University of Glasgow | School of Computing Science

Deontic Logic Prover

Leisha Hussien

School of Computing Science
Sir Alwyn Williams Building
University of Glasgow
G12 8QQ

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Abstract

A formalisation of deontic logic to represent the obligations, prohibitions and permissions within a system, which can then be checked for coherency and consistency to determine the validity of the set of rules.

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Chapter 1

Introduction

1.1 Deontic Logic

Explain what it is, what it means to be obliged, prohibited, permitted, etc. Outline the variant of deontic logic in use, explain why things are being used/not used. Outline problems it faces and potential solutions.

1.2 Applications of Deontic Logic

Places it is already being used/could be used.

1.2.1 Existing Functionality

Things which already exist which kind of do what I'm doing - explain why they aren't sufficient and what I'm doing differently.

Chapter 2

Implementation

What I'm doing and how I'm doing it.

2.1 Lexical Specification

How all the pieces of the logic and situational features are represented.

2.2 Proof Strategy

How I make sure the rules actually make sense.

Appendices

Appendix A

Running the Programs

An example of running from the command line is as follows: