Meeting 8: Inductive Definitions and Syntax

Today

- Your questions on Lab 2
- Syntax
- Inductive definitions and judgment forms
- Code time

Announcements

- Lab 2 out and due Fri 9/18 to Sat 9/19.
- Lab 2 in-class exercise, Tue 9/22
- After Lab 2 deadline, look out for Lab 2 related moodle exercises.

Questions

1. Describe the language 2c
2. 2e parse trees
3. Judgement forms 2a (judgment forms)
(4) \( \text{ConstDecl}, \quad \text{If} \quad (\text{nodes in the JSY}) \)

Judgment Forms

\[
\text{judgment} = \text{a statement about stuff}
\]
\[
\text{term, syntactic object}
\]

\[
\text{judgment form} = \text{a "template" for statements}
\]

\[ e \downarrow v \]

"relation definition"
\( n \in \text{myfavorite} \rightarrow 3 \) judgement form
\( n \in \mathbb{Z} \)

Inference rules define judgement forms
\( n \in \mathbb{Z} \)

\[ \frac{\text{premises}}{\text{conclusion}} \]

\[ \frac{n \in \text{myfavorite} \rightarrow \text{set}}{s(s(n)) \in \text{myfavorite} \rightarrow \text{set}} \]

\[ n ::= 0 \mid s(n) \land (n) = \{ \text{Z}, s(0), s(s(0)) \}, \ldots \} \]