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MODULE *SystemModel*

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Constants and related definitions describing the system model of *Jupiter* protocols.

EXTENDS *Naturals*, *SequenceUtils*

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CONSTANTS

<i>Client</i> ,	the set of client replicas
<i>Server</i> ,	the (unique) server replica
<i>Msg</i> ,	the set of messages
<i>Char</i> ,	the set of characters
<i>InitState</i>	the initial state of each replica

ASSUME We assume that all inserted elements are unique.

$\wedge$   $\text{Range}(\text{InitState}) \cap \text{Char} = \{\}$  due to the uniqueness requirement

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$\text{Replica} \triangleq \text{Client} \cup \{\text{Server}\}$

$\text{List} \triangleq \text{Seq}(\text{Char} \cup \text{Range}(\text{InitState}))$  all possible lists

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VARIABLES

<i>cincoming</i> ,	<i>cincoming</i> [ <i>c</i> ]: incoming channel at the client $c \in \text{Client}$
<i>sincoming</i>	incoming channel at the <i>Server</i>

$\text{Comm} \triangleq \text{INSTANCE } \text{CSComm}$

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\\* Modification History

\\* Last modified *Mon Jan 14 17:24:11 CST 2019* by *hengxin*

\\* Created *Sun Jan 13 09:51:52 CST 2019* by *hengxin*