

1 Design a Skill for Door-opening

Declarative Knowledge

1	Perception	find-door
2	Perception	find-handle
3	Movement	go-to-pre-grasp
4	Perception	recognise-handle-type
5	Movement	move-gripper-to-handle
6	Movement	close-gripper
7	Movement	turn-knob
8	Movement	press-handle
9	Perception	recognise-door-direction
10	Movement	push-door
11	Movement	pull-door
12	Movement	open-gripper

Procedural Knowledge

A	door_found
B	handle_found
C	position_correct
D	type_found
E	position_correct
F	gripper_closed
G	type_knob
H	type_handle
I	position_correct
J	direction_found
K	direction_forward
L	direction_backward
M	door_opened

An example of the corresponding FSM is shown below.

