```
ModelProblem(): mp
  solid
                                       flow0d
               fluid
                            ale
                           fluid_flow0d
                                             fluid_ale
        solid_flow0d
                              fluid_ale_flow0d
    fsi
               fsi_flow0d
                                                   a ← inherits from b
ModelSolver(mp)
                     ms
mp = ModelProblem()
                                   # define problem object
ms = ModelSolver(mp)
                                   # define solver object
ms.solve_nonlinear_problem() # solve the problem
```