

```

1 |----- MODULE XJupiterH -----|
2 | EXTENDS XJupiter, TLCUtils      |
3 |-----|
4 | VARIABLE list                    |
5 | varsH  $\triangleq \langle vars, list \rangle$  |
6 |                                     |
7 | TypeOKH  $\triangleq TypeOK \wedge (list \subseteq List)$  |
8 |-----|
9 | InitH  $\triangleq Init \wedge list = \{InitState\}$  |
10 |                                     |
11 | DoH(c)  $\triangleq Do(c) \wedge list' = list \cup \{state'[c]\}$  |
12 |                                     |
13 | RevH(c)  $\triangleq Rev(c) \wedge list' = list \cup \{state'[c]\}$  |
14 |                                     |
15 | SRevH  $\triangleq SRev \wedge list' = list \cup \{state'[Server]\}$  |
16 |-----|
17 | NextH  $\triangleq$  |
18 |    $\vee \exists c \in Client : DoH(c) \vee RevH(c)$  |
19 |    $\vee SRevH$  |
20 |                                     |
21 | FairnessH  $\triangleq$  |
22 |    $\wedge WF_{varsH}(SRevH \vee \exists c \in Client : RevH(c))$  |
23 |                                     |
24 | SpecH  $\triangleq InitH \wedge \Box[NextH]_{varsH} \wedge FairnessH$  |
25 |-----|
26 | WLSpec  $\triangleq$  The weak list specification |
27 |    $\forall l1, l2 \in list :$  |
28 |      $\wedge Injective(l1)$  |
29 |      $\wedge Injective(l2)$  |
30 |      $\wedge Compatible(l1, l2)$  |
31 |                                     |
32 | THEOREM SpecH  $\Rightarrow \Box WLSpec$  |
33 |-----|
  
```

\ * Modification History
 \ * Last modified *Mon Jan 28 20:09:52 CST 2019* by *hengxin*
 \ * Created *Wed Oct 10 15:40:13 CST 2018* by *hengxin*