

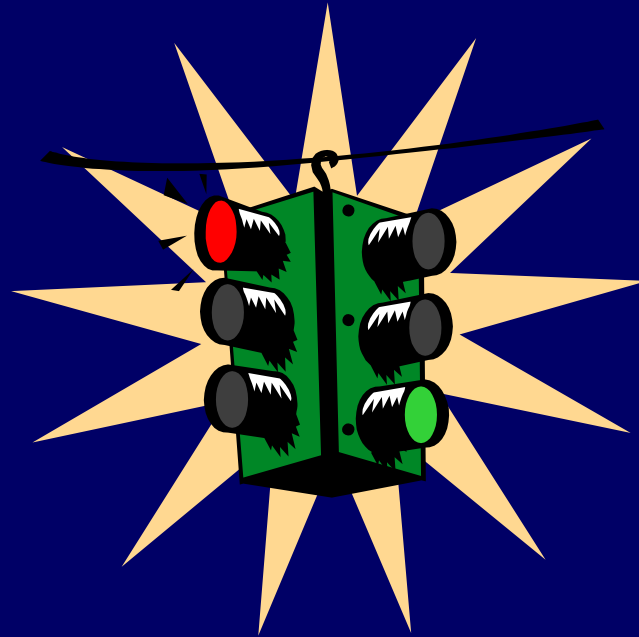
ADVANCED FUNCTIONAL PROGRAMMING



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Prerequisites

In order to take this module you must already have completed COMP1009 Programming Paradigms.



Lectures

- Two one-hour lectures per week; further details are available on the module web page.

Labs

- One two-hour lab per week, which will start once the first coursework has been handed out.

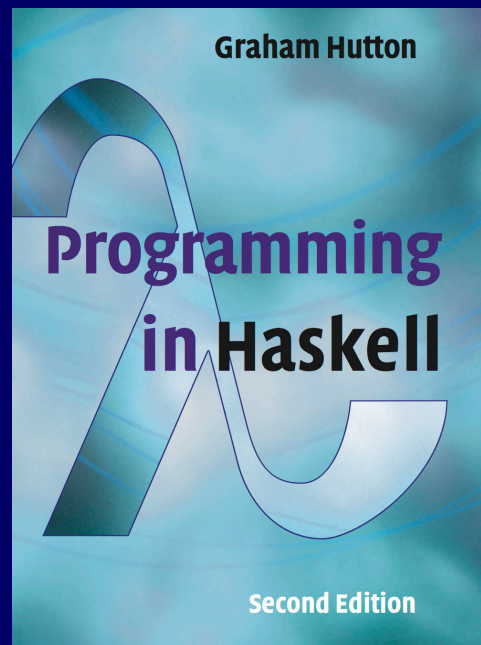
Lecture Notes

- Lectures will mostly be given using a tablet, and you are expected to take your own notes.
- Some extra material will also be provided.



Textbook

There is no formal textbook for the module, but the following will be useful for background reading, and two of the later chapters are covered in detail:



Assessment

- Two programming courseworks (10% + 15%);
- One written examination (75%).

Exercises

In addition to the courseworks, most lectures have a number of informal (non-assessed) exercises.

This Module

- Functional languages represent the leading edge of programming language design, and the primary setting in which new programming concepts are introduced and studied.
- This module builds on the introductory course by focusing on a number of more advanced topics in functional programming, including aspects of recent and current research.

The precise topics covered will vary from year to year, but will include topics such as:

- Programming with effects;
- Reasoning about programs;
- Improving program efficiency;
- Recent and ongoing research.

We will begin with extended example to refresh your Haskell knowledge: solving Sudoku.