

User's Documentation Guidelines

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Created for classes C++ at MFF UK.

1. Compilation

Application was compiled and tested with: Visual Studio 2019, OS Windows 10 64-bit, CPU intel core i7, RAM 8GB

2. Guide

Application can be run from command line. Application provides two basic commands and options

```
C:\Users\Tomas Husak\Documents\Github\SATsolver\Semestral_project_app\Debug>SATsolver.exe help

help = gives list of commands
file <path to dimacs format file> = load dimacs format and returns result
options:
-l = writes logs of solver process
-a = writes assignment if formula will be satisfiable

C:\Users\Tomas Husak\Documents\Github\SATsolver\Semestral_project_app\Debug>
```

figure 1 - help command

. Choose command file for solving formula. You can add some options.

```
C:\Users\Tomas Husak\Documents\Github\SATsolver\Semestral_project_app\Debug>SATsolver.exe file test_cnf_11.cnf -l -a
Unit propagation in decision lvl 0
Making decision
Making decision: in lvl 1
Unit propagation in decision lvl 1
Making decision
Making decision: in lvl 2
Unit propagation in decision lvl 2
Making decision
Making decision: in lvl 3
Unit propagation in decision lvl 3
Making decision
Making decision: no vars found
SATISFIABLE
Assignment:
id  assignment
1   1
2   1
3   1

C:\Users\Tomas Husak\Documents\Github\SATsolver\Semestral_project_app\Debug>
```

figure 2 - formula solving