

generic^{11,40}

$$\begin{aligned} & \text{Generic}\{f:\mathbb{N} \rightarrow T \mid S(f)\} \\ \equiv_{\text{def}} & \exists R:\mathbb{N} \rightarrow (T \text{ List}) \rightarrow \mathbb{P} \\ & ((\forall i:\mathbb{N}, s:(T \text{ List}). \exists s':T \text{ List}. (s \leq s' \ \& \ R(i,s'))) \\ & \ \& \ (\forall f:(\mathbb{N} \rightarrow T). (\forall i:\mathbb{N}. \exists s:T \text{ List}. (R(i,s) \ \& \ (\forall n:\{0..\|s\|^-}. s[n] = f(n)))) \Rightarrow S(f))) \end{aligned}$$

clarification:

$$\begin{aligned} & \text{generic}\{i:l\} \\ & (T; f.S(f)) \\ \equiv_{\text{def}} & \exists R:\mathbb{N} \rightarrow (T \text{ List}) \rightarrow \mathbb{P}\{i\} \\ & ((\forall i:\mathbb{N}, s:(T \text{ List}). \exists s':T \text{ List}. (s \leq s' \in T \text{ List} \ \& \ R(i,s'))) \\ & \ \& \ (\forall f:(\mathbb{N} \rightarrow T). \\ & \quad (\forall i:\mathbb{N}. \exists s:T \text{ List}. (R(i,s) \ \& \ (\forall n:\{0..\|s\|^-}. s[n] = f(n) \in T))) \Rightarrow S(f))) \end{aligned}$$