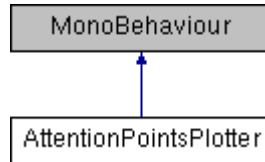


AttentionPointsPlotter Class Reference

Draws the gaze point positions as a point cloud, or, if the use filtering toggle is on, with a single bubble sprite with smoother movements. [More...](#)

Inheritance diagram for AttentionPointsPlotter:



Public Attributes

int **PointCloudSize** = 10

Number of gaze points in point cloud. [More...](#)

Sprite **PointSprite**

Sprite to use for gaze points in the point cloud. [More...](#)

float **PointScale** = 0.1f

Scale to draw the point sprites in the point cloud. [More...](#)

float **VisualizationDistance** = 10f

Distance from screen to visualization plane in the World. [More...](#)

float **FilterSmoothingFactor** = 0.15f

How heavy filtering to apply to gaze point bubble movements. 0.1f is most responsive, 1.0f is least responsive. [More...](#)

GameObject **gameObject**

Properties

bool **UseFilter** [get, set]

Private Member Functions

void **Start** ()

void **Update** ()

void **InitializeGazePointBuffer** ()

void **InitializeGazePointCloudSprites** ()

void **UpdateGazePointCloudVisibility** ()

bool **IsNotTooOld** (GazePoint gazePoint)

void **UpdateGazeBubblePosition** (GazePoint gazePoint)

void **UpdateGazePointCloud** (GazePoint gazePoint)

void **UpdateGazeBubbleVisibility** ()

int **Next** ()

Vector3 **ProjectToPlaneInWorld** (GazePoint gazePoint)

Vector3 **Smoothify** (Vector3 point)

Private Attributes

GazePoint	_lastGazePoint = GazePoint.Invalid
GazePoint[]	_gazePoints
int	_last
GameObject[]	_gazePointCloudSprites
SpriteRenderer	_gazeBubbleRenderer The gaze bubble sprite is attached to the GazePlotter game object itself. More...
bool	_useFilter = false
bool	_hasHistoricPoint
Vector3	_historicPoint

Static Private Attributes

const float **MaxVisibleDurationInSeconds** = 0.5f

Detailed Description

Draws the gaze point positions as a point cloud, or, if the use filtering toggle is on, with a single bubble sprite with smoother movements.

Member Function Documentation

◆ InitializeGazePointBuffer()

void AttentionPointsPlotter.InitializeGazePointBuffer ()

private

InitilalizeGaxePointBugger initializes the _gazePoints array.

◆ ProjectToPlaneInWorld()

Vector3 AttentionPointsPlotter.ProjectToPlaneInWorld (GazePoint gazePoint)

private

Converts the gaze point on the screen to the 3D point in the VR Environment.

Parameters

[in] **gazePoint** The point at which the viewer is gazing at. @

Returns

The 3D point in virtual environment.

◆ Smoothify()

Vector3 AttentionPointsPlotter.Smoothify (Vector3 **point**)

private

Smoothify method smoothens a given Vector3 point.

Parameters

[in] **point** is a point of type Vector3.

Returns

Smoothed point.

◆ Start()

void AttentionPointsPlotter.Start ()

private

Start method is called on the frame when a script is enabled just before any of the Update methods are called the first time.

◆ Update()

void AttentionPointsPlotter.Update ()

private

Update method is called every frame, if the MonoBehaviour is enabled.

◆ UpdateGazePointCloud()

void AttentionPointsPlotter.UpdateGazePointCloud (GazePoint **gazePoint**)

private

UpdateGazePointCloud updates the gaze points of the viewer for each frame.

Member Data Documentation

◆ _gazeBubbleRenderer

SpriteRenderer AttentionPointsPlotter._gazeBubbleRenderer

private

The gaze bubble sprite is attached to the GazePlotter game object itself.

◆ FilterSmoothingFactor

float AttentionPointsPlotter.FilterSmoothingFactor = 0.15f

How heavy filtering to apply to gaze point bubble movements. 0.1f is most responsive, 1.0f is least responsive.

◆ PointCloudSize

int AttentionPointsPlotter.PointCloudSize = 10

Number of gaze points in point cloud.

◆ PointScale

float AttentionPointsPlotter.PointScale = 0.1f

Scale to draw the point sprites in the point cloud.

◆ PointSprite

Sprite AttentionPointsPlotter.PointSprite

Sprite to use for gaze points in the point cloud.

◆ VisualizationDistance

float AttentionPointsPlotter.VisualizationDistance = 10f

Distance from screen to visualization plane in the World.

The documentation for this class was generated from the following file:

- /Users/vineelgannu/Documents/Doxygen/AttentionPointsPlotter File/AttentionPointsPlotter.cs

