Jess

- Production Rule Language
  - Fact
  - Rule
- Procedural Language
- Inference Engine
  - Match
  - Choose
  - Execute
Basic Jess Info

- To run type `java jess.Main` The Jess prompt will then appear.
- You must have `/usr/local/Jess` in your CLASSPATH
- You can find some examples under `/usr/local/Jess`
Facts

Jess>
Jess> (assert (today is sunday))
<Fact-o>
Jess> (assert (weather is warm))
<Fact-1>

Jess> (facts)
f-0 (today is sunday)
f-0 (weather is warm)

Jess> (clear)
Jess> (facts>
Jess>(quit)
Rules
Rules: Pattern

(defrule <rule-name>
  <optional comment>
  <optional declaration>
  <premise_1>
  ........
  <premise_m>
  =>
  <action_1>
  .......
  <action_n>
)

(defrule chores
  "Things to do on Sunday"
  (saliency 10)
  (today is sunday)
  (weather is warm)
  =>
  (assert (wash car))
  (assert (chop wood))
)
Rules: Example

(defun fun
  "Better things to do on Sunday"
  (salience 100)
  (today is sunday)
  (weather is warm)
  =>
  (assert (drink beer))
  (assert (play guitar))
)
Variables

(defrule pick-a-chore
  "allocating chores to days"
  (today is ?day)
  (chore is ?job)
  =>
  (assert (do ?job on ?day)))
(defrule drop-a-chore
   "allocating chores to days"
   (today is ?day)
   ?chore <- (do ?job on ?day)
   =>
   (retract ?chore)
)
Running Examples

Jess> (assert (human Socrates))
Jess> (defrule mortal (human ?X) => (mortal ?X))
Jess> (watch facts)
Jess> (run)

==> f-1 (MAIN: mortal Socrates)
Running Jess Alternatives

- Load From File
  
  Jess> (batch socrates.clp)
  (watch facts)
  (run)

- From Command Line

  java jess.Main socrates.clp