

fifo+_{wf}^{11,40}

$\forall es:ES, C, T:\text{Type}, S:(C \rightarrow C \rightarrow E \rightarrow \mathbb{P}), R:(C \rightarrow E \rightarrow \mathbb{P}),$
 $codes:(j,i:C \rightarrow e:\{x:E \mid S(j,i,x)\} \rightarrow \text{state}@loc(e) \rightarrow T),$
 $decodes:(i:C \rightarrow e:\{x:E \mid R(i,x)\} \rightarrow \text{state}@loc(e) \rightarrow T), Req:(C \rightarrow E \rightarrow \mathbb{P}), Ack:(C \rightarrow C \rightarrow E \rightarrow \mathbb{P}).$

for clients C sends FIFO

from j to i via $(S[j,i], codes)$

receives at i via $(R[i], decodes)$ requests $Req[j]$ are acknowledged by $Ack[j,i]$

$\in \mathbb{P}$