**Constraints Satisfaction Problem Solver**

**(Arithmetic and temporal solvers)**

**Problem definition:**

Constraint satisfaction is a powerful approach to solving a wide class of problems. Constraint satisfaction problems (CSPs) are well-known in AI realm. A constraint satisfaction problem is the problem of assigning values to variables that satisfy some constraints. In any constraint satisfaction problem there is a collection of variables which all have to be assigned values, subject to specified constraints.

This project documents the various aspects of software engineering methods for the development of constraint satisfaction problem solver (arithmetic and temporal). The solver is designed for developers to solve a wide range of problems. The solver is a class library helping programmers to develop intelligent programs requiring constraint satisfaction or optimization on finite domains. Computational problems from many different application areas can be seen as *constraint satisfaction problems*. For example, the problems of scheduling a collection of tasks, or laying out a silicon chip, or interpreting a visual image, can all be seen in this way. The project is the