## SpatialHashing

- m_hashMap
- m_cellSize
- m_mapSize
- m_firstLargePrimeNumber
- m_secondLargePrimeNumber
- m_thirdLargePrimeNumber
- m_initialNeighbourListSize

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+ SpatialHashing()
+ ~SpatialHashing()
+ initialiseSpatialHashing()
+ refreshHashmap()
+ clearHashmap()
+ searchFluidParticleNeighbours()
+ setCellSize()
- modulus()
- getNextPrimeNumber()
- discretizingVector()
- hashPosition()
- getNeighbouringCells()
- inListCheck()

m_spatialHashing

## SPHSolver

- m_fluidParticleList
- m_fluidNameList
- m_smoothingLength
- m_spatialHashing
- m_weightPoly
- m_weightPolyGradient
- m_weightPolyLaplacian
- m_weightPressureGradient
- m_weightViscosityLaplacian
- m_iteration
- m_visualizationType
- m_drawFluidParticles

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+ SPHSolver()
+ ~SPHSolver()
+ updateFluid()
+ getFluidParticlePositionList()
+ getFluidNameList()
+ getVisualizationType()
+ getFluidParticleList()
+ getDrawFluidParticles()
- calculateInterfaceTensionGradientComponent()
- calculateInterfaceTensionLaplacianComponent()
- calculatePressureForceComponent()
- calculateViscosityForceComponent()
- calculateSurfaceTennsionGradientComponent()
- calculateSurfaceTensionLaplacianComponent()
- KernelPoly()
- KernelPolyGradient()
- KernelPolyLaplacian()
- KernelPressureGradient()
- KernelViscosityLaplacian()
- normalizeVector()
- getFluidIdFromName()