```
ModelProblem(): mp
  solid
                fluid
                                        flow0d
                             ale
         solid flow0d
                           fluid_flow0d
                                              fluid_ale
                               fluid_ale_flow0d
    fsi*
                                                     a -----b
                                                     a ← inherits from b
               fsi_flow0d*
                                                     implementation
                                                      ahead
ModelSolver(mp)
                     ms
mp = ModelProblem()
                                     # define problem object
   = ModelSolver(mp)
                                     # define solver object
ms.solve_nonlinear_problem() # solve the problem
```