure all time-annotations fit. This setting can only be set at start-up, any changes at once started is ignored, to keep the it GC free.

Draw Tick Sum – Checkbox selecting if the Tick bars are to be drawn in the histogram. Set to true by default. Can be toggled at run-time when running in the editor.

Further support

Head over to official support forums at <https://community.digitalsoftware.se/> or the Discord at <https://discord.gg/fyqtxZt>