3D Radar Builder

DaiMangou.ProRadarBuilder.Editor.MiniMapModule Class Reference

Minimap Module

Public Member Functions

Sprite MaskSprite ()

generates are sprite specificially used for the mask layer of the Radar

• Mesh ProceduralMapQuad ()

Public Attributes

MapType mapType = MapType.Realtime

Choose between Realtime minimap or a stati minimap

• Sprite MapTexture

Texture to be used for static minimaps

• bool generated

Check if the map has been generated

• bool calibrate

Determine if the static minimap is being calibrated

GameObject Map

the objet which will use the Map texture and Masked Material

• GameObject Mask

the object which will use the mask material

float SavedSceneScale

Cashe of the SceneScale vlaue

• float MapScale = 1

The value set during calibratin of ststic minimap

• float SavedMapScale

Cashe of the MapScale vlaue

• float Scalingfactor

Determines by what rate the minmap is scales at rintime

• Material MapMaterial

Masked material

Material MaskMaterial

Mask Material

• LayerMask layer

The layer on which the minimap will be rendered

• RenderTexture renderTexture

the RenderTexture to be used with the realtime minimap

Camera RealtimeMinimapCamera

The camera reading the RenderTexture for the Minimap

• float CameraHeight

the position of the RealtimeMinimapCamera in the Y axis

• int OrderInLayer = -1

DaiMangou.ProRadarBuilder.Editor.OptimizationModule Class Reference

Options for optimizing the radars functions

Public Attributes

• int poolSize

pool size for objects you wish to track

• bool **SetPoolSizeManually** = false

Determines if the blip will be using pooling

• ObjectFindingMethod objectFindingMethod = ObjectFindingMethod.Recursive

Options for usng two diferent object finding methods

• bool RemoveBlipsOnTagChange

if true, blips will be removed if the object they track has lost its original tag

• bool RemoveBlipsOnDisable

if true, blips will be removed if the object they track has been disabled

• bool RequireInstanceObjectCheck

if true and you are using Recursive optimization method then you can call _3DRadar.radar3D.doInstanceObjectCheck() trigger object search;

• bool RecalculatePoolSizeBasedOnFirstFoundObjects

By setting this to true, you can ensure that evne if your pool value at atart is greater then the actual amount of objects that can be found , your pool value will be reset to the amount of objects found ao that recusrsive searching is avoided

DaiMangou.ProRadarBuilder.Editor.RadarBlips3D Class Reference

Public Attributes

bool DoRemoval = false

Tell the blip to do a removal of blips if the Recursive optimization method is used

bool Instanced

checks if all blips have ben instanced

bool IsActive

check if the blip is set turned on or off

• bool ShowBLipSettings

INTERNAL USE ONLY

• bool ShowSpriteBlipSettings

INTERNAL USE ONLY

• bool ShowMeshBlipSettings

INTERNAL USE ONLY

• bool ShowPrefabBlipSettings

INTERNAL USE ONLY

• bool IsTrackRotation

Determines if the blip will be tracking the rotation of its target

• bool BlipCanScleBasedOnDistance

Determines if th blips can scale by distance

• bool ShowTrackingLineSettings

INTERNL USE ONLY

bool UseTrackingLine

Determines if we should use tracking lines or not.

bool UseBaseTracker

Determines if we should use basetrackers or not

bool ShowBaseTrackerSettings

INTERNAL USE ONLY

bool lockX

Determines if the X rotation of the tracked object should be locked to 0

bool lockY

Determines if the Y rotation of the tracked object should be locked to 0

bool lockZ

Determines if the Z rotation of the tracked object should be locked to 0

bool UseLOD

Determines if the mesh blip will use a the Radar Builder LOD system

bool ShowLODSettings

INTERNAL USE ONLY

bool ShowGeneralSettings

INTERNAL USE ONLY

• bool ShowAdditionalOptions

INTERNAL USE ONLY

bool AlwaysShowBlipsInRadarSpace

determines if the blip should always remeing inside the radar

bool ShowLowMeshSetings

INTERNAL USE ONLY

bool ShowMediumMeshSettings

INTERNAL USE ONLY

• bool ShowHighMeshSettings

INTERNAL USE ONLY

bool ShowOptimizationSettings

INTERNAL USE ONLY

• bool SmoothScaleTransition

if you are using Always Show and Scale By Distance, this will ensure that you have a smooth transition from the moment your blip passes the Tracking Bounds to the moment is is scales to its minimaum scale

• Sprite icon = new Sprite()

The blip icon if the blip is a sprite

• Sprite **BaseTracker** = new Sprite()

The base tracker sprite

• Transform prefab

Prefab blip

• string State = ""

INTERNAL USE ONLY

• string **Tag** = "Untagged"

INTERNAL USE ONLY

• Material SpriteMaterial

The material used for the sprite blip

• Material TrackingLineMaterial

The material used for the tracking line ///

Material BaseTrackerMaterial

The material used for the base tracker

Mesh mesh

The mesh blip mesh when LOD is not active

Mesh Low

The low poly mesh when LOD is active

Mesh Medium

The medium poly count mesh when the LOD is active

Mesh High

The high poly count mesh when the LOD is active

• Material[] **MeshMaterials** = new Material[1]

All mesh materials usd by the Mesh

• Color **colour** = new Color(1F, 0.6F, 0F, 0.8F)

THe colour of the material

• Color **TrackingLineStartColour** = new Color(1F, 0.435F, 0F, 0.5F)

The colour start of the tracking line

• Color **TrackingLineEndColour** = new Color(1F, 0.435F, 0F, 0.5F)

The end colour of the tracking line

Color BaseTrackerColour = new Color(1F, 0.435F, 0F, 0.5F)

The colour ued by the base tracker material

• float BlipSize = 1

The size of the blip

• const float **DynamicBlipSize** = 0.01f

The default minimum scale of the blip

• float **BlipMinSize** = 0.5f

The minimum size of the blip

• float BlipMaxSize = 1

The maximum size of the blip

float TrackingLineDimention = 0.02F

The width of the tracking line

• float LowDistance

The distance at which the LOW mesh will replace the current mesh of the mesh blip

• float MediumDistance

The distance at which the MEDIUM mesh will replace the current mesh of the mesh blip

float HighDistance

The distance at which the HIGH mesh will replace the current mesh of the mesh blip

• float BaseTrackerSize = 0.5f

The scale of th base tracker

• int NumberOfBLips

INTERNAL USE ONLY

int count

INTERNAL USE ONLY

• int MatCount = 1

INTERNAL USE ONLY

• int **Layer** = 0

INTERNAL USE ONLY

• List< GameObject > TrackingLineObject = new List<GameObject>()

A list of All tracking lines

• List< GameObject > gos = new List<GameObject>()

A list of the objects being tracked

• List< Transform > RadarObjectToTrack = new List<Transform>()

A list of the actual blips you see in your radar

- List< GameObject > BaseTrackers = new List<GameObject>()
- CreateBlipAs CreateBlipAs

Determines what the blip should be created as , prefab or sprite

• int **ObjectCount** = -1

records the amount of tracked objects in the radr far this blip type

• int OrderInLayer = 1

the order in layer of the blip

• SortingLayer sortingLayer

Sorting layer of the sprite blip

• OptimizationModule optimization = new OptimizationModule()

Methods of optimizing radar performance

DaiMangou.ProRadarBuilder.Editor.RadarCenterObject3D Class Reference

Public Attributes

bool Instanced

checks if all blips have ben instanced

- bool IsActive
- bool ShowBLipSettings

INTERNAL USE ONLY

• bool ShowSpriteBlipSettings

INTERNAL USE ONLY

bool ShowMeshBlipSettings

INTERNAL USE ONLY

bool ShowPrefabBlipSettings

INTERNAL USE ONLY

bool IsTrackRotation

Determines if the blip will be tracking the rotation of its target

bool lockX

Determines if the X rotation of the tracked object should be locked to 0

bool lockY

Determines if the Y rotation of the tracked object should be locked to 0

bool lockZ

Determines if the Z rotation of the tracked object should be locked to 0

bool ShowGeneralSettings

INTERNAL USE ONLY

bool AlwaysShowCenterObject

Determines if the enter object or center blip should alwats be shown in th radar

bool CenterObjectCanScaleByDistance

Determines if the center object (center blip) can scale by distance

bool ShowAdditionalOptions

INTERNAL USE ONLY

• bool ShowTrackingLineSettings

INTERNL USE ONLY

bool UseTrackingLine

Determines if we should use tracking lines or not.

• bool UseBaseTracker

Determines if we should use basetrackers or not

bool ShowBaseTrackerSettings

INTERNAL USE ONLY

bool SmoothScaleTransition

if you are using Always Show and Scale By Distance , this will ensure that you have a smooth transition from the moment your blip passes the Tracking Bounds to the moment is is scales to its minimaum scale

• Sprite icon = new Sprite()

The blip icon if the blip is a sprite

• Sprite BaseTracker = new Sprite()

The base tracker sprite

• Transform prefab

Prefab blip

string State = ""

INTERNAL USE ONLY

• string **Tag** = "Player"

INTERNAL USE ONLY

• Material SpriteMaterial

The material used for the sprite blip

• Material TrackingLineMaterial

The material used for the tracking line ///

Material BaseTrackerMaterial

The material used for the base tracker

Mesh mesh

The mesh blip mesh when LOD is not active

• Material[] **MeshMaterials** = new Material[1]

All mesh materials usd by the Mesh

• Color **colour** = new Color(1F, 0.435F, 0F, 0.5F)

THe colour of the material

• Color **TrackingLineStartColour** = new Color(1F, 0.435F, 0F, 0.5F)

The colour start of the tracking line

• Color **TrackingLineEndColour** = new Color(1F, 0.435F, 0F, 0.5F)

The end colour of the tracking line

• Color **BaseTrackerColour** = new Color(1F, 0.435F, 0F, 0.5F)

The colour ued by the base tracker material

• float BlipSize = 1

The size of the blip

• float **TrackingLineDimention** = 0.2f

The width of the tracking line

• const float **DynamicBlipSize** = 0.01f

The default minimum scale of the blip

• float **BlipMinSize** = 0.5f

The minimum size of the blip

• float BlipMaxSize = 1

The maximum size of the blip

• float BaseTrackerSize = 0.5f

The scale of th base tracker

• int **Layer** = 0

INTERNAL USE ONLY

• int OrderInLayer = 1

the order in layer of the blip

• GameObject CenterBlip

The blip at the center of the radar

• Transform CenterObject

The object being tracked to and used to represent the CenterBlip

• int MatCount = 1

INTERNAL USE ONLY

• CreateBlipAs _CreateBlipAs

Determines what the blip should be created as , prefab or sprite

• GameObject BaseTrackerObject

Object which will sit on the y plane of the radar at all time

• GameObject TrackingLine

Line wich will indicate distance in height from the centerobject to the radar </summary

DaiMangou.ProRadarBuilder.Editor.RadarDesign3D Class Reference

Public Attributes

float RadarDiameter = 1

This is the Diameter of the radar, this value will directly change the scale of the Radars child object "Designs" once UseSceneScale is false

• float SceneScale = 100.0f

This is the amound of the scene that the radar is able to 'see' in order to collect dats on things to track and display

• float **TrackingBounds** = 1

The range in which all blips can be shown in the radar

float InnerCullingZone = 0f

The diameter of the zone at the center of the radar in which all blips will ce culled

float RadarRotationOffset = 0f

INTERNAL USE ONLY

• const float ConstantRadarRenderDistance = 4

Do not replace this value

float xPadding

The padding on the x and Y axis of the radar system

• RadarPositioning radarPositioning = RadarPositioning.Snap

Determins if the radar will ise Manual position or Snap Positioning

• SnapPosition snapPosition = SnapPosition.BottomLeft

Determines where in scren space the radar system will be positioned

Frontls frontls = Frontls.North

Determining what defines the forward facing position of the radar

Rect RadarRect

INTERNAL USE ONLY

• int **Count** = 0

INTERNAL USE ONLY

• int **DesignsCount** = 0

INTERNAL USE ONLY

• bool UseLocalScale

Determines if we should use the scale of the Radar "Designs" child object instead of the Radar Diameter

• bool **Visualize** = true

INTERNAL USE ONLY

• bool LinkToTrackingBounds

Determines if the tracking bounds values will always be the same as

• bool ShowScaleSettings

INTERNAL USE ONLY

bool ShowRenderCameraSettings

INTERNAL USE ONLY

bool ShowPositioningSettings

INTERNAL USE ONLY

• bool **IgnoreDiameterScale** = false

When true, the radar; diameter (Sale of the Radars "Designs" child object) when scales to a vlue greater or less than one will not prompt the radar system to reposition itslf automatically to maintain a correct position in screen space

• bool ManualCameraSetup

INTERNAL USE ONLY

bool UseMainCamera

determines if we will be using the gameobject in the scne with the tag "Main Camera"

bool _3DSystemsWithScreenSpaceFunction

Determines if the 3D Radar will also be using the screen space system

• bool _3DSystemsWithMinimapFunction

Determines if the radar can also be a minimap

bool ShowMinimapSettings

INTERNAL USE ONLY

• GameObject DesignsObject

INTERNAL USE ONLY

Camera camera

The camera which will be the camera your player views the world through at any time

• Camera renderingCamera

The camera whuch will only render radar systems, (These camera are automatically created for you)

• string CameraTag = "MainCamera"

INTERNAL USE ONLY

• List< RotationTarget > RotationTargets = new List<RotationTarget>()

The list of Rotation targets

Vector3 Pan = new Vector3()

The pan of the blips in the radar

DaiMangou.ProRadarBuilder.Editor.RotationTarget Class Reference

Public Attributes

bool ShowDesignSetings

called only from editor , and is not necessary at runtime

bool UseY

When true, the z rotation will be the same as the Y rotation

bool FreezeX

Freeze rotation around particular axis

• float RotationDamping

Damping used to control rotation of particular design layer

string tag

the string tag you define

string FindingName

the name of the object you wish to find

• string InstancedObjectToTrackBlipName

The name of the instanced object you wish to target

• string InstancedTargetBlipname

the name of the instanced blip you wish to track

Rotations rotations

Selection between Inverse rotation and Proportional rotation

• GameObject TargetedObject

This may be a blip or any other object in scene

• GameObject Target

the object whose rotation you wish to target

• TargetObject ObjectToTrack = TargetObject.ThisObject

Selection of the way in which you wish to select and object

• TargetBlip target = TargetBlip.ThisObject

The blip you wish to target

• RetargetRotation RetargetedRotation = RetargetRotation.none

Determining what axis value we wish to pass to another axis value

• valueState ValueState = valueState.positive

A selection between positive and negative

• float AddedRotation = 90

this rotation value is usually used when using sprites