

# The POF system

## View (GUI)

### View

- +Change Particle Count
- +Change Particle Size
- +Change Particle Appearance
- +Change Grid Size
- +Change Neighbor Area Size
- +Change Rendering Sensitivity

### Renderer

- +Triangulation

## Model

### Handler

```
vector4 ParticleDatas[]  
int particleIndices[]  
Float particleRadius;  
Struct Hash{  
    int ParticleDatas[];  
} groupedParticles[];
```

### Hasher

```
vector4 ParticleDatas[]  
Float particleRadius;  
  
Struct Hash{  
    int ParticleDatas[];  
} groupedParticles[];
```

### Surface Recognizer

```
+vector4 ParticleDatas[]  
  
+Struct Hash{  
    int ParticleIndex[];  
} groupedParticles[];  
  
+int surfaceParticleIndices[];
```

### MarchingScalarFinder

```
+vector4 ParticleDatas[]  
  
+int surfaceParticleIndices[];  
  
+Struct Hash{  
    int ParticleIndex[];  
} groupedParticles[];  
  
+int marchingCubesIndices[];
```

### MarchingCubes

```
+int marchingCubesIndices[];
```

## Controller

### Controller

- +Handler
- +Hasher
- +Surface Particle Recognizer
- +Marching Cubes
- +Group Neighbor Particles
- +Zhu Bridson
- +Others

### NVIDIA Flex

- +EditParticleParameters
- +Create Simulation