

Entrega 9

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Extender semantica de arboles binarios.

$$\llbracket \text{Tree } t \ r \ l \rrbracket_{\Gamma} = \begin{cases} \llbracket \text{Tree } A \rrbracket_{\Gamma} & \text{si } \llbracket t \rrbracket_{\Gamma} = A \text{ y } \llbracket u \rrbracket_{\Gamma} = \text{Tree } A \text{ y } \llbracket v \rrbracket_{\Gamma} = \text{Tree } A \\ \text{Error} & \text{si } \llbracket t \rrbracket_{\Gamma} = \text{Error} \text{ o } \llbracket u \rrbracket_{\Gamma} = \text{Error} \text{ o } \llbracket v \rrbracket_{\Gamma} = \text{Error} \\ \perp_{\text{Tree } A} & \text{si no se cumple lo anterior} \end{cases}$$

$$\llbracket \text{Leaf } t \rrbracket_{\Gamma} = \begin{cases} \llbracket \text{Tree } A \rrbracket_{\Gamma} & \text{si } \llbracket t \rrbracket_{\Gamma} = A \\ \text{Error} & \text{si } \llbracket t \rrbracket_{\Gamma} = A \\ \perp_{\text{Tree } A} & \text{si no se cumple lo anterior} \end{cases}$$

$$\llbracket \text{ifLeaf } t \text{ then } u \text{ else } v \rrbracket_{\Gamma} = \begin{cases} \llbracket u \rrbracket_{\Gamma} & \text{si } \llbracket t \rrbracket_{\Gamma} = \text{Leaf } A \\ \llbracket v \rrbracket_{\Gamma} & \text{si } \llbracket t \rrbracket_{\Gamma} = \text{Tree } A \end{cases}$$

$$\llbracket \text{Node } t \ r \ l \rrbracket_{\Gamma} = \llbracket t \rrbracket_{\Gamma}$$

$$\llbracket \text{CL } t \ r \ l \rrbracket_{\Gamma} = \llbracket l \rrbracket_{\Gamma}$$

$$\llbracket \text{CR } t \ r \ l \rrbracket_{\Gamma} = \llbracket r \rrbracket_{\Gamma}$$