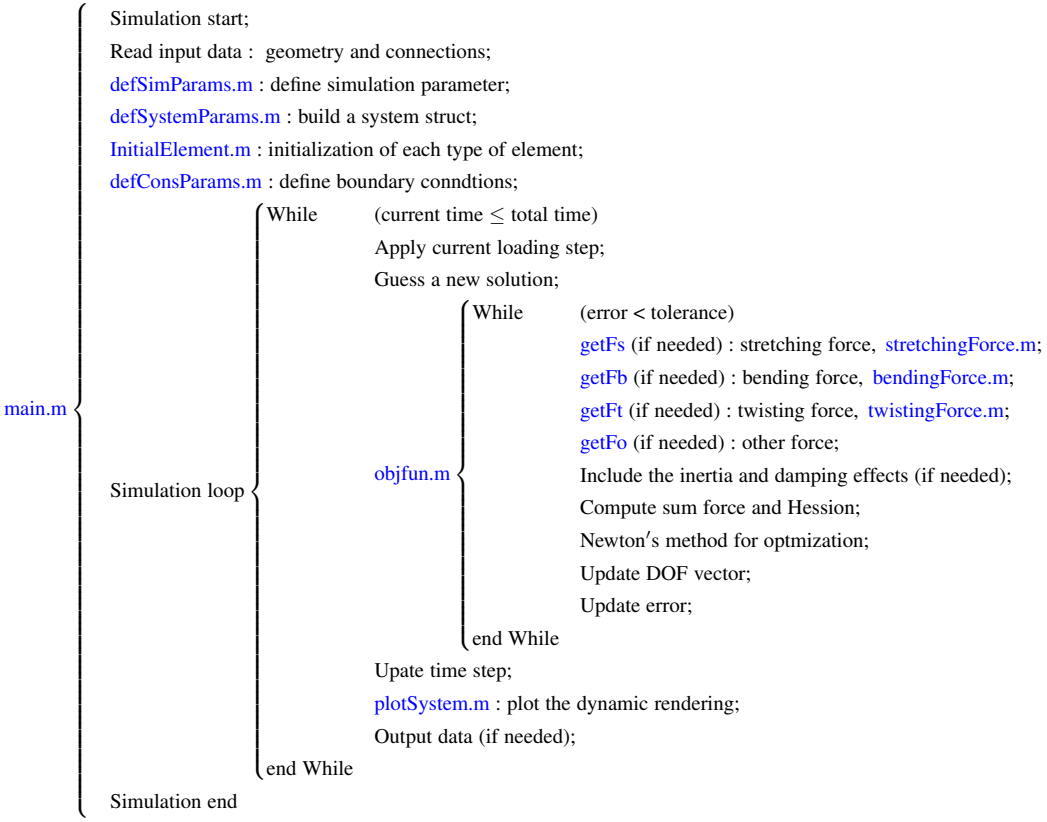
main.m
Simulation start;
Read input data : geometry and connections;
defSimParams.m : define simulation parameter;
defSystemParams.m : build a system struct;
InitialElement.m : initialization of each type of element;
defConsParams.m : define boundary conndtions;
Simulation loop
While (current time ≤ total time)
Apply current loading step;
Guess a new solution;
objfun.m
While (error < tolerance)
getFs (if needed) : stretching force, stretchingForce.m;
getFb (if needed) : bending force, bendingForce.m;
getFt (if needed) : twisting force, twistingForce.m;
getFo (if needed) : other force;
Include the inertia and damping effects (if needed);
Compute sum force and Hession;
Newton′s method for optmization;
Update DOF vector;
Update error;
end While
Upate time step;
plotSystem.m : plot the dynamic rendering;
Output data (if needed);
end While
Simulation end