Relazione

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0.1 TYPING RULES

$$\frac{}{\Gamma \vdash \mathbb{Z} : \text{LInt}} \text{ IntE} \quad \frac{}{\Gamma \vdash \mathbb{B} : \text{LBool}} \text{ BoolE} \quad \frac{x : \tau \in \Gamma}{\Gamma \vdash x : \tau} \text{ Var} \quad \frac{\Gamma, x : \tau_1 \vdash e : \tau_2}{\Gamma \vdash \lambda x : \tau_1.e : \tau_1 \to \tau_2} \text{ Lambda}$$

$$\frac{\Gamma \vdash e_1 : \tau_1 \to \tau_2 \quad \Gamma \vdash e_2 : \tau_1}{\Gamma \vdash e_1 e_2 : \tau_2} \text{ App} \quad \frac{\Gamma \vdash e_1 : \tau_1 \quad \Gamma \vdash e_2 : \tau_1}{\Gamma \vdash e_1 \text{ op } e_2 : \text{result(op)}} \text{ PrimBinOp} \quad \frac{\Gamma \vdash e : \tau}{\Gamma \vdash \text{op } e : \text{result(op)}} \text{ PrimO}$$

$$\frac{\Gamma \vdash c : \text{LBool} \quad \Gamma \vdash e_1 : \tau \quad \Gamma \vdash e_2 : \tau}{\Gamma \vdash \text{if } c \text{ then } e_1 \text{ else } e_2 : \tau} \text{ Cond} \quad \frac{\Gamma \vdash e : \tau \to \tau}{\Gamma \vdash \text{fix } e : \tau} \text{ Fix}$$

0.2 BIG-STEP SEMANTICS

$$\frac{}{v \Rightarrow v} \text{ IntE/BoolE} \quad \frac{e_1 \Rightarrow \lambda x : \tau.e \quad e_2 \Rightarrow v_2 \quad e_1[v_2/e_1] \Rightarrow v}{e_1 e_2 \Rightarrow v} \text{ App}$$

BIBLIOGRAFIA

[1] Pantieri, Lorenzo e Tommaso Gordino (2017), *L'arte di scrivere con LATEX*,
http://www.lorenzopantieri.net/LaTeX_files/ArteLaTeX.pdf.

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