In this thesis we address a long-term maintainability problem in Haskell type class system. In particular we study a possibility of backward-compatible changes in existing class hierarchies.
In the first part of the thesis we give a brief overview of the language. The following part summarizes current proposed solutions to the problem and analyzes their properties. Based on this analysis we derive our own language extension proposal.

In the penultimate chapter we present several possible applications of the language extension and compare the extension to other solutions. As a part of the thesis we also give a proof-of-concept implementation of the extension for the GHC compiler, which is briefly described in the last part of this thesis.