

From Constraints to Application Conditions

Presentation

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Introduction

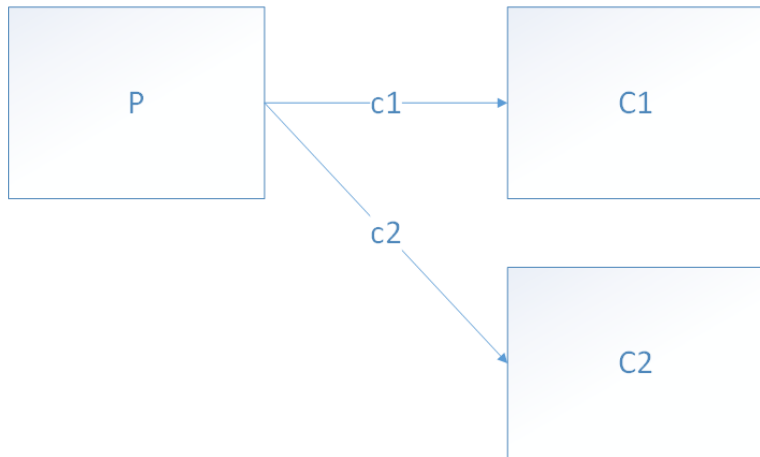
Why construct application conditions from constraints?

TODO: Explain what we're going to present

- ① Introduction
- ② Construction of Application Conditions from Constraints
- ③ Construction of Left from Right Application Conditions
- ④ Lessons Learned

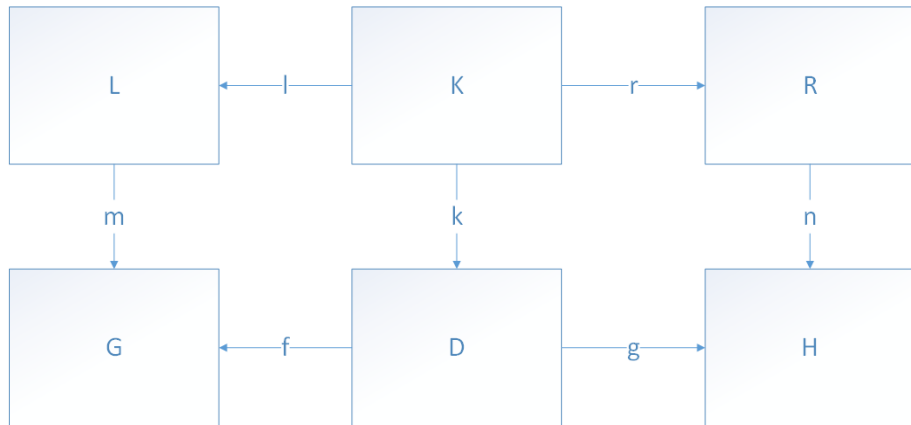
Introduction

Constraint Schema



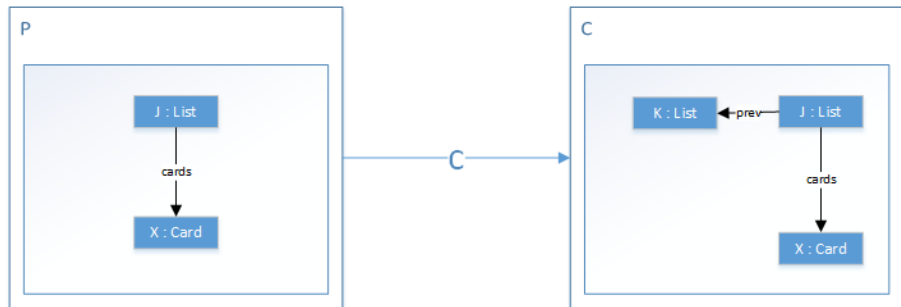
Introduction

Rule Schema



Introduction

Constraint Example



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① Introduction

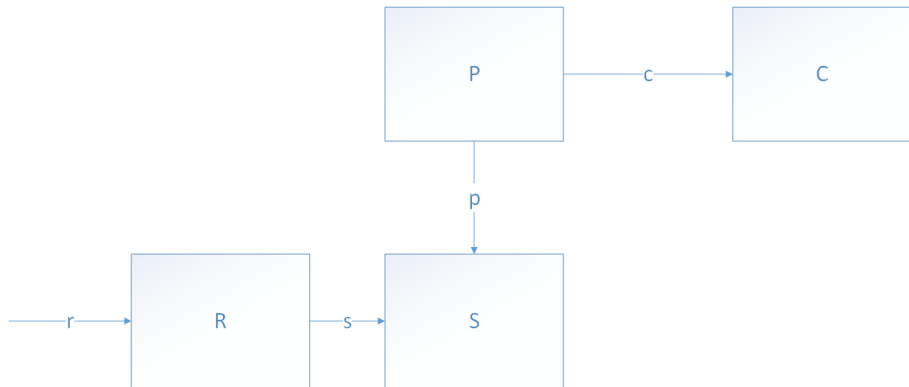
② Construction of Application Conditions from Constraints

③ Construction of Left from Right Application Conditions

④ Lessons Learned

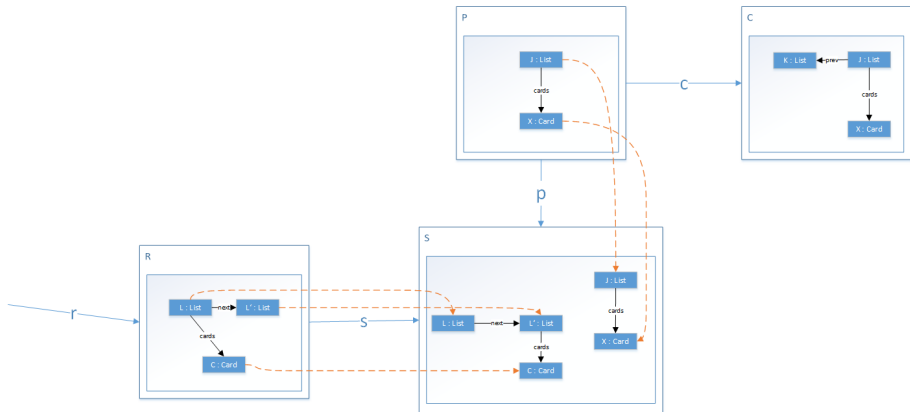
Construction of Application Conditions from Constraints

Construct S – Schema



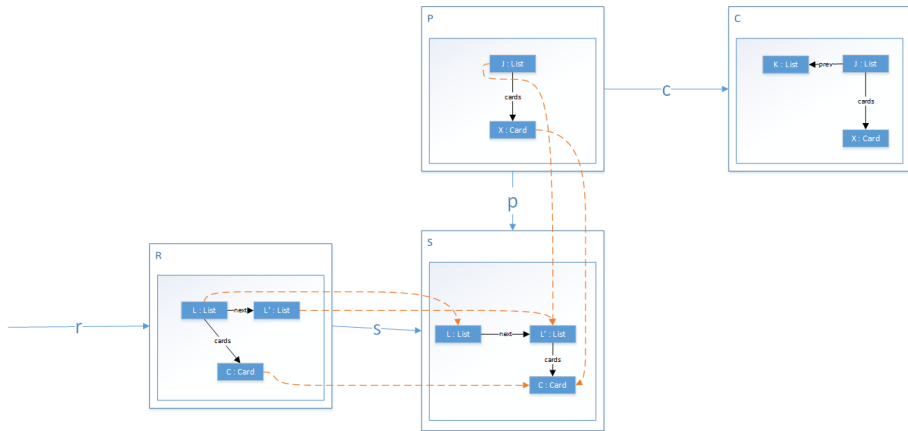
Construction of Application Conditions from Constraints

Construct S – Example Step 1



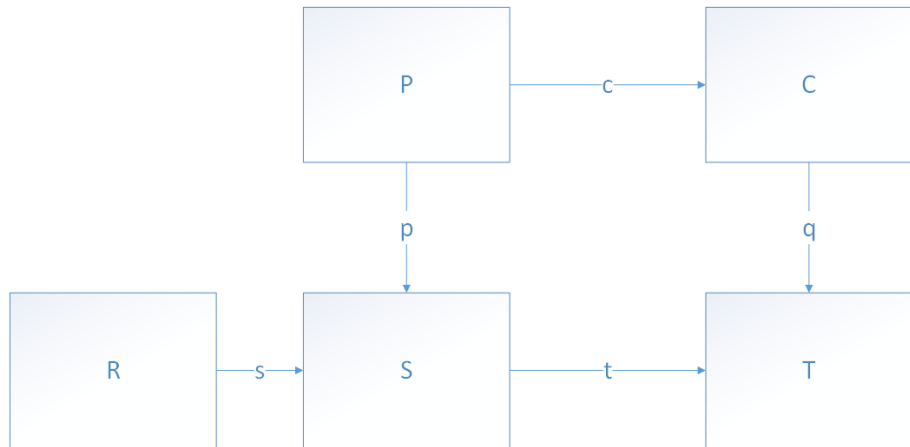
Construction of Application Conditions from Constraints

Construct S – Example Step 2



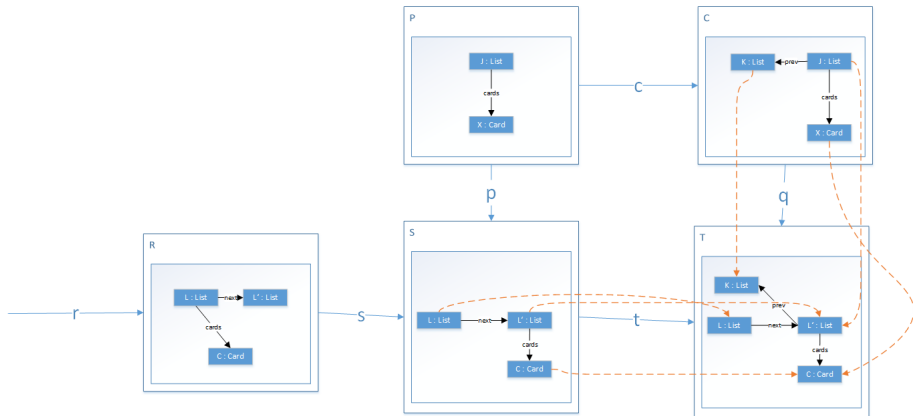
Construction of Application Conditions from Constraints

Construct T – Schema



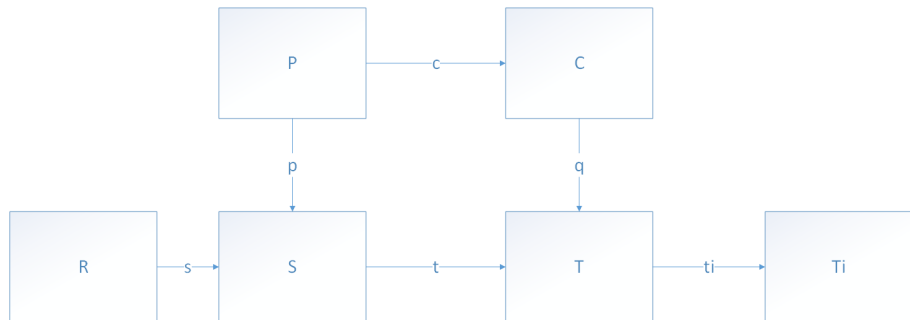
Construction of Application Conditions from Constraints

Construct T – Example



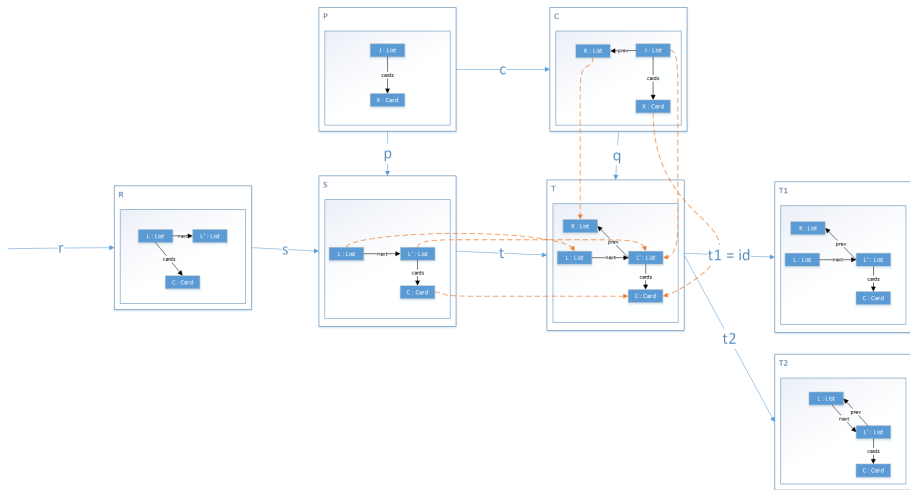
Construction of Application Conditions from Constraints

Construct T_i – Schema



Construction of Application Conditions from Constraints

Construct T_i – Example

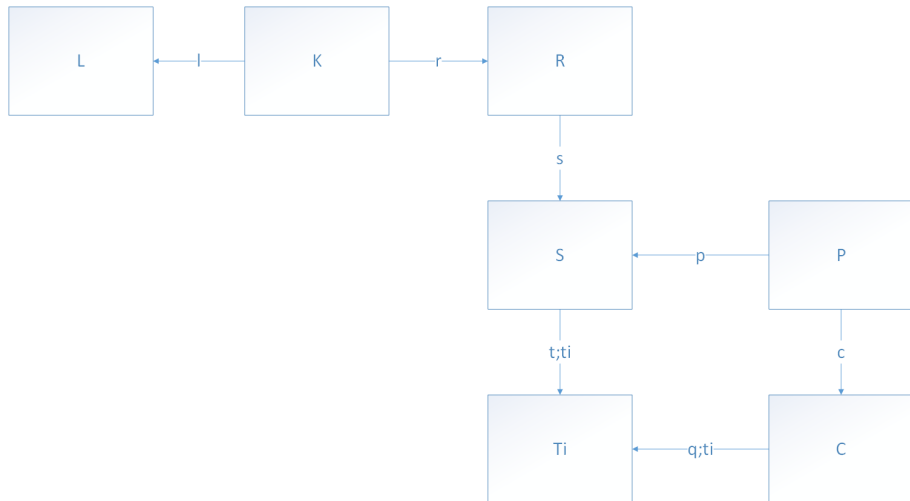


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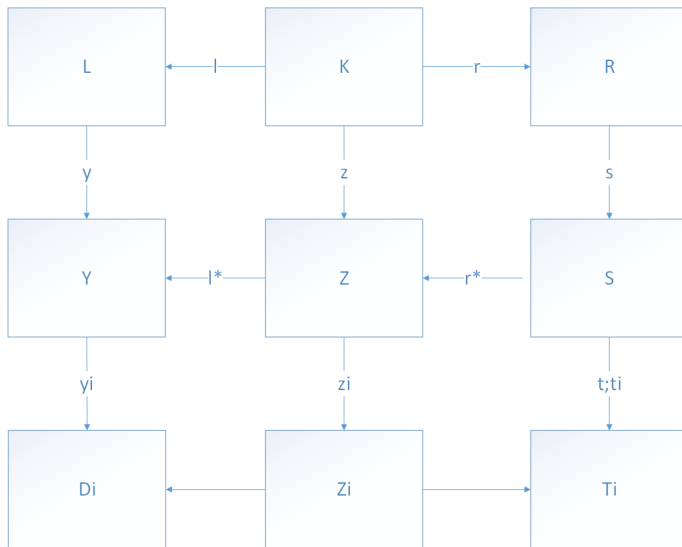
Construction of Left from Right Application Conditions

Overview



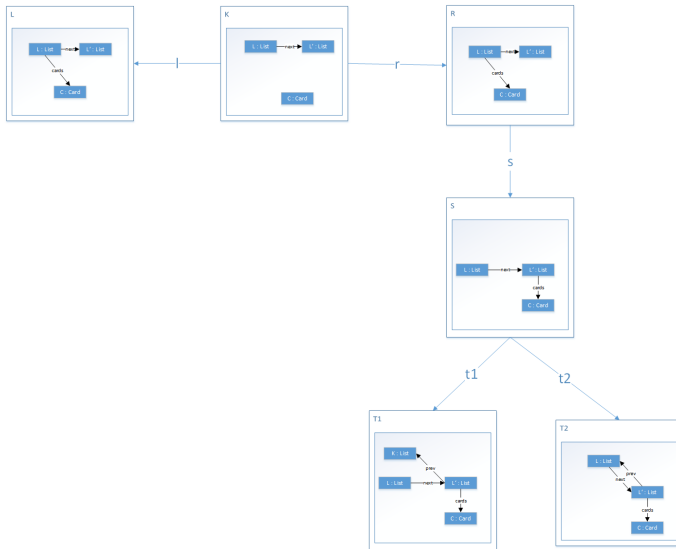
Construction of Left from Right Application Conditions

From Right to Left Application Conditions – Schema



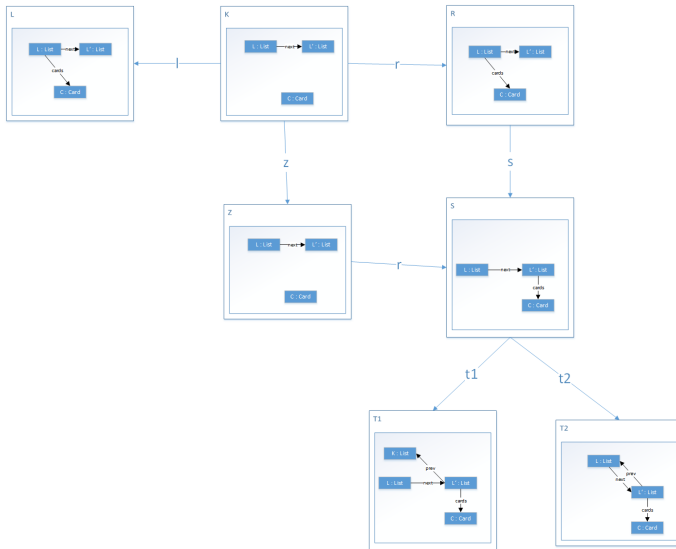
Construction of Left from Right Application Conditions

From Right to Left Application Conditions – Example Step 1



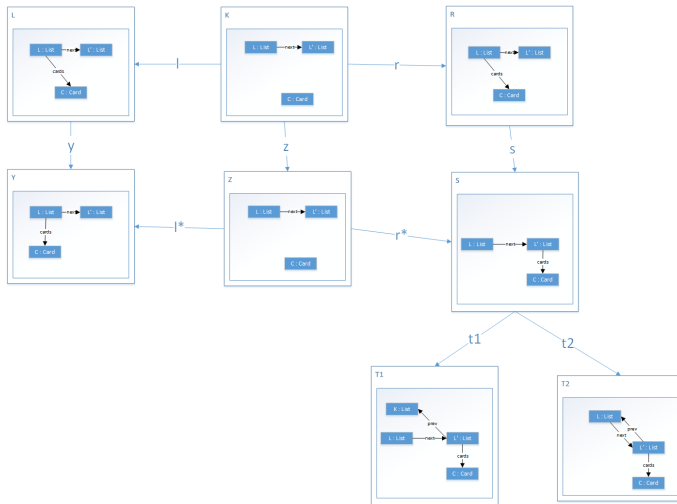
Construction of Left from Right Application Conditions

From Right to Left Application Conditions – Example Step 2



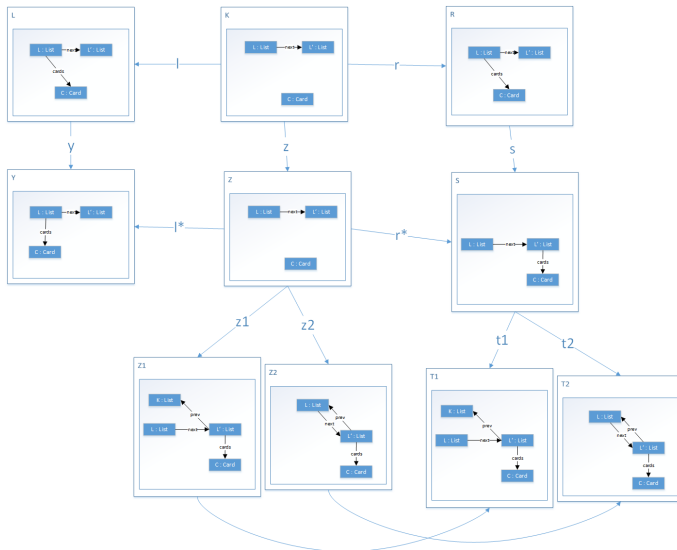
Construction of Left from Right Application Conditions

From Right to Left Application Conditions – Example Step 3

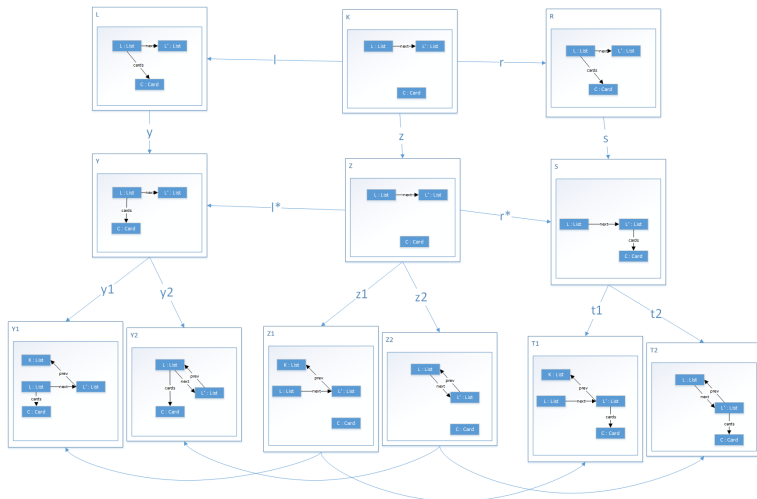


Construction of Left from Right Application Conditions

From Right to Left Application Conditions – Example Step 4

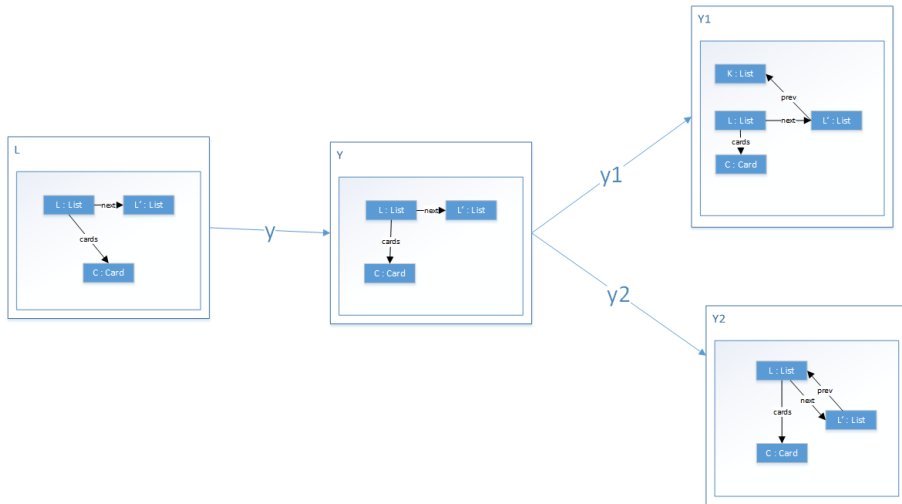


Construction of Left from Right Application Conditions



Construction of Left from Right Application Conditions

Left Application Condition – Example



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Lessons Learned

- The construction of applications conditions can be implemented with the code from the exercises
- Problems:
 - choose left or right and first or second in corners/spans?
 - difficult to output diagrams in Plantuml as labels are used to identify objects in the diagrams (but there exist multiple objects with the same label) - no help for debugging
- Code generation for category theory would be great!