

Project: Solving proximity constraints

Jan-Michael Holzinger^{*}

Sophie Hofmanninger[†]

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Version Number	Changes Summary	Author
0.1		Jan-Michael

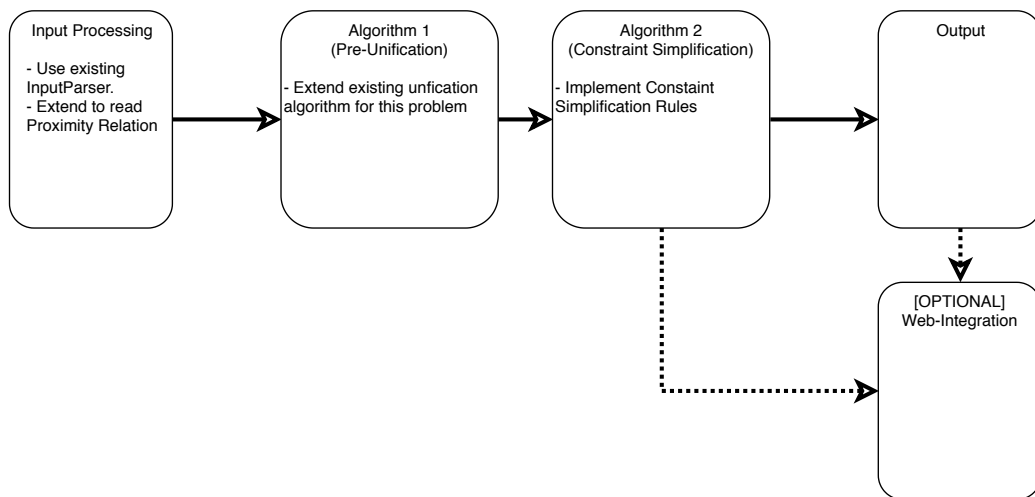
1 System Overview

We split the problem in 4 (5) smaller tasks:

1. Input Processing,
 2. Pre-Unification,
 3. Constraint Simplification,
 4. Output.
- O. Web-Integration.

^{*}jan.holzinger@gmx.at

[†]sophie@hofmanninger.co.at



1.1 Input Processing

The first idea here is to use and probably extend the given code, to proximity relations. The class that can be used for this is InputParser.

For the Proximity Relations \mathcal{R} and the λ -cut we have the following idea:

1. We try to get the number of constants, variables and function symbols (n_1, n_2, n_3) respectively.
2. We let the user input 3 $n_i \times n_i$ symmetric matrices that consist of values in $[0, 1]$ for $i = 1, 2, 3$. These matrices must have a 1 in the main diagonal.
3. We let the user input $\lambda \in [0, 1]$ and calculate the set \mathcal{R}_λ .

1.2 Pre-Unification Algorithm

1.3 Constraint Simplification Algorithm

1.4 Output