



Workflow

- Define Reporting
 - Set plot frequency
 - Set data save frequency
 - Define FEM
 - Choose velocity/position basis function
 - Choose pressure/density basis function
 - Toggle low/high order energy
 - Choose quadrature order
 - Define Solver Settings
 - Toggle mass lumping
 - Toggle mass update
 - Toggle hourglass filter
 - Adjust artificial viscosity
 - Define Discretization Properties
 - Initial domain size
 - Domain refinement
 - Domain transformation
 - Time step / stop time
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- Compute Q_1 Mesh Topology
 - If Higher Order
 - Define edge nodes
 - Define center nodes
 - Assemble high-order topology info
 - Define Pressure DOF Mapping
 - Assemble List of Boundary DOF
 - Perform Mesh Transformation
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- Preallocate Memory Space
 - Compute Quadrature Values
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- Initialize Flow Field
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- If Strong Mass Conservation
 - One time assemble mass matrix
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- Compute Stable Time Step