

SESAxioms^{0,22}

SESAxioms{i:l}

$$\begin{aligned}
& (E; T; \text{pred?}; \text{info}; \text{when}; \text{after}) \\
\equiv_{\text{def}} & (\forall e:E, l:\text{IdLnk}. \\
& \exists e':E. \\
& \forall e'':E. \\
& \text{rcv?}(e'') \\
& \Rightarrow \text{sender}(e'') = e \\
& \Rightarrow \text{link}(e'') = l \\
& \Rightarrow e'' = e' \vee e'' < e' \ \& \ \text{loc}(e') = \text{destination}(l)) \\
& \& (\forall e, e':E. \text{loc}(e) = \text{loc}(e') \Rightarrow \text{pred?}(e) = \text{pred?}(e') \Rightarrow e = e') \\
& \& \text{SWellFounded}(\text{pred!}(e;e')) \\
& \& (\forall e:E. \neg \text{first}(e) \Rightarrow \text{loc}(\text{pred}(e)) = \text{loc}(e)) \\
& \& (\forall e:E. \text{rcv?}(e) \Rightarrow \text{loc}(\text{sender}(e)) = \text{source}(\text{link}(e))) \\
& \& (\forall e, e':E. \\
& \quad \text{rcv?}(e) \Rightarrow \text{rcv?}(e') \Rightarrow \text{link}(e) = \text{link}(e') \Rightarrow \text{sender}(e) < \text{sender}(e') \Rightarrow e < e') \\
& \& (\forall e:E. \neg \text{first}(e) \Rightarrow (\forall x:\text{Id}. \text{when}(x,e) = \text{after}(x,\text{pred}(e))))
\end{aligned}$$

clarification:

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$$\begin{aligned}
& (E; T; \text{pred?}; \text{info}; \text{when}; \text{after}) \\
\equiv_{\text{def}} & (\forall e:E, l:\text{IdLnk}. \\
& \exists e':E. \\
& \forall e'':E. \\
& \text{rcv?}(\text{info};e'') \\
& \Rightarrow \text{sender}(\text{info};e'') = e \in E \\
& \Rightarrow \text{link}(\text{info};e'') = l \in \text{IdLnk} \\
& \Rightarrow e'' = e' \in E \vee \text{class}(E;\text{pred?};\text{info};e'';e') \ \& \ \text{loc}(\text{info};e') = \text{destination}(l) \in \text{Id}) \\
& \& (\forall e:E, e':E. \\
& \quad \text{loc}(\text{info};e) = \text{loc}(\text{info};e') \in \text{Id} \Rightarrow \text{pred?}(e) = \text{pred?}(e') \in E+\text{Unit} \Rightarrow e = e' \in E) \\
& \& \text{strongwellfounded}(E; e, e'. \text{pred!}(E;\text{pred?};\text{info};e;e')) \\
& \& (\forall e:E. \neg \text{first}(\text{pred?};e) \Rightarrow \text{loc}(\text{info};\text{pred}(\text{pred?};e)) = \text{loc}(\text{info};e) \in \text{Id}) \\
& \& (\forall e:E. \text{rcv?}(\text{info};e) \Rightarrow \text{loc}(\text{info};\text{sender}(\text{info};e)) = \text{source}(\text{link}(\text{info};e)) \in \text{Id}) \\
& \& (\forall e:E, e':E. \\
& \quad \text{rcv?}(\text{info};e) \\
& \quad \Rightarrow \text{rcv?}(\text{info};e') \\
& \quad \Rightarrow \text{link}(\text{info};e) = \text{link}(\text{info};e') \in \text{IdLnk} \\
& \quad \Rightarrow \text{class}(E;\text{pred?};\text{info};\text{sender}(\text{info};e);\text{sender}(\text{info};e')) \\
& \quad \Rightarrow \text{class}(E;\text{pred?};\text{info};e;e')) \\
& \& (\forall e:E. \\
& \quad \neg \text{first}(\text{pred?};e) \\
& \quad \Rightarrow (\forall x:\text{Id}. \text{when}(x,e) = \text{after}(x,\text{pred}(\text{pred?};e)) \in T(\text{loc}(\text{info};e),x)))
\end{aligned}$$

http://www.cs.cornell.edu/Info/Projects/NuPr1/FDLcontent/p0_286125_/p19_312356_{SESAxioms}.html