Detailed Content

One、RETE

Node root(start)

type node (class)

alpha node (attribute)

beta node (hybrid attribution)

action node

Type Node:

①light state node: on/off

②movement state node (judge is there anyone in home): have someone/nobody (And keep time)

③luminance state node (brightness state node): high/low

④button sensor node: press

⑤user node: student/teacher/administrator

⑥instruction node: open/close

Two、Control Rule

0. Button Sensor Node:

Once pushed, the light will be open/closed, except for it is set by administrator to keep.

1.Automatically Control

a. Action: close the light

Condition: on & nobody for 120s

b. Action: open the light

Condition: off & have someone & low

2.Instruction Control

1)Single Instruction

[1] Student (User Node)

a. Action: close the light

Condition: on & nobody & No Super Command

b. Action: open the light

Condition: off & have someone & low &No Super Command

[2] Teacher (User Node)

a. Action: close the light

Condition: on & No Super Command

b. Action: open the light

Condition: off & No Super Command

[3] Administrator (User Node)

a. Action: close the light

Condition: on

b. Action: open the light

Condition: off

c. Action: keep light on for certain hours

Condition: No conflict with other ‘keep’ instruction

d. Action: keep light off for hours

Condition: No conflict with other ‘keep’ instruction

2)Multiple Instruction

a. The priority is as follows:

Student < Teacher < Button < Administrator

b. The lower instruction obeys higher priority instruction

c. Students’ instruction will be responded in time sequence

d. Teachers’ instruction will be responded in time sequence

e. If administrators’ command conflicts, administrators should communicate and judge which command should be kept, before that conflicting commands will not be executed.

State Transfer:

