

## Mass-Spring-Network

### PREPARATION

1. Download Application4\_Stub
2. Read and Understand the Spring and Mesh structures in main.cpp

### Create Grid

Affected Location: flatIndex(), initMesh()

1. Complete the flatIndex(Uint x, Uint y) method, to map a 2D index to a 1D index
2. Create a uniform grid in initMesh consisting of connected triangles
3. init the render mesh
4. Take care of a proper initialization of all members of mesh
5. add springs to the network connecting the particles

### Simulation

Affected Location: idle()

1. Implement a simple mass-spring-simulations using Euler integration to solve the ODE
  - Apply global forces to the particles
  - Apply spring forces
  - Integrate new positions

**Tweek Parameters for a good visible result**