Group Project - Proof search vs Proof checking - Log book

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Meeting 1 - 12.10.2010

People present: S. Benhaim, J. Bullian, M.G. Parusinski, K. Cheng, Dr. Dirk
Purpose: Discuss organisation of the project and discuss main topic on the project
Points discussed:

- Statement of the problem and its implications
- Possible challenges of the problem
- Reports and deadlines to meet
- Goals of the project

For next meeting

- Read litterature about Description Logic and KR based system

Meeting 2 - 13.10.2010

People present: S. Benhaim, J. Bullian, M.G. Parusinski, K. Cheng
Purpose: Discuss organisation of the project, assigning role in the group, discussing design and goals.
Points discussed:

- Language will be Haskell
- M.G. Parusinski becomes Secretary
- Syntax for representing formulas using Abstract Data Types
- Output files to be generated: one human readable, one machine readable
- Tools for programming: Code review, Version Control, Automated testing (HUnit)
- Optimisation

For next meeting:

- Check HUnit
- Think about a modular design
- Choose version control
- Provide possible documentation for other members

Temporary assignements:

- S.Benhaim: Proof search
- M.G. Parusinski: Model Checking
- K.Cheng: Proof Checking
- J.Bullian: Model Construction

Suggested critical goals (for B):

- Implementing an algorithm that performs proof searching
- Implementing an algorithm that performs model construction
- Implementing an algorithm that performs proof checking
- Implementing an algorithm that performs model checking
- Ensuring our algorithms are correct if terminates

Secondary optional goals (for A):

- Generating human readable format for models and proof representation
- Implement a parser for reading formulas
- Testing the code with tests unit
- Extend to non standard logics

Meeting 3 - 14.10.2010

People present: S.Benhaim, J.Bullian, M.G. Parusinski, K.Cheng
Purpose: Discuss organisation of the project, agreeing on roles
Points discussed:

- Code review and version control: Google code if the project can be open source
- HUnit will be used for testing
- Data type to describe signature: see signature.hs
- Questions for the supervisor

For next meeting:

- Decide whether the code can open source or not. If possible which license to use

Meeting 4 - 15.10.2010

People present: Dr. Dirk, S.Benhaim, J.Bullian, M.G. Parusinski, K.Cheng
Purpose: Discuss first report and division of work
Points discuessed:

- Changes to types: restricting to unary and binary relations correcting errors made
- Determining whether project can be open-source or not

- Diving proof and model search algorithm into three parts: tree creation, proof search, model search

For next meeting:

- Read litterature about DL, tableau calculus
- Check CoLoss
- Correct the type definitions

Meeting 5 - 18.10.2010

People present: S.Benhaim, J.Bullian, M.G. Parusinski, K.Cheng
Purpose: Discuss first report, setting up the working environment for the project and discuss timetable
Point discussed

- Time table agreements
- Project organisation

Agreements:

- Monday meetings at 12-13 everybody agreed this as their first choice
- Thursday meeting at 11-12 everybody agreed this as their first choice

For next meeting:

- Set up a Google Account for code.googe.com if not already available
- Install Mercurial on favourite O.S.
- Read about DL, and tableau calculus
- Compare Extreme Programming, and Scrum
- Think about first iteration plan
- Think about schedule
- Think about development method (See above)