Nyāya for iPad
Interactive Environment with BoolTool

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What is BoolTool?

Manipulation and evaluation
of formulae in propositional logic

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  - ▶ It calculates satisfiability, tautologies and contradictions

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BoolTool
Web interface

Project Aim
Allow the user to learn

- Formalism of propositional logic
- Separation of syntax and semantics
- Normal forms (NNF, CNF, DNF)
- Standard transformations of Boolean functions
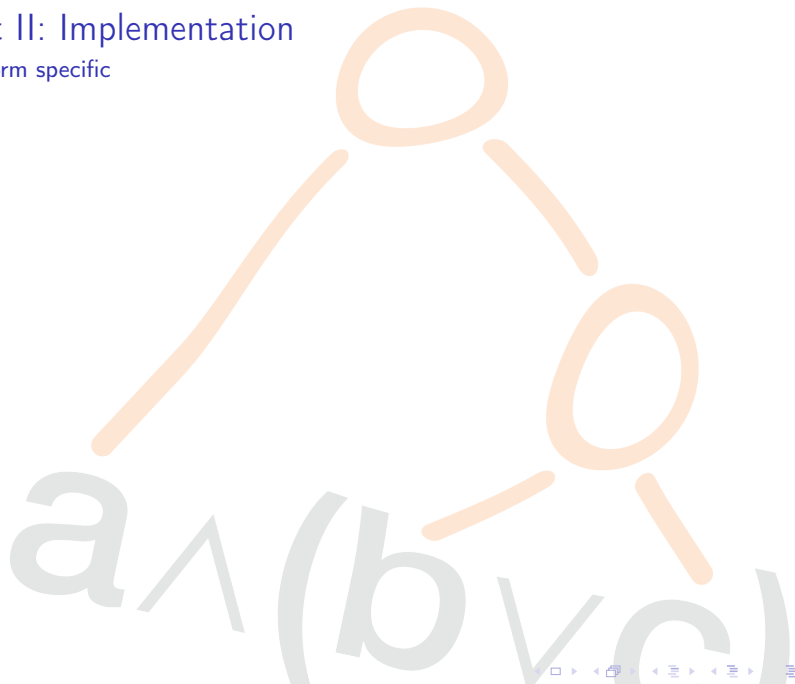- Coherence of different representations

Part I: Concept
Platform agnostic

- Self-explanatory environment
- Tutorials for general concepts and definitions
- Exercises to consolidate the learned concepts and definitions
- Glossary of technical terms
- Playgrounds to build and transform formulas

Part II: Implementation
Platform specific

Sources

- Barwise, Etchemendy und Barker Plummer, **Tarski's World**
- Middeldorp, **Logic**, Lecture
- Huth and Ryan, **Logic in Computer Science**
- Apple iOS Developer Documentation