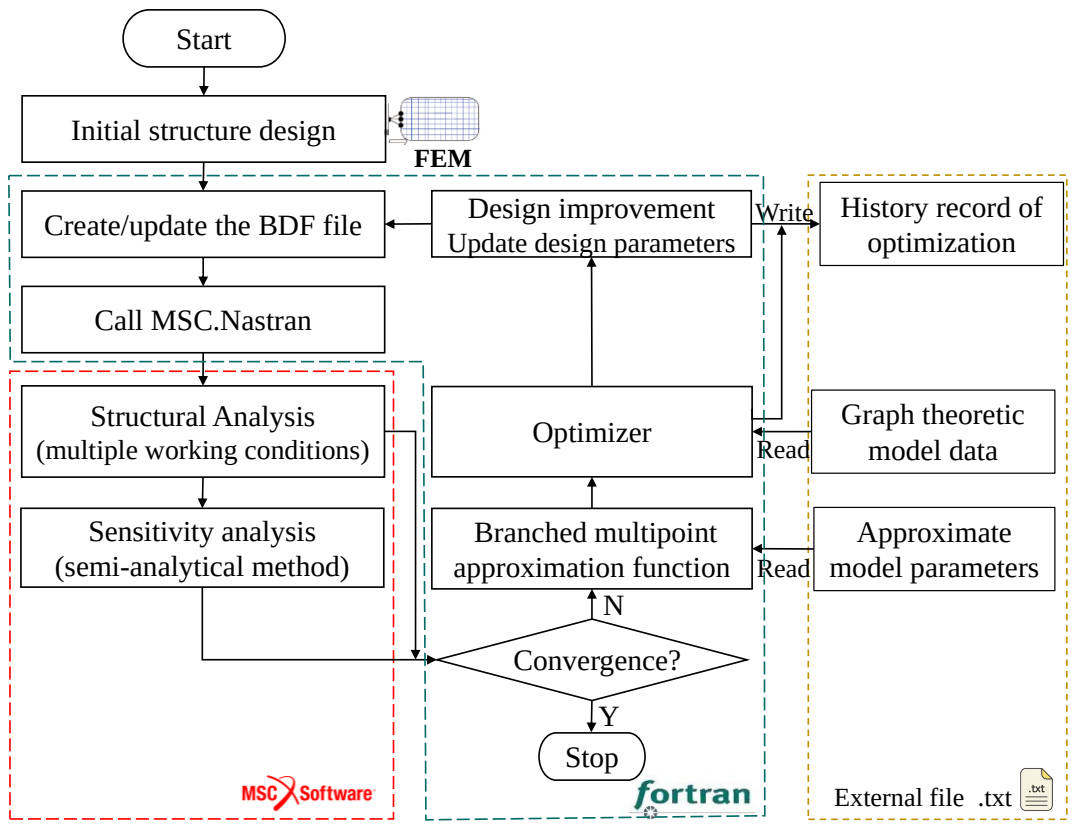
Start
Initial structure design
FEM
Create/update the BDF file
Call MSC.Nastran
Structural Analysis
(multiple working conditions)
Sensitivity analysis
(semi-analytical method)
MSC Software
Design improvement
Update design parameters
Write
History record of
optimization
Optimizer
Read
Graph theoretic
model data
Branched multipoint
approximation function
Read
Approximate
model parameters
N
Convergence?
Y
Stop
fortran
External file .txt
.txt