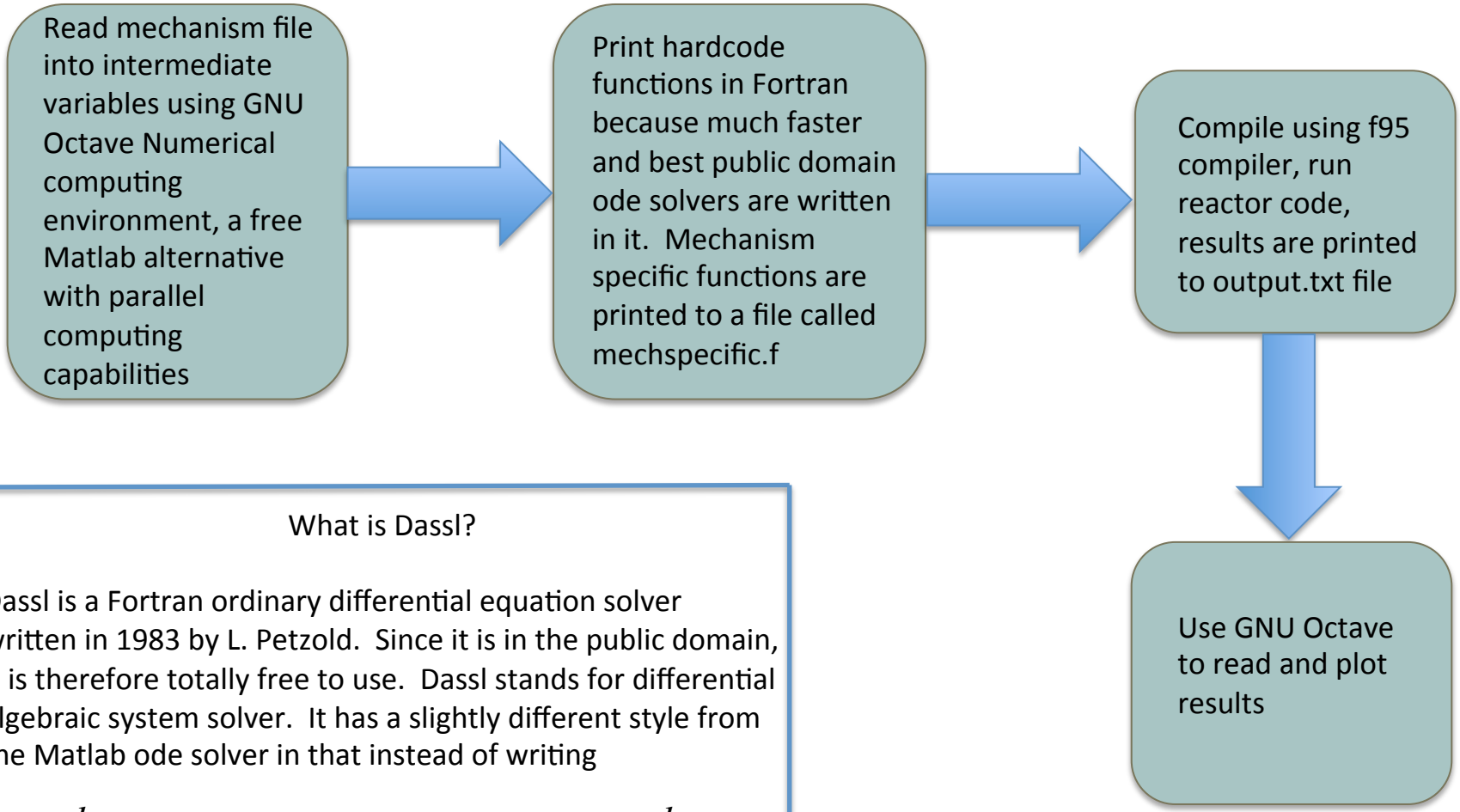
# Software Flow Chart for Octave-Fortran Hybrid Version

This version of the software avoids both Chemkin and Matlab fees, which can be substantial in a corporate setting. The purpose of this project was to simplify the Chemkin fuel mechanism modeling software as well as avoid its expensive fees, but Matlab also has expensive fees, Matlab's free cousin GNU Octave is great but slow. This therefore resulted in the Octave-Fortran hybrid version of my software.




What is Dassl?

Dassl is a Fortran ordinary differential equation solver written in 1983 by L. Petzold. Since it is in the public domain, it is therefore totally free to use. Dassl stands for differential algebraic system solver. It has a slightly different style from the Matlab ode solver in that instead of writing

$$\frac{dy}{dt} = \dot{w}$$ You write $$delta = \dot{w} - \frac{dy}{dt}$$