

- Vec4 [] is a 3 dimensional vector with particle mass data.

- Bounds is a range that particles can reach in 3D space.

İlişki tablosu: -Handler bir tane nFlexe sahip nFlex hiç handler'a sahip değil.

-Handler geri kalan tablolardan hepsine bir tane olmak üzere sahiptir ama o classlar handler'a sahip değildir.

-Bir handler'ın birden çok particle'ı olabilir ama bir particle'ın yalnızca bir tane handler'ı vardır.

Fonksiyonların hangi parametreleri aldığını da yaz.

- Surface recognizer ı dikkatli incele.

-Handlerı yaz.

Hash System

- PointIndice : int[]
- Intervalx : int
- Intervaly : int
- Intervalz : int
- Particles : Vec4 []
- Bounds : bounds
- Radius : float

- + GroupByCells();
- + SetData();
- + checkS();
- + ifExist();
- + ifDoesNotExist();
- + findID();

Surface Recognizer

- Particles: Vec4 []
- Groups: Hashmodel []
- Bounds : bounds
- ParticleNeighBounds : bounds

- + SetData();
- + FindDistance();
- + FindConstant();
- + FindGradientWeight();
- + FindNeighbourParticles();
- + FindSurfaceParticles();
- + FindBoundary();
- + GetParticleBound();
- + FindAreaCells();
- +FindID();
- + ReturnSurfParticles();
- + CallGradientKernel();

Particle Finder

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- +FindDimentionalIntervalNum();
- + FindId();
- +findBoundary();

Situational Surface Calculator

- Particles: Vec4 []
- Groups: VertexIndex []
- Bounds : bounds
- ParticleNeighBounds : bounds

- + findDistance();
- + findConstant();
- + findGradientWeight();
- + findNeighbourParticles();
- + findKernel();
- + findWeights();
- + weightedPos();
- + zhuAndBridson();

Marching Cubes

- Surface : float
- Cube : float[8]
- WindingOrder: int[]

- + GetSurface();
- +SetSurface();
- + Marching();
- + Generate();
- + March();
- + GetOffset();
- + VertexOffset();

Triangulation

- FlagIndex;
- Offset;
- EdgeFlags;
- idx;

- + SetEdgeVertex();
- + GetEdgeVertex();
- + MarchingCubes();
- + March();
- + EdgeConnection();
- + EdgeDirection();
- + CubeEdgeFlags();
- + TriangleConnectionTable();

IMarching

- Vector3 Vertices[];
- Int Vertice Indices;
- Float isolevel;

- + GetSurface();
- +SetSurface();
- + Generate();

Imarching is an interface class

Handler

- Length : int
- Particles : Vec4 []
- Groups : HashModel []
- TestDraw : int []

- + OnEnable();
- + OnDisable();
- + GetParticles();
- + GetIndices();
- + Update();
- + GetBounds();
- + OnFlexUpdate();
- + OnDrawGizmos();

NVIDIA Flex