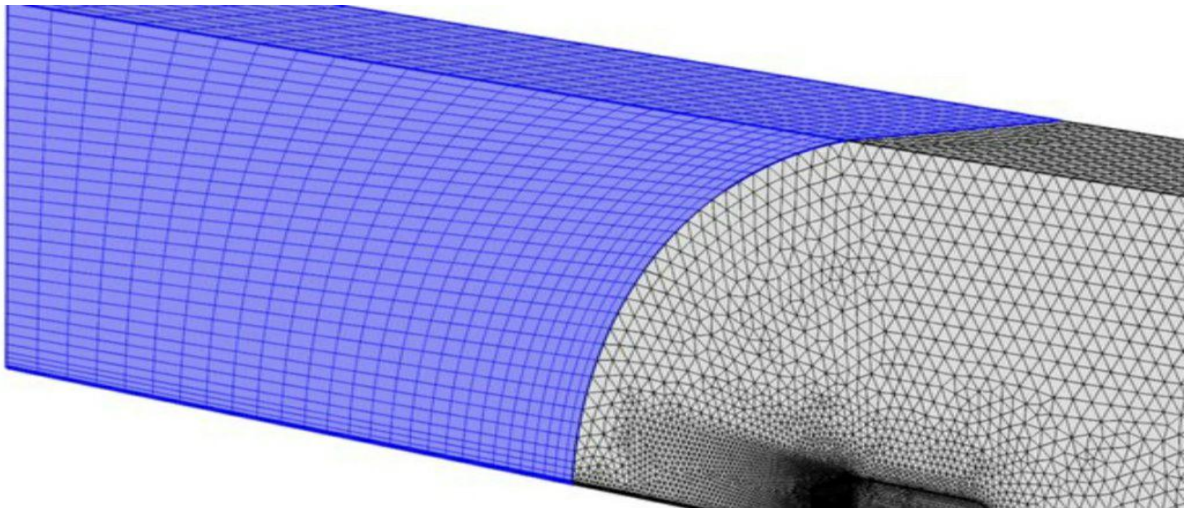
Mesh Types:

Meshing is discretization part of computing **finite element methods** to simulate a flow in a pipe, magnetic field around a magnet or similar problems to analyze a structure.

The higher the resolution of discretization, the finer the error in simulation. To overcome wasting too much compute power on plain parts, only turbulent volume of problem is discretized at higher resolution (i.e. more mesh surfaces) and rest of volume with relatively dull parts are given low resolution.



The parameters of choosing a mesh type:

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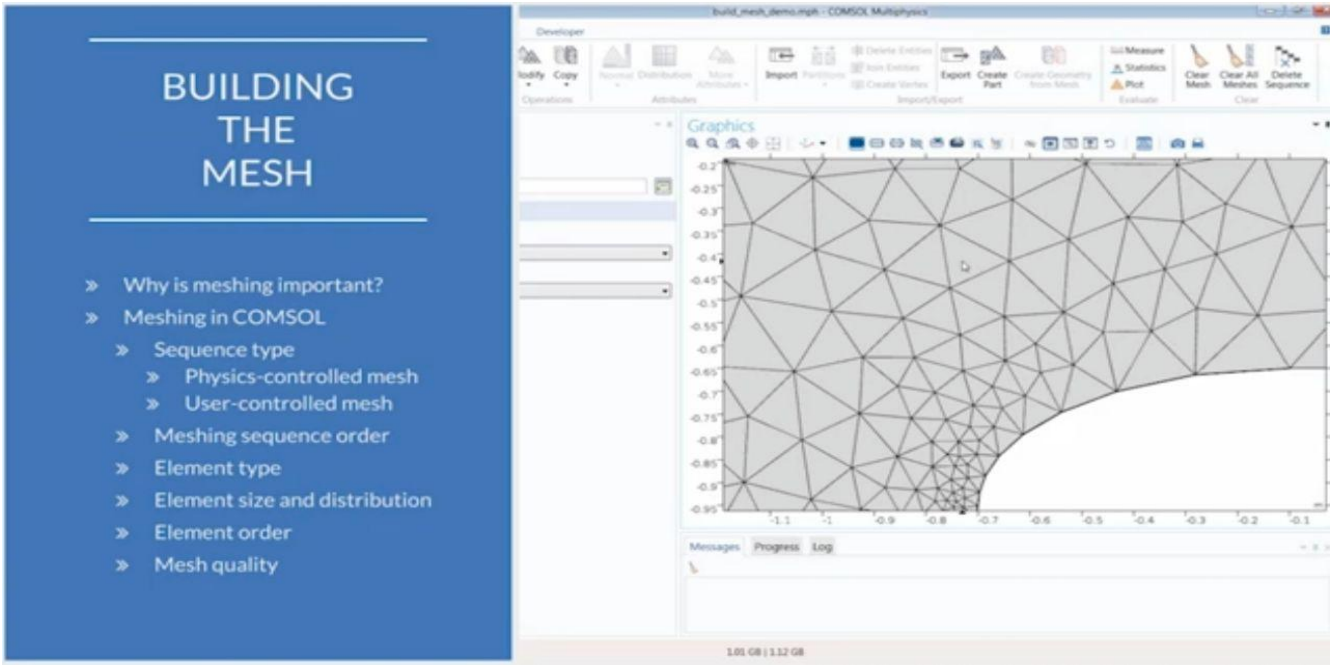

Basically choosing the mesh type is important depending on the element size, element type, element order, and mesh quality.

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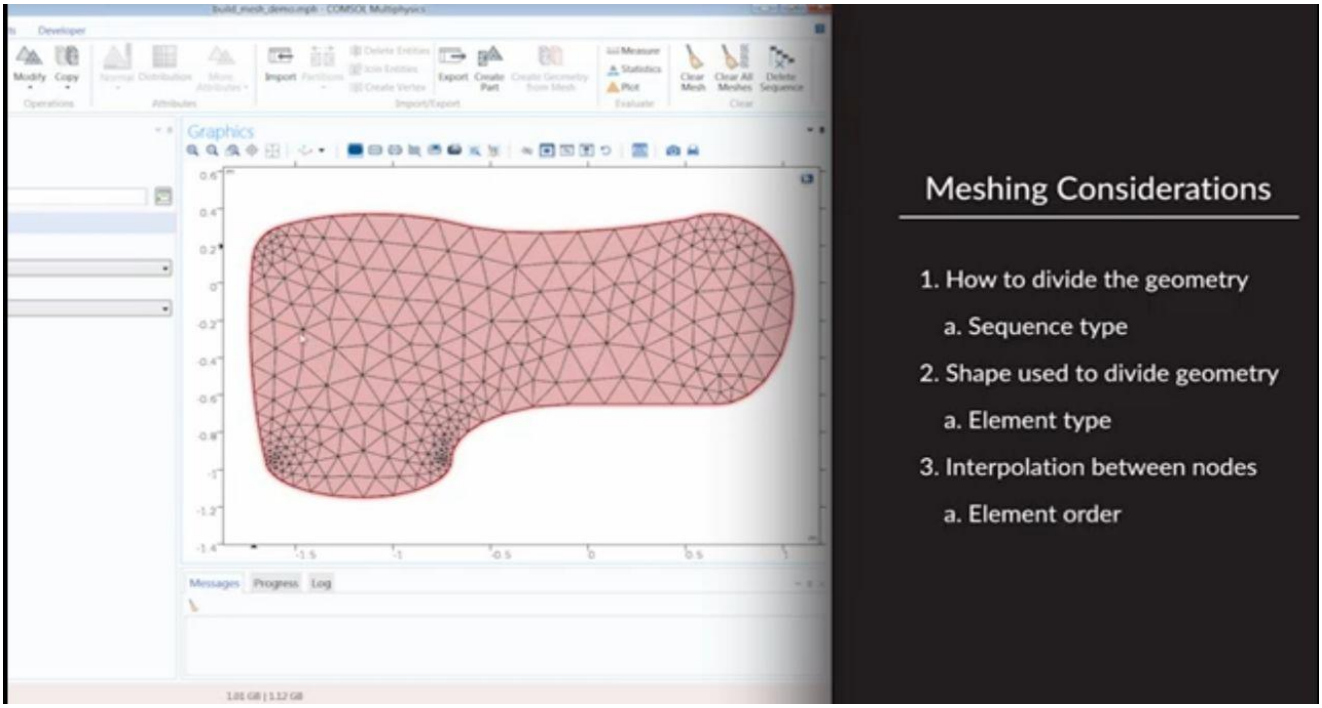

Types of mesh:

1. Extremely fine
2. Extra fine
3. Finer
4. Fine
5. Normal
6. Coarse
7. Coarser
8. Extra Coarse
9. Extremely Coarse

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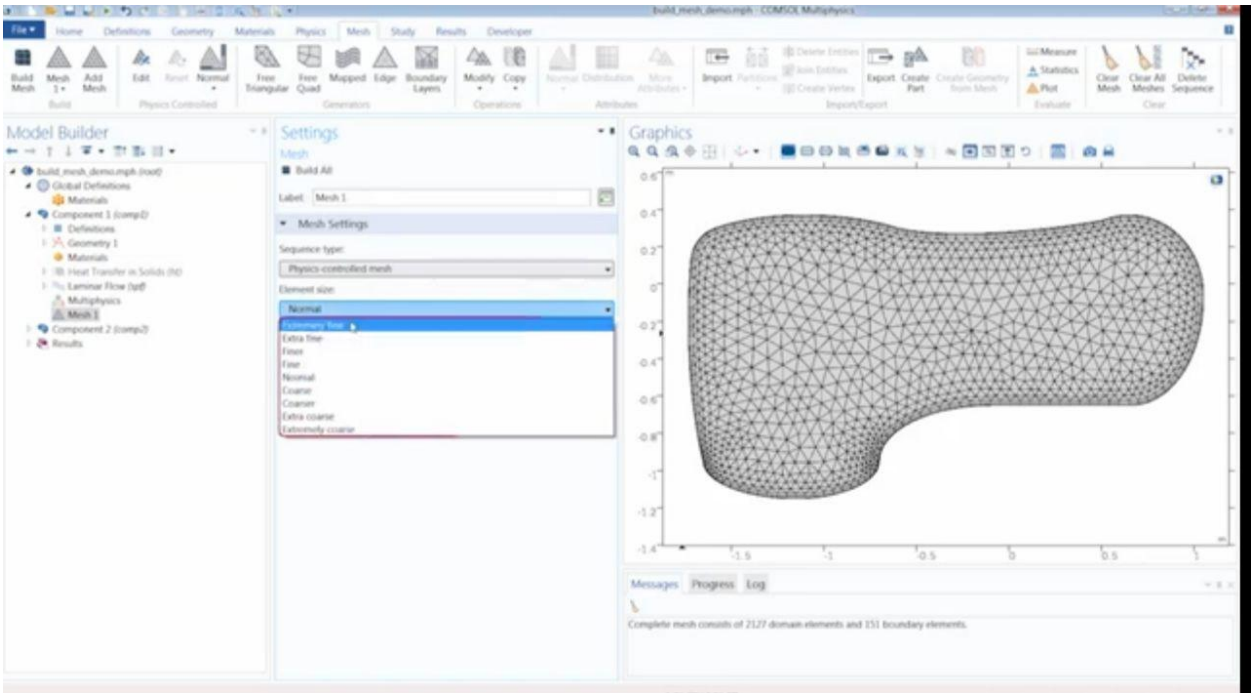

Checking the difference between the mesh types:

The normal setting:

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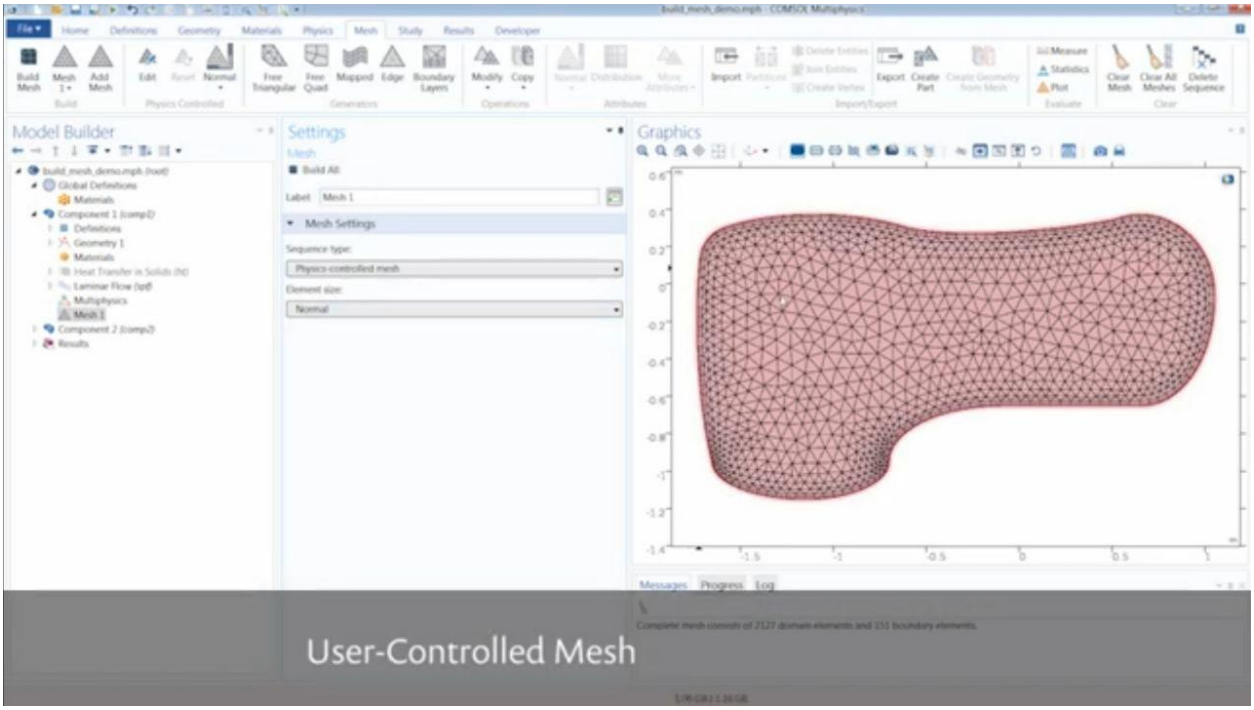
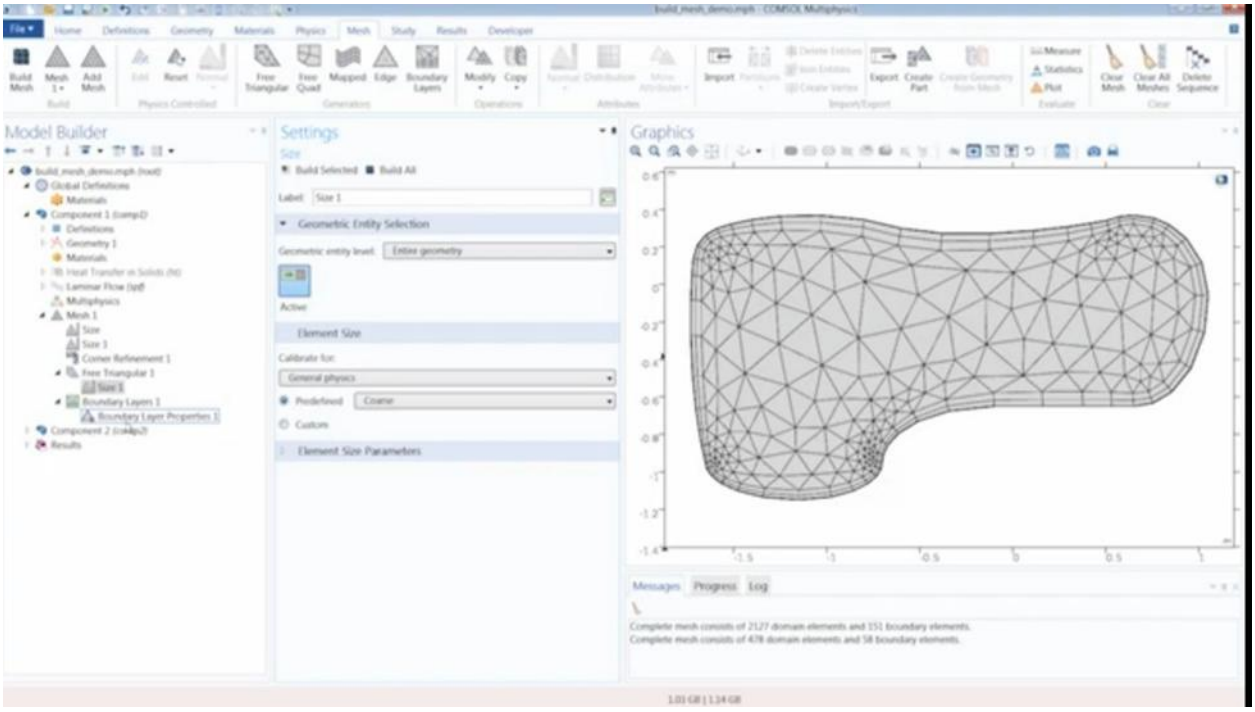


The coarse setting is demonstrated below:



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