symbol

- a symbol is defined as $a < x, y, z >$ where x, y, z are args
- args are evaluated in reverse, so x can depend on y and z, and y can depend on z
- when a symbol is expanded trough a rule x, y, z refere to the symbol that is expanded and can be used in other symbols:
  $A < x, y, z > \rightarrow B < x > - < z >$
- A ->
  - A (all default)
  - $A <;; >$ (all default)
  - $A < x; y; z >$ (no change)
  - $A < x;; >$ (y,z default)
  - $A < x >$ (y,z default)
  - $A < \{*, 2\} >$ (default for x scaled)
  - $A < x\{*, 2\} >$ (x scaled)
- symbols
  - [,] (start / end branch)
  - +,- (rotate left / right) -> default_rotation_angle
  - ,/ (increase / decrease widht) -> "?? where to save this information??"
  - !,? (increase / decrease hue) -> "implement later, do the above first"
  - ABCD (draw branch) -> default_len
  - abcd (jump) -> default_len

plant

- is generated out of a lstring
- is generated by a turtle
- the turtle gets generated together with the plant
- each plant has a turtle

turtle

- is responsible for generating the plant out of the lstring
- holds all information of the plant a given node

components

- the L-String is generated via button press or at leas seperatly and first
- Structures are generated and drawn over one or more frames
- they get regenerated if global vars or the viewport changes
  - "maybe they could exist in local coordinate systems, so that they dont need to be regenerated on viewport changes. Maybe this can be done with blending?"
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