Learn RISC-V CPU Implementation and BSV

(BSV: a High-Level Hardware Design Language)

Rishiyur S. Nikhil

L3: Structure of BSV Programs

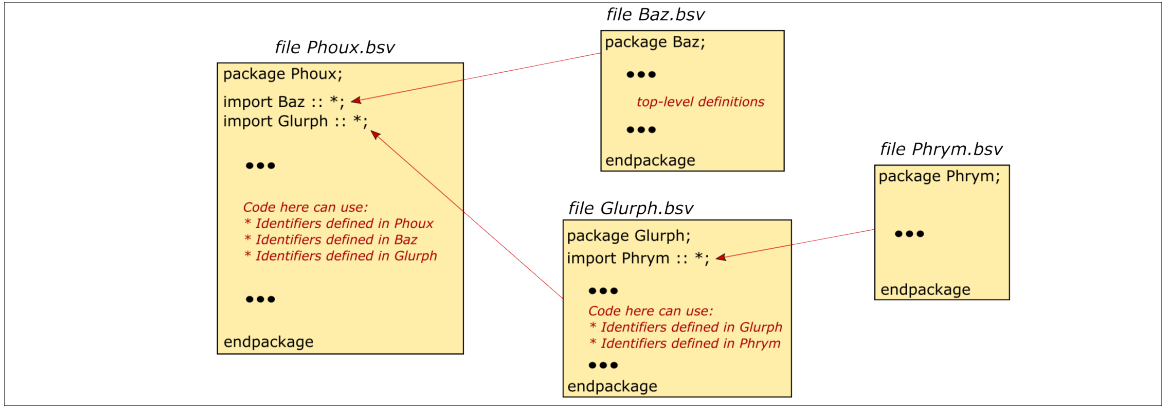
First: a Minimal (trivial!) BSV program

Examples

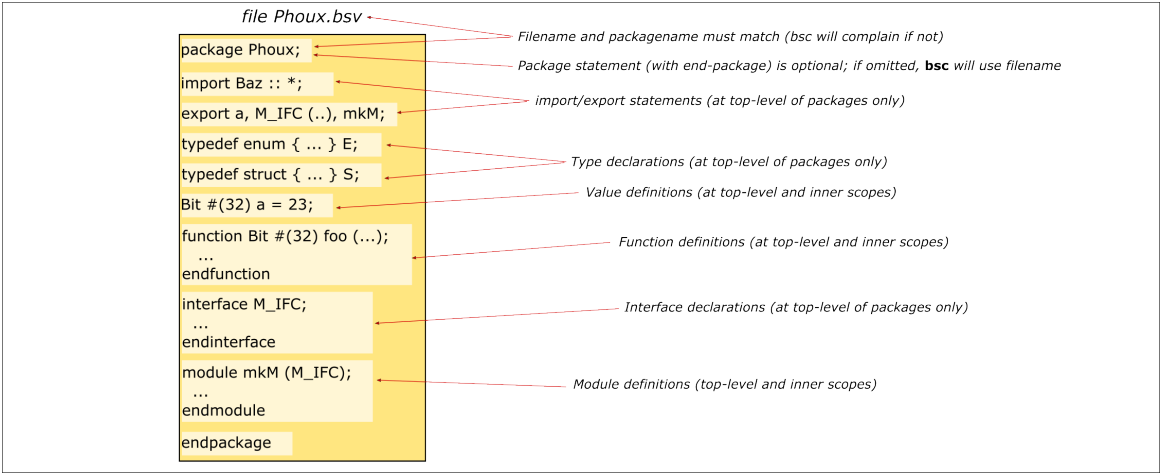
Demo: please see directory `Ex_03_A`, code and `Makefile`

(More related exercises in the book.)

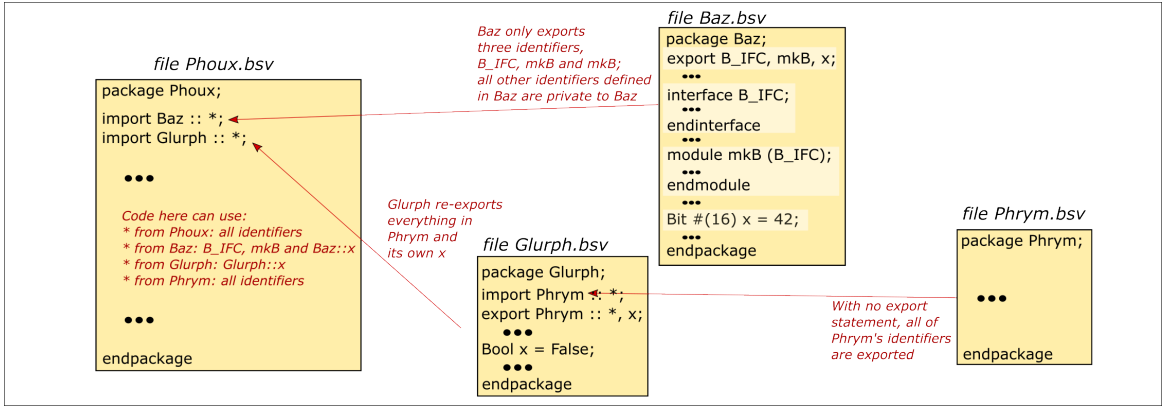
File-level view of a BSV program



What's in a BSV package/file?



Namespace control with package imports and exports



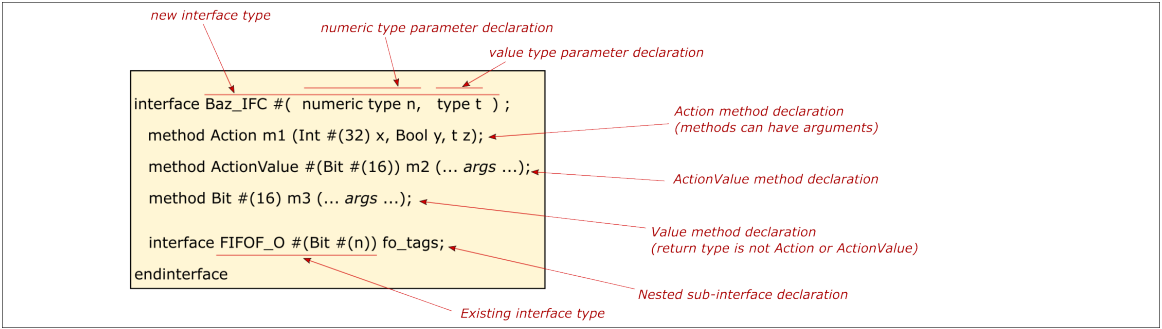
Extending our Minimal BSV program to two packages/files

Examples

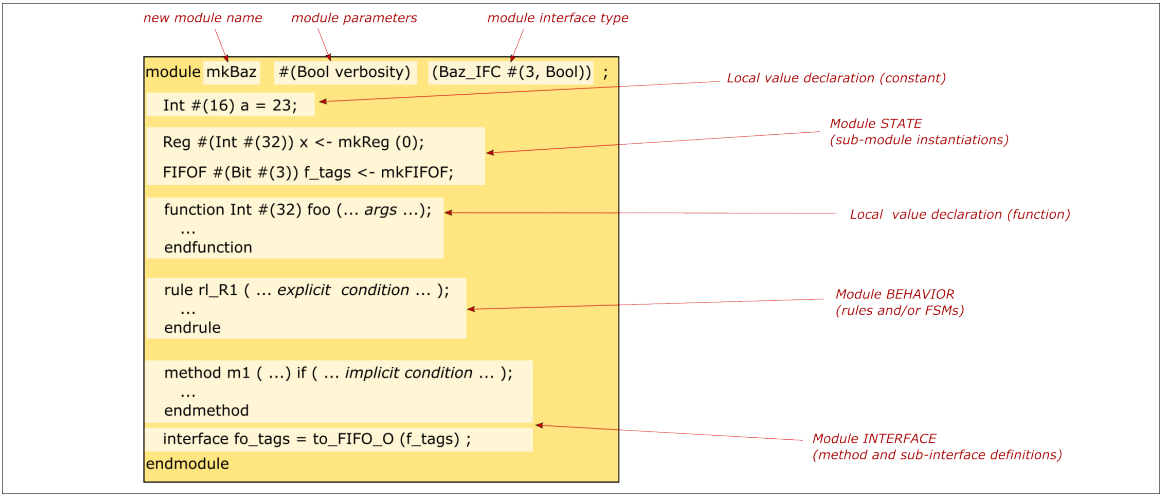
Demo: please see directory `Ex_03_B`, code and `Makefile`

(More related exercises in the book.)

What's in an Interface Declaration?



What's in a Module Declaration?



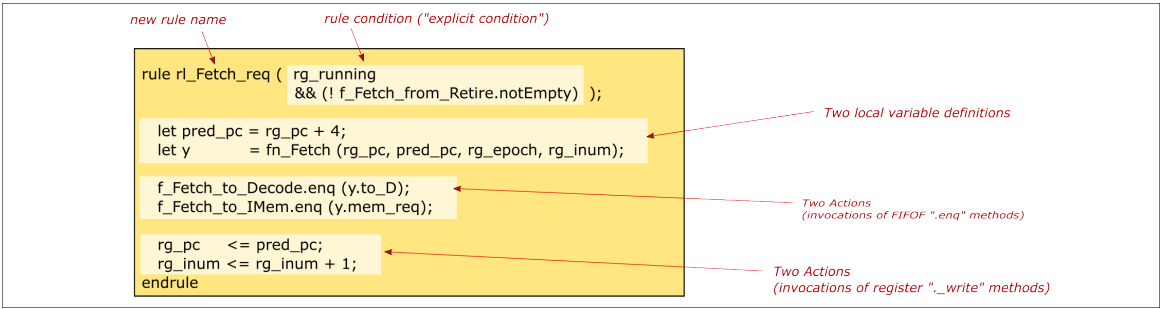
Extending our Minimal BSV program to define a module with an interface

Examples

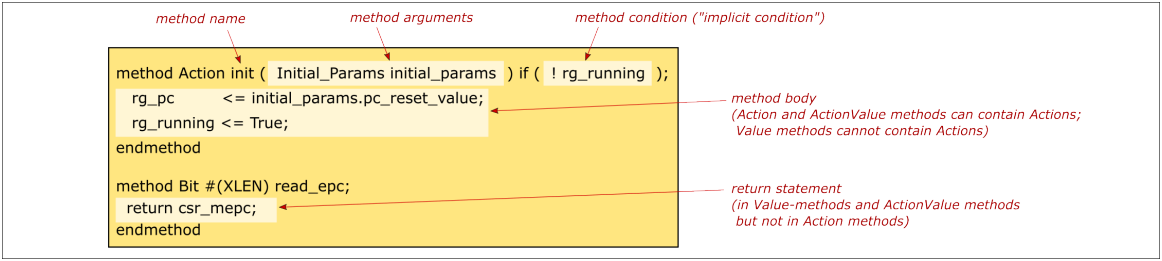
Demo: please see directory `Ex_03_C`, code and `Makefile`

(More related exercises in the book.)

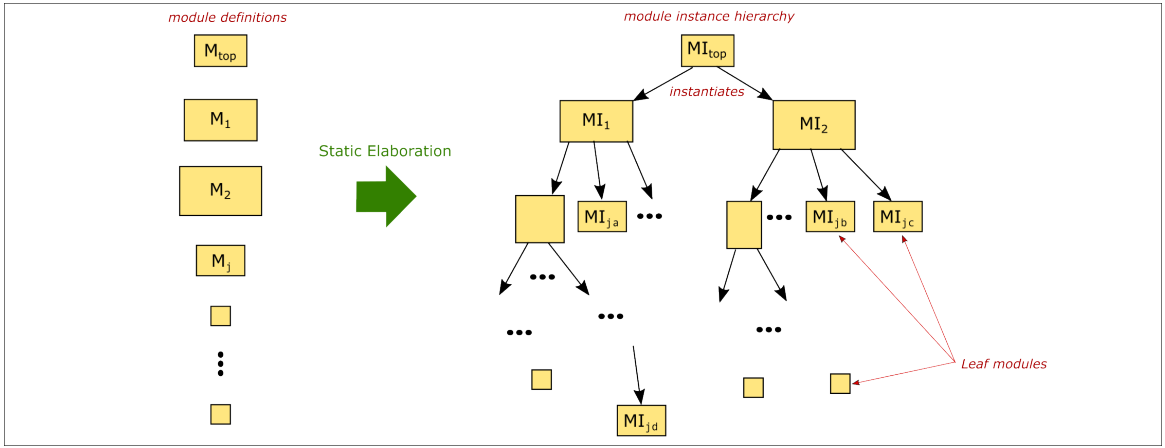
What's in a Rule?



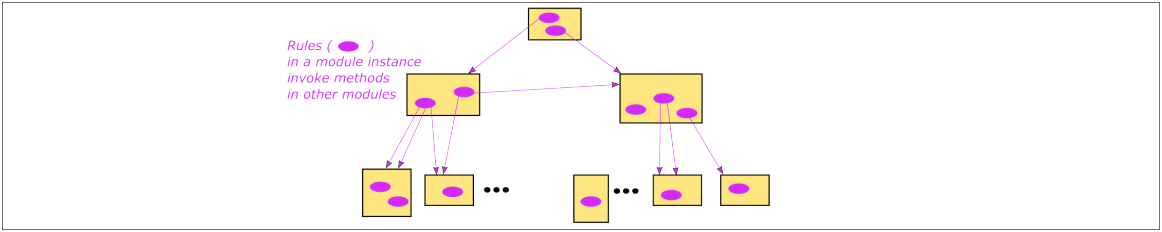
What's in an Interface Definition?



Static elaboration



Module interaction



End