

# Functive

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# 1 Grammar

## 1.1 Formalization

$$\begin{aligned} \textit{program} &::= \overline{s} \\ s &::= \text{Definition } n : t := e . \\ &\quad | \text{Signature } n := t . \quad | \text{Assumption } n : t . \\ e &::= v \quad | \quad ( e' \ e ) \quad | \quad ( \text{let } n := e \text{ in } e ) \\ &\quad | \quad ( \text{fun } n \Rightarrow e ) \quad | \quad ( \text{rec } n \text{ of } n \Rightarrow e ) \\ v &::= \textit{primitive-value} \quad | \quad n \\ n &::= \textit{string} \quad | \quad n.\textit{string} \end{aligned}$$

## 1.2 Notation

- An expression with an overline may be repeated any natural number of times.