



## Homework / Project Document

Course	<b>Planning and Scheduling</b>
Homework/ Project	<b>#4</b>
Title	<b>JSHOP2 Input/Output</b>
Students/ Authors	<b>Alexander Moriarty and Alexander Hagg</b>

Instructor	Prof. Gerhard Kraetzschmar
Project Evaluator	Prof. Gerhard Kraetzschmar
Acceptance Status	<input type="checkbox"/> Accepted <input type="checkbox"/> Revision needed <input type="checkbox"/> Rejected
Points	
Comments:	

## Domain description:

```

1 ; Assignment 4
2
3
4 (defdomain basic (
5   (:operator (!pickup ?a) (see ?a) () ((have ?a))
6   ) ;end operator pickup
7   (:operator (!pour ?a ?b)
8       ((have ?a)(see ?b))
9       ()
10      ((full ?b))
11   ) ;end operator pour
12   (:operator (!find ?a)
13       ()
14       ()
15       ((see ?a))
16   ) ;end operator find
17   (:operator (!clean ?a)
18       ((dirty ?a) (have ?a))
19       ((dirty ?a))
20       ()
21   ) ;end operator clean
22
23   (:method (maketea ?a ?b)
24       ((see ?b) (dirty ?b))
25       ((wash ?b) (maketea ?a ?b))
26       ((see ?a) (see ?b) (not (dirty ?b)))
27       ((!pickup ?a) (!pour ?a ?b))
28       ((see ?a) (not (see ?b)))
29       ((!find ?b) (maketea ?a ?b))
30       ((see ?b) (not (see ?a)))
31       ((!find ?a) (maketea ?a ?b))
32       ()
33       ((!find ?a) (!find ?b) (maketea ?a ?b))
34   ) ;end of maketea method
35
36   (:method (wash ?a)
37       ((not (dirty ?a)))
38       ()
39       ((see ?a))
40       ((!pickup ?a) (!clean ?a))
41       ((have ?a))
42       ((!clean ?a))
43       ()
44       ((!find ?a) (!pickup ?a) (!clean ?a))
45   ) ;end of wash method
46 ))
47

```

## Problem description:

```

1 (defproblem problem basic
2  ((full kettle) (dirty cup1)) ((maketea kettle cup1) (maketea kettle cup2)))

```

Graphical Interface for JSHOP2

File View

Plan found

- (maketea kettle cup1)
  - [ 1 ] (!find kettle)
  - [ 2 ] (!find cup1)
  - (maketea kettle cup1)
    - (wash cup1)
      - [ 3 ] (!pickup cup1)
      - [ 4 ] (!clean cup1)
    - (maketea kettle cup1)
      - [ 5 ] (!pickup kettle)
      - [ 6 ] (!pour kettle cup1)
- (maketea kettle cup2)
  - [ 7 ] (!find cup2)
  - (maketea kettle cup2)
    - [ 8 ] (!pickup kettle)
    - [ 9 ] (!pour kettle cup2)

Multi-step size: 1

Multi-Step

Single Step

Run

Restart

Current State ( Total: 7 )

(see kettle)  
(see cup1)  
(see cup2)  
(have cup1)  
(have kettle)  
(full kettle)  
(full cup1)

Step Info

ADDED ATOMS:  
(full cup2)

Progress: 32 / 32